A SOCIALIST ECONOMY FOR THE TWENTY-FIRST CENTURY:
EXPLORATIONS OF CHALLENGING ISSUES

Richard A. Rosen
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Table of Contents

3 One: Introduction

7 Two: Implications of the Issues for Six Illustrative Economic Sectors

26 Three: Lessons Learned from the Industry Sector Analyses

31 Four: Additional Research Required

33 Five: Final Observations and Conclusions

34 Appendix A
The following report reflects the views of the author alone. Any opinions expressed should not be attributed to others associated with the project, which seeks to incorporate a diversity of viewpoints.
The goal of this paper is to describe many of the key concepts and issues that arise when one contemplates how to restructure the American economy—or any modern economy for that matter—on a much more democratic and sustainable basis. As will become apparent below, some of these key concepts and issues comprise what I believe should be a modern definition of “socialism.” I try to answer questions such as: (1) how does this modern version of socialism relate to the idea of establishing employee-owned or -controlled businesses and more “nonprofit” workplaces; (2) what role might external organizations of employees, such as unions, play in governing workplaces and protecting employees; and (3) what role should various government agencies play in regulating workplace conditions, environmental compliance, and prices for goods and services in different sectors of the economy?

In my exploration of these questions through a close look at key institutions and economic practices, I outline a number of specific changes that I deem necessary for a socialist economy. These include: A major transition from stockholder and private ownership to public ownership or cooperative ownership by employees; adjustments to the price and the market system for all sectors of the economy to ensure that social optimality, not financial optimality, becomes the main goal of business; major changes in how loans and investments are made so that government regulatory mechanisms provide oversight and input into investment allocation; and, finally, new governance practices and structures grounded in democratic participation and built to facilitate the goals outlined above.

There is, of course, a vast liberal and left-liberal literature that addresses how to reform modern businesses and corporations in order to make their work more transparent and accountable to the public, and relevant to solving social problems. But, often the social goals of such reformist endeavors are not clear, especially regarding the extent to which they support some, or all, major aspects of capitalism. Further, they often fail to include either environmental sustainability or social sustainability via enhanced social justice as explicit goals.

In order to achieve environmental sustainability as well as social justice by restructuring our economy, we must begin by analyzing—in more detail than most commentators have attempted—the social role of the major products and services that our economy produces and the ways in which the environmental impacts of these products and services can and should be reduced. Vague generalities and out-of-date structural analyses of the economy are not very helpful in this regard. Specifically, there is a substantial nineteenth and twentieth-century literature on establishing cooperative business organizations and worker-owned
and -controlled businesses that implicitly assumes that making all businesses employee-owned and -directed inevitably leads to a sustainable economy from either a social or environmental perspective.¹ In this essay, I will argue that we need to be skeptical about such broad claims. Much of the past literature on worker cooperatives is too narrowly focused because it only analyzes the types of changes businesses must implement to become employee-owned; the prototypical business envisaged is a small light manufacturing company with only a few plant locations.

While this image of a typical business might have provided a useful example of a socialist business in the nineteenth or early-twentieth centuries, this is no longer the case. The economy is now comprised of many more types of business structures than light manufacturing plants, and it produces a much greater variety of products and services than were produced even just fifty years ago. In addition, the educational backgrounds and achievement levels of the workers in any given industry of our current economy are much more varied than they were in the past. In particular, many new service industries have a high proportion of highly educated workers. Moreover, many more legal and regulatory requirements have been placed on businesses over the past several decades and these too must be considered in thinking about how to restructure the economy, especially since even greater regulation is likely required to achieve many aspects of sustainable development, even in highly developed economies. Finally, there are many more types of stakeholder groups that have a legitimate interest in how businesses (large and small) and nonprofits function, what impact they have on society and the environment, and how they treat their employees and customers. Economic life in a modern so-called democratic society is much more complicated than it used to be, and life will need to get even more complicated if democracy is going to be strengthened in the future to meet pressing social needs. Thus, all of these things must be taken into account when making proposals for restructuring business and all other places of employment, including government.

Additionally, one must also consider whether various economic sectors have developed specific structural features that constrain how business or economic activity must be carried out in those sectors in the future, in all plausible scenarios. For example, one sector of the economy that is rarely discussed in the leftist economic literature on social justice is the residential housing sector. This is a very strange omission given that the total costs of residential housing are usually the largest aggregate costs faced by most households in any given year. (Note that the residential housing sector includes housing construction, building maintenance and repair, home cleaning, utilities—water, sewage, garbage removal, natural gas, electricity, and telephone—internet, cable television, gardening, and so on.) Therefore, all industries that provide either housing itself, or services to the residential housing sector, are extremely significant in a highly developed society like the United States. Furthermore, within the US economy the residential housing sector plays a crucial role in funding the tax revenues of local government. Thus, one must not neglect the interaction between the residential housing sector of the economy, other sectors (especially banking), and government in constructing a new type of socialist economy. For example, one key issue is how the sale, resale, and rental prices for dwellings are and should be determined, and how they interact with both interest rates for mortgages and real estate tax rates to determine the affordability of a particular dwelling for interested buyers or renters. The residential housing sector is also important because the largest component of

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most families’ wealth is the real estate they own, if any. This is especially true for older households given that residential property usually appreciates in value over time.

A consideration of housing markets leads to another central issue that will be discussed at length in this essay: the role that markets in general play in any particular sector of the economy. While most discussions of economics and specific national economies often imply that there is a single conception of a “market” that determines all prices for most goods and services, the economy is actually segmented into many different markets and market structures so that market prices are determined in very different ways for each sector and product. This is true at both the wholesale and retail levels. For example, government policies and regulations play a major role in determining mortgage interest rates, and, therefore, housing prices. In many other sectors of the economy (outside of banking), large corporations often have oligopolistic pricing power, given the relative lack of competition for some of the products and services they sell.

In order to avoid oversimplifying the issues relevant to structuring a modern economy, this essay will attempt to analyze a select set of economic sectors that have very different mechanisms and structures for determining prices, and discuss some of the social and environmental implications of these different pricing mechanisms. Obviously, the residential housing market is very different from most others since the main determinant of prices for housing is “location, location, location!” But this fact has very serious implications for society that few analysts on the left have discussed, and fewer still have proposed making major changes to the housing market to try to avoid its negative social consequences.

One of the key questions that always arises when economists discuss the pros and cons of markets is “are they efficient?” The neoliberal idea implicit in this question is that if markets are “competitive,” then they are “efficient.” But from our perspective, we need to ask what does “efficient” really mean, and is it good for all markets to be “efficient”? When we think of market efficiency, we need to ask: efficient to what end? More broadly, we need to ask what goals society is trying to achieve, and whether markets (efficient or not) help us achieve these goals. Without answering these questions, the concept of market efficiency is really quite devoid of meaning, since without knowing where we want to go we cannot know how to get there in a socially “optimal” or efficient way. And if efficiency is only defined relative to certain financial calculations such as profitability or monetary consumption—as it often is—then it probably does not capture all the aspects of social optimality that should be taken into account when trying to reach certain social, environmental, and economic goals.

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So it is likely that markets cannot be the sole or even the major determinant of how to get where we want to go in any economic sector. The widespread existence of market power in various markets also has a large impact on the efficiency and efficacy of markets in attempting to reach social goals. The use of markets to attempt to achieve various social goals introduces certain levels of risk to society and individuals because markets are, by their nature, unpredictable. Thus, in attempting to achieve social goals, society and individuals need to try to assess the degree of risk, and what kinds of risks, they are willing to accept.

Finally, another fundamental set of issues that this essay will explore is how the ownership, control, and management of businesses and other institutions that employ people can impact democratic decision making, efficiency, and the future directions of society, such as those determined by capital investment decisions.
These issues directly relate to modern definitions of “socialism” in contrast to “previously existing socialism,” which was generally state-controlled. Thus, in some economic sectors—especially small businesses—it may still be appropriate for individual business owners to determine where capital is invested in that business. However, in other economic sectors it may be more socially just if all employees of a business are the owners who make all management and investment decisions, and who share the profits. This represents an approach often called “employee-directed businesses,” or cooperatives for short. But varied management structures are also necessary for the private, nonprofit, and government sectors of the economy. And there must also be a role for other stakeholders to be involved in making major investment decisions, depending on the type of business.

For example, private universities might be appropriately managed and controlled differently from public neighborhood schools or even public universities. In contrast, a just society may find it inappropriate to allow large corporations to be investor-owned and -controlled if the investors are “external” to or not employed by the corporations. But employee investors might be allowed to manage and control such a firm with appropriate regulatory oversight by relevant government agencies and stakeholder entities. Not allowing external equity owners in most businesses would be justified on the principle that people should not unduly benefit financially from the work of others in a business without doing the work themselves. Thus, how and to what extent other external stakeholder entities might be involved in the oversight of large corporations is another issue that will receive considerable attention below. Relevant stakeholder entities might include employee unions, local citizens’ groups, major issue-oriented, nongovernmental organizations, or other government agencies not directly responsible by law for regulating a given corporation.

Finally, along with cooperative ownership, this essay will make the case for public ownership of key economic sectors and institutions, such as large corporations, housing, and banks. Public ownership, like cooperative ownership, can help control against income, housing, and wealth inequality. Public ownership of capital is inherently more just because returns on that capital will go to the public at large.

It goes without saying that any restructuring of the economy will require substantive changes to government institutions. While this essay does not explore these changes directly, the arguments outlined rely on parallel and complementary changes to local, national, and international government to ensure that decision-making processes are truly democratic and aligned with social justice and sustainability values.
This is an interesting industry to discuss because it has at least seven very important characteristics: it is capital intensive, it has significant environmental impacts, both at the product and direct emissions levels, it uses large quantities of fossil fuels and other natural resources as inputs, its workplaces are highly automated, it is usually an external investor-owned industry, it often has oligopolistic pricing power for its products, and it is usually influenced by the presence of unions organizing and representing its employees.

What, then, would a socialist chemical industry look like that was not state-socialist, in other words, not owned and controlled by the state as in the former Soviet Union? First of all, how would decisions to build new chemical manufacturing plants be made given that each new plant requires a lot of capital, which, by definition, is a very socially valuable resource? One proposal would require a chemical industry-specific commission known as an Industrial Review Board (IRB) to determine if, when, and where any new chemical plant would be socially desirable. (See the text box below for a brief presentation of what an IRB is and how IRBs would function, in general, for specific industries.) An IRB would require a large amount of stakeholder input prior to making such an important social decision given the amount of capital needed, for example, to build a new chemical plant rather than investing it in some other industry. Thus, it would not be a decision that private investors should make on their own based on their assessment of market conditions for various chemical products—as is done today—nor would the state alone decide through a central investment planning process. (Even today there are existing constraints that have to be resolved by specialized state agencies, but that would always be the case.) In theory, irrespective of the current market conditions or prices for chemical products, an IRB would decide either “yes, a new plant is socially desirable since society needs more of certain chemical products,” or “no, a new plant is not necessary because its products are not needed and might be detrimental to society.” IRB approval would also be required for the production of each new product by a plant it has already approved.

How each chemical product should be priced is a somewhat complex issue that the corresponding IRB would have to resolve. When there is ample competition for a given product, the chemical industry IRB might decide to allow that product market to set the selling price. But in insufficiently competitive prod-
An attractive idea is to apply the model of state public utility regulation beyond the power and water sectors where such regulation is now commonplace. In “How Should the Economy Be Regulated?” (http://www.tellus.org/tellus/publication/how-should-the-economy-be-regulated), I note that state public utility commissions (PUCs) have the power to approve corporate investments in the industries they regulate, not merely set rates for products. The focus of each Industrial Review Board should be to ensure that appropriate financial investments are made by each industry in a way that mutually reinforces the need to achieve key social and environmental goals over the coming decades, with mitigating climate change chief among these goals. The IRB/PUC model would work in the following way: Whenever a business of significant size wanted to invest more than a specified minimum sum of money (e.g. $10 million) in a new production facility for an existing product type, or to create a new product or service, they would apply to their industry IRB for approval of this investment. If the investment proposal were large and/or controversial, the IRB would determine that formal legal hearings should be held. This would involve a full-scale review of the evidentiary and policy issues relevant to whether or not the proposal should be approved, with or without modification. The review would involve administrative judicial proceedings that would allow for formal intervenor status for a variety of stakeholders to ensure that stakeholders likely to be affected by the product or service would play a central role in deliberation and decision making. It is important to note here that generally the initiative to invest would come from the relevant regulated private or public corporation, and not from the regulatory body or the government. Thus, typically, no government agency would require that any new investment be made by corporations. However, in other situations, a particular industry IRB might have legal responsibilities to achieve social goals, such as keeping the electricity system reliable. In such a case, the IRB might need to find an existing appropriate public or private corporation that would be willing and able to make the relevant investments to achieve that social goal. If no existing corporation were willing to do so, a new public corporation might need to be established with government financial support to enable this social goal to be achieved. Finally, whether or not major new investments or new products and services are in the public interest should be the guiding bottom-line criterion upon which all regulatory decisions by IRBs are ultimately based.
uct markets, the IRB would have to set a price on a cost-plus-reasonable-profit basis, as public utility commissions now do for electricity and natural gas. One tricky aspect of determining product cost is how to distribute the capital investment in the plant that manufactures the product among all the other products made in that plant. In addition, if the capital for the new chemical plant came from government development funding, or if the plant were an employee co-op, there would not need to be an equity return (profit) term required above and beyond some minimal interest rate for the loan or bond money. For certain chemical products, such as those utilized as inputs by the drug industry, the government and/or IRB might even decide that public subsidies are socially desirable in order to make the resulting drug prices more readily affordable for consumers.

The fact that most chemical manufacturing plants use large quantities of either natural resources (various chemical compounds) and/or fossil fuels as inputs means that often these plants are not operable with only renewable feedstocks made from biomass products. Fossil fuels, such as oil, provide key components of the chemical feedstocks needed to make certain products, although sometimes organic feedstocks, such as wood or other crops, may also be used. If fossil fuels rather than biomass are required for feedstocks, rather than simply used as energy to operate the plant, then the IRB would likely consider that this new plant should not be built. Assuming they would take into account that the global allowance of fossil fuels to be used for any purpose will have to rapidly approach zero by approximately 2050 to meet internationally agreed upon climate targets.

One exception would be if the fossil fuel inputs were made into certain plastics that never break down into carbon dioxide emissions. For resource inputs that do not require the use of fossil fuels for their provision, the IRB would have to consider the full range of other environmental and social impacts from mining, land use, and so on, before allowing any new plant utilizing these inputs to be built. Given such complex considerations and trade-offs, the IRB might downsize (or upscale) the initially proposed plant, or it might require that the product mix be substantially modified. Once its decisions were made and the possibilities of legal challenges were resolved, the original proponents, presumably a group of employees comprising the board of directors of such a plant, would have to decide whether to proceed with construction.

If a large corporation within the chemical industry is still investor-owned (perhaps during a planned phase-in to becoming an employee-owned and -managed firm), its employees should all be represented on management groups throughout the company by a union, with very active involvement by employees. This stage of management would somewhat resemble the current German model for major industries, but with greater power given to the employee union. Unions are needed by employees to help coordinate their activities and provide guidance for their demands from management. Furthermore, although chemical plants are highly automated, their employees usually enjoy a relatively high educational level. This is relevant because a chemical plant would provide a good institutional setting for high school and college graduates to receive further on-the-job education and training. Large corporations in similar industries could also provide a socially valuable route for educational advancement and job training, which schools cannot possibly provide.

Over the medium term, a modern socialist economy would have to evolve from the current mode of mostly investor-owned businesses to cooperative forms of ownership shared among employees (and perhaps communities) so that any value added, or profits earned, primarily benefit those who actually perform the work and the communities in which the business is embedded. In most cases, including that of the chemical industry, the traditional stockholders’ share of equity could presumably be bought out by the employees and/or community investment/development funds by means of low-interest government bonds. Thus, many such corporations would become publicly
owned companies. One key issue is how the current level of private investor equity would be valued for the sale of a corporation. This would have to be done by the relevant IRB, which would be able to judge the social value of each component of the company. Should the product mix of a particular company be very socially desirable, the value of the buyout might be close to depreciated book value. But if the product mix were not socially desirable, the IRB might halt production of some of the products, implying that the buyout price for sale might be quite a bit lower than depreciated book value.

**B. SMALL BUSINESS**

This sector is quite varied. Most small businesses are family-owned and -operated, but additional employees are often hired. Currently, in the United States there are approximately fifty-three million independent workers, twenty-three million non-employer businesses (small family and single-person businesses), and five million employer businesses with under twenty employees. Employer firms with fewer than 500 employees (not so “small”) generate almost half of the entire GDP and the majority of all new jobs. However, the employees in these relatively “small” businesses are rarely asked to contribute equity to the business, nor are they able to earn equity. Due to the small number of employees per firm and the importance of personal relationships in successfully running most small businesses, it is difficult to develop modern socialist guidelines that would be generally applicable to the democratic management of all small firms. However, although they do not have the political power of large corporations, the redesign of small businesses must be considered within a new socialist economy, as messy as their inclusion may be.

There should be at least three stages of a transition toward a more socialist economy for small businesses, including: 1) the improvement of internal employee/mangement/owner relationships in the short run, including improvements in salary and wage distributions, and labor unions to protect employees despite close relationships between employees and management; 2) the establishment of institutional structures that move in the direction of cooperative ownership and management; and 3) the establishment of cooperative ownership and management structures over the medium term (approximately ten years) that set price controls on certain products and services, especially for professional services.

It would be appropriate to establish regulatory guidelines for small businesses in order to clarify a reasonable spread in income per employee; this would prevent small-business owners from attempting to remunerate non-family workers as little as possible in order to maximize the family’s own income, as is often the case today. This would guarantee that should a small business prosper, so would all its employees. Additionally, a transparent formula must be developed so that an increase in business revenues per employee leads to the possibility of non-family employees becoming equity owners in the business. Over time, family-owned businesses would become more and more like employee cooperatives, and employees with equity shares would also have voting rights to determine all aspects of the business, including capital investments. Of course, some co-ops run without equity shares are more like nonprofit corporations.

Obviously, a transition to an effective co-op ownership structure would partially depend on maintaining a fairly stable group of committed employees, which is often difficult for small businesses, especially if starting salaries are not sufficiently generous to foster employee loyalty. To further facilitate this transition of small family-owned businesses to co-ops, government and local bank loans should be made available to employees, after a certain trial period of employment, to help them purchase shares in the business.

Another aspect of a new model for small businesses must address the issue of how to enforce the various government regulations—environmental and labor among others—that apply to them. Much needed would be more multi-issue government inspectors.
to periodically review each business and to conduct private interviews with employees along with union representatives. Another complicated labor issue specific to family-owned businesses is the potential for family members to be exploited through lower wages or insufficient benefits. Thus, the financial accounts of small businesses must periodically be made accessible to employees in order to guarantee that the regulations discussed above have actually been implemented.

In determining the proper social role of small businesses in a future economy, we might ask: should society establish a wide range of specific niche markets reserved for small businesses/co-ops? This may seem like an odd question, but since small businesses create most new jobs in most societies, large corporations must be prevented from taking over the entire economy, both in retail and manufacturing. This issue has scarcely been addressed in the literature on the future of small business in a progressive state. For example, in many upper-income neighborhoods, domestic cleaning services are offered by large companies that retain a percentage of what they charge clients before paying the cleaners themselves. This, of course, is very different from the traditional arrangement in which cleaners were hired directly by the person who wanted their home cleaned; in theory, the absence of a middleman provided cleaners greater autonomy with respect to wages and working conditions. Naturally, if all workers in large cleaning service firms were unionized, they might end up earning more than those employed individually. These new cleaning service companies are even more prevalent in the commercial sector, where workers have struggled to unionize in order to receive decent wages and benefits.

Should employees in all small businesses have both the right and responsibility to unionize prior to becoming equity shareholders in a newly created cooperative business structure? Clearly they should, because unions of small-business employees could help insure that all relevant labor regulations affecting those businesses be enforced. Furthermore, the unionization of small-business workers should be required so that all benefits and workplace issues can be implemented and enforced on a uniform basis across states, as well as across different sectors of the economy. This would also include the distribution of income among small-business employees—including owners, as noted above.

**Should society establish a wide range of specific niche markets reserved for small businesses/co-ops?**

An even more comprehensive approach to these issues would be to require union membership by all small business employees, including the owners themselves! What would the implications of such a union membership requirement be? This question requires considerable reflection, but in order to make health insurance, sick leave, parental leave, day care, preschool, and vacation time universal, all small business employees, including owners, should be included. Thus, it is clear that, in the long term, all small business employees should automatically be represented by regional “small-business” unions. Without them, employees and owners would remain very isolated and would have no institutional defenders of their rights (and responsibilities).

What would employees’ responsibilities be once they earn decent salaries and receive adequate benefits? One key responsibility would be to propose new ideas to management about how to run the business better, or which new markets to enter. Each employee should also actively consider how to expand their business in the local community while collaborating with community groups to develop programs that improve the lives of local residents. There could be a bright future for small businesses perceived to treat their employees and customers properly and with respect. This is one potential advantage of small community businesses that might allow them to compete successfully at the retail level with large national corporations.
In theory, small businesses might also be more creative and nimble in conjuring up new products and services to sell. Of course, sometimes the ability to do so depends on the availability of credit (capital) to initiate these activities. Credit for small businesses should be made available from regional development and cooperative community banks in greater amounts than that currently available.

There are a few existing examples of successful efforts to expand access to democratic financing for small employee cooperatives that serve community needs. For instance, in his paper in the Next System Project’s New Systems series, Ed Whitfield describes efforts in Greensboro, North Carolina to open the Renaissance Community Cooperative grocery store in a low-income food desert. The cooperative development team and community supporters worked with the Fund for Democratic Communities and other non-extractive funders to raise $2.45 million in start-up funds, and the store is set to open in 2016.

When considering the issue of whether small businesses must sometimes be constrained when pricing their goods and services, we must consider the time frame and characteristics of individual neighborhoods, as well as other factors. For example, during any given emergency that affects the locality of a small business, prices must be required to remain stable relative to pre-crisis periods. Price gouging should never be permitted, for example during a storm. However, under “normal” business conditions in any locality, society should assume that the prices small businesses charge are “competitive,” and that the risk of oligopolistic pricing is minimal. Of course, this assumes that the wholesale prices that the local small businesses must pay for their supplies are also “competitive,” but this issue should be dealt with at a higher regional or national level by government regulators. It goes without saying that for many small businesses providing local or national services, labor costs are usually the biggest cost input, which means that it may not be necessary to determine whether or not the prices charged are fair and competitive, as long as employees are being paid fairly. We can assume that if labor costs are the dominant input to the retail costs, other firms could start up and enter the relevant market to undercut the preexisting prices should they become unjustifiably high. However, there may be exceptions to this rule when oligopolistic pricing prevails, as may often be the case for highly trained professionals, such as doctors or lawyers. Successful professional businesses, like law firms for example, may have to be monitored to guarantee the reasonableness of their pricing policies for their services.

The difficult question here is: how should society monitor the “reasonableness” of prices? One public policy approach would be to ignore this issue while imposing a very high marginal income tax rate on all high-income brackets. Another approach would be to have various government-monitored professional societies establish pricing guidelines for various services. As a result of such a monitoring process, caps could be set on the price of most professional services. This type of price regulation could be extended from small professional business to large entities such as hospitals, law firms, architectural firms, and so on.

C. HOUSING

As noted in the introduction, the residential housing sector is among the largest sectors of the economy, and it takes more household income than any other sector when all relevant taxes, utilities, and maintenance costs are included. This is because the United States, like most other countries, has a market for both new and existing dwellings that allows the cost of both owning and renting to increase without limit in response to market activity. The exception is a very small percentage of dwellings for low-income residents that are rent-controlled. Thus, society as a whole is not just paying on a continuous basis for the increasing cost of constructing new residential housing; it is paying for a constantly increasing market price for existing housing. We need to determine who is receiving most of that money versus who is paying it. In other words, what are the distributional impacts of free markets for
real estate? Additionally, since most owners of residential housing take out mortgages to finance their purchases, they are also paying large amounts of interest—usually to banks. Finally, property tax on residential real estate is a primary source of government income in most states and a substantial annual cost to most homeowners that significantly increases the cost of living. What, then, would a socialist housing sector look like?

We are so used to the idea that real estate markets for residential dwellings exist in modern capitalist societies that few authors, even those proposing alternatives to capitalism, ever question their inevitability. Historically, rental real estate markets were marginally constrained by the existence of rent-control laws and low-income housing regulations in some cities, which generally only limited rent increases in previously unregulated markets. While a few countries and cities have recently reintroduced some rent control—in particular Germany—or retained limited forms of rent control established in the past (New York City), this practice has generally been phased out across the United States over the past several decades. The result is that rents in popular cities like San Francisco, Boston, New York, and Washington DC are much higher than they would be had more comprehensive rent-control regulation been continued in these cities. Of course there are many other characteristics, besides being in a popular city, that increase property value, for example proximity to the waterfront. However, is there any progressive alternative to rent control (which never had much influence on the prices of single-family homes—the most common type of housing—anyway)?

One very negative implication of residential real estate markets is that, as prices rise, wealthy buyers of expensive dwellings generally end up making even more money than middle-class buyers of moderately priced dwellings, thus making wealth (and income) inequality even worse than if residential real estate markets did not exist. For example, let’s assume that a rich family buys a $1 million house and finances at least 80 percent of the initial price. Should the price of the house double after ten years, the family would have converted their $200,000 down payment into $1.8 million. In contrast, even if a poor family was able to purchase a $100,000 home—also financing 80 percent of the price—and their home value were to also double, they would only make $180,000 in capital gains. Thus, by being able to afford a monthly mortgage payment ten times higher than the poor family, the rich family would, after ten years, become even richer in comparison to the poor family due to much higher capital gains. And if the rich family had purchased a home in a more popular city than the poor family, where property values were escalating at a higher annual rate, the rich family would end up even better off relative to the poor family in a less popular location.

What can be done to redress this situation? This is not an easy problem to solve because so much of our economy, government financing, and culture revolves around housing prices. One short-run approach would be to freeze all residential real estate prices and rents, allowing them to only increase with inflation in the future, or not at all, in order to reverse the increase of inequality. Particularly in areas with expensive real estate, prices should not even be allowed to increase with inflation so that wealth distribution can become more equal over time as the prices of lower-cost housing increase.

Another approach would be for governments to finance the public ownership of housing on a regional or national basis, and move all property owners into the category of property renters so that higher-income families cannot continue to benefit from owning more expensive real estate. The government could then regulate the rental prices of all types of real estate—not just current rental apartments—according to a set of democratically determined formulas as the private ownership of all residential property is phased out. This new universal type of rent control could be phased in after all purchase prices for residential real estate have been frozen, so that no owners would unfairly benefit during the transition to socialized hous-
ing rental prices. This approach to abolishing real estate markets would also make it much easier for the government to build new “affordable” housing for the poor and lower-middle classes, and to charge affordable rents for such dwellings. Perhaps a new subsidy or tax for “affordable” housing could be included in all other rental prices for other real estate.

By establishing mechanisms for allowing the market value of real estate in different communities to converge over time, educational opportunity would likely become more equal.

But would socialized housing be properly maintained and operated if the government bought out all current owners of real estate? In the past, government ownership of residential properties has often led to their deterioration, so changes to ensure that governing structures are democratic and accountable will be necessary. But were both the rich and poor required to rent their dwellings, there would likely be much more political support for a very activist housing authority responsible for keeping all dwellings up to reasonable standards. In addition, such a housing authority could impose strict energy efficiency and other health standards on all properties, since they could and would finance investments to bring properties up to new, much more rigorous efficiency standards. This would most likely be the fastest way to reduce greenhouse gas emissions from the housing sector, since many households in lower-income groups cannot usually afford to finance major energy efficiency and solar energy installations in their homes. The establishment of such rental housing authorities would, then, help all countries deal with climate change. Under the existing capitalist system, private owners of dwellings would have to be required by law to upgrade their buildings and energy equipment to conform to new standards, given the serious problem of climate change. But if current property owners were not able to finance upgrades to their buildings, what would be the alternative? And who would finance it? Would all owners receive the same interest rates and amounts of subsidies? Or would poor families inevitably have to pay higher market-based interest rates, as they often do? If the government were to finance all residential building upgrades upon purchasing the buildings from their current owners, this problem would be resolved, and no further increase in income and wealth inequality would result.

Another serious problem that confronts our society from a social justice perspective also results from our unregulated residential real estate markets: wealthier communities that pay above-average real estate taxes enjoy better schools and social services. Significantly, this problem does not exist to the same extent in Europe, since schools there are usually funded more equally across neighborhood boundaries. Regional and national governments in Europe have more control over education, including funding and educational standards, and quality is more uniform there than it is in the US. By establishing mechanisms for allowing the market value of real estate in different communities to converge over time, educational opportunity would likely become more equal. Beyond this, moving directly to government ownership of all housing would also allow for direct, more equal funding of local educational institutions, either through a uniform but very progressive tax on the rental cost of housing as charged by the government, or by paying for education and other functions of local government through broader and more uniform taxing approaches such as state or federal income taxes, or value-added (sales) taxes.

Ideally, over time, new housing would develop along more cooperative and socially constructive lines, such as cohousing. Many American cities used to have various forms of government-subsidized or -owned cooperative housing, especially right after World War II. Thus, one alternative to government ownership of housing would be for the government to finance more cooperative housing projects—both new and old—which would be self-managed by tenants. In this way,
the management of all relevant housing issues could be more local and democratic. This would suffice as long as basic norms and standards were required of such co-ops, like national energy efficiency standards. Beyond collective management, co-ops could begin to integrate more communal dining facilities, allowing especially single occupants of dwellings to maintain and develop better social attachments, thus minimizing social isolation. In addition, non-working adults could become better integrated into child-care functions, when desirable, including greater participation in grade school education at the community level.

Furthermore, cohousing and cooperative housing could facilitate the development of many kinds of cooperative institutions such as clubs for music, art, writing, and other cultural activities as a substitute for activities such as private television viewing. Depending on location, cooperative housing institutions could also be involved in agricultural activities to supply both themselves and their neighbors with food at reasonable prices. However, should any type of cooperative work activity be undertaken such as agricultural work, cooking, maintenance, child care, and so on, it would be very important to make sure that the people providing these services be properly compensated when necessary and appropriate. However, while some co-op members might need to be compensated, those without such a need might create cultural pressure for no one to be compensated. This is a common problem with voluntary social welfare programs, and it often leads to a situation whereby it is preferable for compensation to be universal, so that members needing compensation do not stand out in an embarrassing manner.

While I may not have sufficiently distinguished between single-family homes and rental apartments in the above discussion, it is important to ask, again, if the policy of government buyouts could and should apply to single-family homes as well. One might also assume that they could never be part of cooperatives; but this is not the case. Cooperative, government-owned dwellings could consist of many apartments in a single building, and even many single-family homes in a neighborhood co-op. If large groups of single-family homes were organized as a co-op, the families living in them could collectively organize the maintenance and operation of the homes, lawns, driveways, and so on, in a more cooperative and cost-effective manner. For example, each family would not have to hire their own yard maintenance workers, or snow-removal contractors, or do it all themselves. Various kinds of equipment would also more likely be shared, encouraging a "sharing economy" within the housing sector. In addition, this ownership structure would probably allow for and encourage much more investment in, and siting of, solar electric and solar thermal equipment on the collective properties. Presumably, collective ownership structures would lead to more community-oriented behavior and lifestyles.

One benefit of a government-financed socialization of all housing would be that government financing would come at much lower interest rates than private mortgage financing. On average, this would reduce the cost of housing for all families, which would be especially important in cities that currently have very high-priced housing. Another advantage of government-regulated pricing for dwellings is that the pricing could become much more progressive in relation to family income than it is today, as noted above. For example, very large dwellings could be priced such that the marginal price for more rooms increases rapidly above a culturally acceptable "reasonable" size. Currently, under market forces, each room added to an existing dwelling usually costs less than the average price per room of a smaller house.

D. DEFENSE MANUFACTURING

It is tempting to suggest that under a future socialist economic system, the defense industry would just wither away, especially if all countries’ economies were similarly organized. But this is probably not realistic even if peace were much more prevalent globally than it is today. In all likelihood, the defense industry would be a lot smaller and would be focused on new
technologies that could save lives on a battlefield and facilitate the security of nations, including the prevention of terrorism. For example, we would need far fewer large offensive weapons systems such as aircraft carriers and bombers, both of which are very expensive. However, some military-related research and development (R&D) would be necessary, as well as manufacturing facilities, especially because there could not be a competitive international market in battleships or fighter jets. At most, a country might have two or three firms that could produce such products, but that would lead to oligopolistic pricing. Therefore, even in a capitalist society, the defense industry would have to be run as a regulated monopoly.

If the government pays for all or most of the military-related R&D, should defense contractors be allowed to make profits from their research and manufacturing work? The answer is “no” because this would be a “public service” industry. Even worker-owned co-ops would not be allowed to make profits from defense contracts above and beyond compensating employees at “reasonable” pay scales for their job category. This is another reason why defense production would, in general, be considered like the output of a regulated utility, but one that does not deserve to earn any profits prior to socializing the industry, since it would not undertake any significant investment risks.

What would reasonable pay scales look like, and how would defense contracts be awarded? Could “competition” exist in the defense-contracting sector so that the prices of goods and services would not have to be regulated? At present, the military-industrial complex has much higher average wages and salaries than other sectors of the economy because competition is severely limited for many goods and services purchased, including professional skills. In the future, the market for items like military underwear could be competitive provided the military does not impose unusual requirements on the manufacture of such products, which might discourage the production of military underwear versus ordinary civilian underwear. However, if for whatever reason, military cloth-

In all likelihood, the defense industry would be a lot smaller and would be focused on new technologies that could save lives on a battlefield and facilitate the security of nations, including the prevention of terrorism.

While the setting of fair wages and salaries—including all mandated fringe benefits—might be relatively straightforward in any industry, the inherently difficult aspect of regulating fair product prices results from the problem of how to divide machinery and overhead costs among goods and services. Obviously, this is less of a problem when establishing prices for services than when determining fair prices when expensive (capital-intensive) equipment and machinery is involved in the production process. The solution to this problem depends, in part, on the degree to which different equipment is used to make various kinds of products. When different products are made with the same equipment, its annual depreciated costs must be fairly distributed according to, perhaps, the fraction of time the equipment is used to make each product.

What is the correct way to account for the depreciation of capital investments in order to arrive at a “cost-based” charge for the use of such equipment over time? Currently, there are standardized accounting formulas for depreciation, but we should not as-
sume that accounting rules developed for a capitalist economy would be fair should a more socially conscientious economy be implemented. For example, the current system assumes that many types of equipment depreciate (for tax purposes) much more quickly than they should, given their actual engineering lifetimes; this allows firms to recover their investment costs far too soon. Thus, early customers that are given fair cost-based prices based on the use of particular types of equipment might pay too much, and customers who rely on much older equipment to make the products that they purchase might pay far too little. Confounding many accounting rules is the impact of inflation on allocating investments to production costs according to their cost basis, since current accounting rules usually ignore inflation and only rely on the original investment costs expressed in current (non-inflated) dollars. This does not significantly affect fair pricing practices when inflation is low, but if inflation becomes a significant factor, this assumption could possibly have undesired consequences. Perhaps socially “just” accounting rules have to be reconceived in order to consider inflation-adjusted investment figures. Obviously, accounting issues would affect any kind of cost-based or fair pricing decision making, and are not only relevant to the pricing of military goods and services.

Since the defense industry is paradigmatic of an industry that exists solely to carry out the public interest, how would the demand for products best be democratically determined? Currently in the US, Congress decides, in conjunction with the Defense Department, what kinds of products are needed. Yet while Congress is, in theory, a democratic body, other stakeholders need to have greater input into what kinds of armaments or related products should be produced in their communities or regions, given their possible negative side effects. This issue is not unique to the defense industry, but given the important public interest that defense serves, local communities home to various kinds of defense production facilities need to have some input into how and what products are produced there. This is especially relevant when worker health and safety issues inevitably arise. One stakeholder group that will automatically be involved with these issues consists of the unions that represent defense plant workers. Since these plants are unlikely to employ only a few workers, traditional labor unions provide an organic way for workers to be represented on a wide range of issues including health, safety, and environmental issues both internal and external to the immediate plant site. This would be true for many other large industrial facilities in other economic sectors—such as vehicle manufacturing, metals production, mining—especially to the extent that the demand for new metals cannot be satisfied through recycling, and so on.

E. NONPROFIT SECTOR

The nonprofit sector of a modern economy is actually very large and poses certain issues for a new economic system that have rarely been discussed in the past. Besides government institutions like public schools, the nonprofit sector also includes political organizations, lobbying groups, research organizations, foundations, social service organizations, professional organizations, and vast swaths of the medical sector such as hospitals, and private schools, among others. One characteristic of the nonprofit sector is that it tends to employ individuals with advanced education who are much more likely to produce services than physical products. By definition, this sector does not earn profits for investors and is therefore not “capitalist” even if it exists within a capitalist economy. However, many nonprofit institutions do actually bolster the perceived legitimacy of a capitalist economy.

The nonprofit sector tends to primarily produce services because they are labor-intensive rather than capital-intensive; thus relatively little capital is required from external investors on which they would want to earn a profit. Rather than earn a profit on the capital investments required for production, nonprofits provide high-quality services in the interests of the broad public good. For most small nonprofits, a cooperative form of control and management is
probably as appropriate as it is for small businesses, especially given the former’s need for highly skilled workers, or at least workers with comparable educational and skill levels. Without the need to generate “profits,” nonprofits should find it easier to transition to a democratic cooperative form of governance than most for-profit businesses, since internal conflicts between staff members for a bigger bite of the profit pie would be absent.

Large nonprofits traditionally do earn “profits,” but allocate them to the generous salaries of managers and professionals. The difference between large nonprofits and for-profit corporations is that the “profits” do not go to external stockholders since there are none. But the management of large nonprofits usually consists of highly paid professional staff, such as the senior doctors in a hospital or other highly trained managers who bounce from one large nonprofit to another. Such management structures are usually not very democratic, thus more broadly based management structures should be developed for large nonprofits that include employees at all levels of the organization. In highly scientific or technical institutions like hospitals or research laboratories, expertise is relevant to most management issues, so that certain management committees may need to be dominated by technical experts. But this does not mean that technical management committees should not include staff at all levels. Other types of nonprofits, such as foundations that award project funding, should include representatives of the communities they typically fund.

As the structure of all corporations in our new economic model moves away from stockholder ownership and toward cooperative ownership by employees—who are members of unions and represented on all management committees—a kind of “convergence” will occur between management structures of the current for-profit sector and the future large nonprofit sector. By definition, corporations that are no longer owned by external investors will no longer be capitalist institutions: they will be “not-for-profit.” This will lead them to approximate “nonprofits,” which usually have a fairly specific public-interest mission. Hopefully, in the future all corporations, large businesses, and nonprofits will have a required socially conscious mission that helps build a sustainable economy.

To what extent should the role of nonprofits be different from that of government? Clearly, there will be significant overlap. Some would say that nonprofits serve communities with respect to issues that are underfunded or relatively ignored by government. Though a valid response, others might argue that because nonprofits in the US are often funded by, or more responsive to, private interests and their donors, they are inherently less democratic than government agencies that could serve the same social purposes. Ideally private nonprofits could play the role of innovators, after which existing or new government agencies could distribute the innovative benefits more widely throughout society. This role is probably most appropriate for private nonprofits since it is generally easier for them to take new and bigger risks with their funding than is the case for government.

However, there are currently many large nonprofits, such as the Red Cross, whose missions might best be carried out by government. One reason for government to operate and coordinate all aid missions is to help ensure greater fairness and equity in the distribution of such aid, and to avoid organizational overlap and inefficiency. There are many other types of very large foundations that, in the long run, should not even exist—for example, the Rockefeller, Ford, or Gates foundations, which are all funded by family fortunes. Such fortunes would not be possible in a more just society where private stockholders no longer exist. In our future vision for society, the richest people would only be those who earn the highest salaries due to special expertise. But if the lowest to highest salary ratio were regulated through laws such as income tax rules, then far fewer wealthy families or employees would have sufficient excess earnings to start even small foundations, and certainly not large foundations. There would be no new family foundations with “only” tens of millions of dollars in assets, nor would today’s huge fami-
ily-based foundations exist that privately decide how to spend huge sums of money. Such foundations often have more money for certain types of projects abroad than the US government.

Another issue to address is: should contributions to nonprofits always be tax-deductible just because they are nonprofits, as they are today? Under what conditions, if any, should contributions not be tax-deductible? In the current economy, where the government does not have sufficient funds for all necessary social and research programs, making contributions to nonprofits tax-deductible provides an important incentive for people to give. But for those functions currently performed by nonprofits that should, in the future, be performed by government, tax-deductibility for such contributions should be ended.

A final important issue is whether the government should provide grants to any nonprofit corporations and, if so, what should the government (on behalf of its citizens) require in turn? For example, upon receiving a government grant for the development of a new technology, even cooperative businesses could be prohibited from applying for a patent. This would prevent private stakeholders from profiting from government grants; and this rule should also apply to nonprofits.

**F. AGRICULTURE**

Currently, the agricultural sector employs very few people in the US, but it utilizes a lot of machinery and is very capital-intensive given the industrial form of agriculture that is primarily practiced today. Discussions regarding the necessary transition to sustainable agriculture as part of a new economy often confuse sustainable agriculture with organic agriculture. While organic agriculture is compatible with the current industrial form of agriculture, sustainable agriculture will likely lead to greater employment in this sector, and will likely make it less capital-intensive.

A system of sustainable agriculture will require a revival of small towns and cities scattered throughout fertile regions of the country; thus, local cultural and political institutions will have to be greatly enhanced to attract workers and families back to “the land.” Whether family or cooperative farms become the new backbone of a revived agricultural system is still open for debate.

The practice of sustainable agriculture has yet to be fully fleshed out for the various climatic zones of the world. But there have been several good attempts recently, especially those summarized by Frances Moore Lappé. The key issues for our purposes are not biological or biochemical factors but, rather, social and political ones. Current industrial agriculture has reduced the workforce of farm owners and workers to only about 2 percent of the entire population over the last 150 years. Today large corporations control most agricultural production at one or many of the following stages: growing, harvesting, storage, wholesale-marketing, processing/cooking, and retail. How each stage of the process of getting food onto people’s tables should function must be considered when outlining the transition to a sustainable agricultural system that provides uncontaminated, healthy food to all Americans, and which allows for exports of food to other regions of the world. Of course, a sustainable agricultural system must also rejuvenate the soil, ecological systems, and water of farming regions.

Prior to 1900, agriculture was primarily “organic” in today’s sense of the word. Synthetic chemical products such as fertilizers and pesticides were not yet invented or widely used. The production of meat and milk was integrated into the production processes for cereals, grains, and vegetables on family farms. There were no GMOs or patented seeds. Most farms were owned by families where almost all family members participated in agricultural-related activities. These families rarely visited the nearest towns, nor did they actively participate in cultural and educational institutions until universal education was required. The local economy was primarily structured around small businesses that catered to the needs of farm families as well as their own families. With farming its major activity, life in the rural US was quite limited, not
that farm families had much free time. This point is significant because it is almost impossible to imagine today’s youth settling in communities that resemble those of the early-twentieth century. Today cars, trucks, and Internet access are widespread and while this has the potential to somewhat alter the social and cultural dynamics of rural farming communities, it is probably not enough to attract many young people back to the land without significant change. Furthermore, farming typically involves hard physical labor and is poorly remunerated; this second point would obviously have to be addressed. Another question is: What would happen to older farmers in the future, when the physical burden of farming becomes too great? Would they be allowed to retire at a younger age than other workers, as often is the case with police and fire fighters?

Where would the capital come from to finance truly sustainable agriculture that achieves net greenhouse gas neutrality, or better yet, which is a net sink of carbon? As modern sustainable agriculture may not make a profit or pay sufficient salaries given current food prices—at least during a fairly lengthy transition period—it would have to be initially subsidized by the government while industrial agriculture is phased out. Similarly, given the precarious financial condition of rural states that rely on farming today, the development of vibrant towns and cities that could attract new farming families would also have to be federally subsidized. This is especially true given that salary offers from city-based jobs would generally be much more attractive than agricultural salaries. Today, most young people can also choose which part of the country they want to work in. In contrast, prior to World War II, few children of farm families had a choice. One “bottom line,” then, is that either food production will have to be heavily subsidized if it comes from sustainable farms, or food prices will have to be systemically raised to cover the full cost of sustainable agriculture without unduly benefiting existing industrial farms as they are phased out. Either way, the population will probably pay much more for food than we do now, and, therefore, will have less to spend on other goods and services. On the other hand, current, relatively poor, farming communities will have more money to spend.

In order to broaden out the range of personal interactions and management input from which farmers could benefit relative to the current era of farming, it would make sense to organize farms on a cooperative ownership basis. Even today there are some cooperative farming institutions that still exist, such as grain elevators and local banks. Co-op farms would give farm families a chance to interact at many different management and occupational levels with their peers, as well as with external service suppliers. Furthermore, fairly large farming co-ops would also help reduce many kinds of transaction costs that individual farmers probably do not want to be burdened with, such as arranging crop and animal sales, crop insurance, financing, healthcare insurance, and so on. Co-op management processes would also give each farm family a sense that they are not alone in confronting unpredictable weather conditions or fluctuating market prices.

Another key question, however, is whether society should rely on “markets” to price each kind of crop or animal product. This, in turn, leads to the issue of whether futures markets—speculation on future market prices of crops and animals—should be permitted. Since the model of the future economy attempts to phase out investor profits from as many businesses and economic institutions as possible, this principle should also apply to the agricultural sector. Traditionally, agriculture has not been vertically integrated to a significant extent, thus there have been multiple ways in which excess profits could be made. Seed producers sell to farmers who sell to storage facilities and wholesalers, who manage their risks through futures markets, also used by banks and other investors to profit from accepting risk. Wholesalers then sell foodstuffs to food product manufacturers, who then sell their finished products to wholesalers and to large retail food marketers like supermarkets. Wholesalers also sell to small food retailers, where they have more influence over pricing policy.
Currently, those who participate in these many layers of economic transactions attempt to retain a slice of the total product retail price as profit and income to cover their expenses, including possibly inflated salaries for business owners. The final result of all these transaction entities and costs is that farmers are paid only a small fraction of the final retail price of food. Clearly, there must be a better way to organize the agricultural/food sector of our economy. We could begin by discussing the possibility of agricultural co-ops that manage the cultivation of crops in the first place. They might be able to handle all economic transactions from seed production to wholesaling, and perhaps even to retailing food on a vertically integrated basis. This would eliminate a lot of unnecessary middlemen, thus making it possible for the farmers in the co-ops to earn better incomes by hiring other co-op employees to perform these other functions under their management and control. Contrary to current practices, all farmers in all co-ops would have to be paid the same socially mandated benefits—sick and parental leave, vacation days, and so on—as are all other workers. Such requirements would help make farming a more attractive profession again.

One issue that arises from a discussion about wholesale markets for agricultural commodities is what kinds of wholesale markets should be allowed, and what boundary conditions should be set. As with other items potentially traded in global markets, it would be especially unfair to allow global agricultural markets to exist where corn grown in high cost-of-living regions had to compete with corn grown where farm workers’ wages were lower. This would be one aspect of the “race to the bottom” that we generally find in current globalized markets for commodities. Thus, inter-regional trade of this sort could not be allowed, at least not without a price adjustment mechanism that reflects regional cost differentials.

Of course, it is unrealistic to expect all regions of the world to be self-sufficient regarding each and every agricultural commodity or type of food product because different regions of the world have very different climates, soil types, and water supplies. This means that inter-regional agricultural trade should be allowed, but carefully regulated and controlled. However, should family incomes in rich countries decrease as global wealth becomes more equitably distributed, certain expensive food products may find themselves in a shrinking market, while other food products—particularly those that cost less and are healthier—may enjoy a growing market. Additionally, unhealthy foods like tobacco and sugary sodas may need to be taxed more heavily, or eliminated altogether.

Another dimension of the problem of how to best restructure agricultural and processed food markets in a sustainable way is that it will be necessary for “organic” and traditional food products, and their markets, to coexist for the first few decades. This makes the issue of how to best restructure and regulate regional and global commodity and food markets more complicated. The best way to transition from current to sustainable food products might be to simply require every food retailer to steadily increase the fraction of organic products it sells from the current level to 100 percent over a designated time period—perhaps twenty years. Each food retailer would, then, have to shift about 5 percentage points of its sales to organic products each year, which although very challenging is probably possible. Nevertheless, the maximum allowable time period for a complete transition to organic food products in every region of the world should probably be no longer than thirty years, given the current state of climate change.

Regions like Western Europe, where organic foods are already sold in significant quantities, should establish much faster transition rates in order to pave the way for other regions. Organic food sales have been growing at almost 10 percent per year in regions of Europe with yearly overall economic growth rates of only 1 to 2 percent. With the baseline for 2015 at about 10 percent of total retail sales of food products, this means that organic food sales in countries like Germany are growing at a rate of about 8 percentage points per year faster than overall economic growth.
Yet, even this growth rate for organic food of about 1 percentage point per year (of all food) is not nearly fast enough to meet a reasonable target of 100 percent organic food in the foreseeable future.

**G. FINANCE**

Since 2008 there has been a great deal of critique of the financial sector, but little has been said about how one might overhaul the entire system in favor of a more functional, democratic, and just set of institutions that support a sustainable economy instead of allowing the financial sector to earn a disproportionately high percentage (approximately 40 percent) of all corporate profits, at the expense of consumers. What would a restructured and sustainable financial sector look like, and how could it be controlled more democratically? Would the equivalent of Wall Street, where various kinds of financial securities are bought and sold at a feverish pace, even need to exist? One major feature of a sustainable financial sector would be for it to take as little money out of the rest of the economy as possible, which means that, at the very least, all financial institutions should be nonprofit. To accomplish this, in part by precluding securities speculation, our future economy would dispose of financial securities such as stocks and bonds—perhaps even government bonds.

In considering a restructuring of the financial sector, it is critical to propose how to minimize the numerous transaction costs this sector currently imposes on the rest of the economy while maximizing the extent to which this sector provides needed capital to build a sustainable economy at relatively low cost and risk to society. One consequence of this basic approach is that there should be no need for financial institutions, as for other businesses, to earn profits. There would be two basic kinds of banks: employee and/or community-owned cooperative banks, and state or government-owned and -managed development banks that direct major capital investments from the public sector (derived, in part, from tax revenues such as an assets tax) to sustainable development projects like renewable energy, clean water supplies, and organic agricultural development. Financial institutions would need to become nonprofit entities, in part because there would be no need or desire for private investors (capitalists) to risk their own money to provide capital to these institutions. All financial institutions—even local co-ops—should be conceived and operated in the spirit of a “public utility” and regulated as such by a central bank regulatory agency. Currently, the US has many electric and gas utilities that are co-ops, so there is an important institutional precedent here for cooperatives to be regulated as public utilities.

As David Schweickart argues in his essay in the New Systems series, the large banks would be the state and regional development institutions that would “create” money supplies by issuing new “loans” for major capital investments when approved to do so by the relevant industry-specific IRB (my proposed institution), with appropriate levels of public funds to back up (guarantee) the risks of such investments. Schweickart points out that there are a number of historical examples of public control over investment that may provide some lessons to be learned for creating increased public and social control over investment: government control over investment in Japan, South Korea, Germany, in Mondragon’s Caja Laboral, and even in the United States, in the example of the Bank of North Dakota, “the nation’s only public bank.” Andrew Cumbers has also written about public investment, in renewable energy specifically, outlining how the Norwegian state oil company and the Danish support of renewable energy offer potentially viable models for public sector direct investment and ownership of major energy initiatives.

While these examples exist within the current capitalist economic system, the financial risks of these types of development loans would be far lower in our restructured economy because most major investments would not be made on a speculative and leveraged basis to enhance the profits from those investments. Furthermore, these development loans would not require the government to issue bonds.
and accrue debt in order to raise the money. The government could just create the money for the development loans by fiat, thus no securities, such as government bonds that would pay interest to creditors, would exist. The lower risks inherent in most regional development loans, and the absence of profits charged, would also allow for the continuation of relatively low interest rates, or a low assets tax rate.

One major feature of a sustainable financial sector would be for it to take as little money out of the rest of the economy as possible, which means that, at the very least, all financial institutions should be nonprofit.

In other words, the interest rates charged for various types of loans would be based on two key factors: the social priority for the kind of investment contemplated, and the overhead cost of doing business for the development banks (without profits). As indicated, instead of calling the annual payments on these kinds of development loans “interest,” they could be considered payments of an “asset tax.” The tax rate for assets taxes could also be set by government according to the social priority and social risk represented by such assets. Complex speculative financial instruments such as derivatives, which existed primarily to reap profits for rich investors or institutions, would no longer exist, since there would be no bonds or stocks (equities) from which to create them.

In contrast to the operation of large regional development banks, smaller, more local types of private, cooperative, and community banks would not have the authority to create or expand the money supply. They would be required to have a 100 percent reserve of deposits on loans. Thus, they would only be able to lend out the amount of actual savings deposited by citizens and businesses. This dual approach to lending money for the real economy and for necessary government infrastructure investments would greatly stabilize the new economy, making financial crises almost impossible. The government would determine and regulate the size of the money supply via a central bank regulating the volume of loans originated by all of the regional development banks.

On a related point, approximately how high would the yearly administrative costs for cooperative or community banks issuing home mortgages be? How would these costs relate to the interest rates charged for mortgages during the period when privately owned real estate still exists? Providing home mortgages is a key function of traditional banks in our current financial system. The real cost of providing a mortgage when profits are forbidden would be almost zero, since once the initial administrative costs of arranging a home mortgage were incurred, a computer program would oversee all monthly payments. Thus, even an incremental interest rate of 1 percent per year (after adjusting for inflation) would exceed the costs of initiating and processing most home mortgages. For instance, a mortgage for $300,000 at 1 percent per year would generate $3,000 for a cooperative bank—a very large sum just to supervise monthly payments, adjust these payments for changes in real estate taxes, and so on. The true annual cost of carrying out these functions, averaged over thousands of mortgages, might be more like $300 or less. Thus, once home purchase prices were subject to the type of regulation discussed above, the cost of housing would be much lower than it is today, given that even low mortgage rates are currently 3.5 percent, or more.

Furthermore, any cooperative banks issuing mortgages would be required to permanently hold them, as reselling mortgages is usually done to generate a profit. But, again, speculative investments would not be allowed in our new economy, so financial instruments such as derivatives or repackaged mortgages would not exist. In short, there would be no need for what today are for-profit investment banks, or any
kind of for-profit banks. Again, public government-owned development banks would be the primary vehicle for making major capital investments in industry, commercial buildings, and public infrastructure. Furthermore, if private capital is not risked and there are no profits generated for bank stockholders, bank executives would have less work to do and would, thus, receive much lower salaries than they do today. Both development banks and local cooperative banks would be able to loan money to both private (cooperative, nonprofit) businesses and public entities at fairly low interest rates, based on socially prioritized asset tax rates or interest rates.

As in other sectors of the future economy, a government regulatory mechanism, such as industry-specific Industrial Regulatory Boards, would have to provide oversight and input into how all loan money is allocated among different sectors of the economy. In current legislatures, elected representatives have a significant, if not overriding, say in how public moneys are spent. While, in the future, legislators might not explicitly allocate all public loans, they would have some role to play in determining broad investment priorities. Thus, the democratic political process might address the allocation of loan funds throughout regions of the country at a more aggregate level than industry-specific IRBs would. The IRBs would deal with loans at the individual, cooperative, nonprofit, or business level. These loans would be made provided certain social, political, and fairness criteria were met.

For the foreseeable future, a major category of loans would have to be made to invest in technologies that could mitigate climate change by reducing the emissions of greenhouse gases. These technologies would include both “demand-side” technologies, such as additional insulation for existing buildings or electric vehicles and mass transit, and “supply-side” technologies such as renewable energy technologies like solar panels, windmills, and biofuels. This general category of loans for mitigating climate change might need to total at least $1 trillion per year, if not more, for the United States alone. (Although this seems like a lot of money, it is only a small fraction of current annual capital investments, and is only about $3,000 per capita.) Other possible loans for capital investments would have to be very carefully allocated to other sectors of the economy that are also high social priorities and that do not cause significant greenhouse gas emissions. Regional development banks would have to balance overstimulating versus under-stimulating the regional economies in which they operate.

The really politically charged aspect of deciding which sectors of the economy deserve new loans, and in what amounts, will likely affect the allowable investments that could be made for producing discretionary consumer products. This will raise political and cultural questions such as: does society really need new and faster cell phones, new flat-screen TVs, or new chemicals? Of course, a great deal of development financing will likely be allocated to the production of new medicines to improve human health, although older medicines are often perfectly adequate. It may be that better healthcare delivery systems need more investment rather than more pharmaceuticals. Similarly, a lot of investments will need to be allocated to the transition from industrial agricultural systems to organic ones that produce safer and healthier food products. Finally, there will be many tradeoffs between investments in public cultural activities and the production of private “toys.”

It may be necessary, as well, to limit the production of various types of traditional consumer products, regardless of the demand for them, and to ration certain products. In the latter case, the price will need to be determined and fixed by a government regulatory commission like an IRB to avoid monopoly pricing. For example, if cellular phone production had to be restricted due to a shortage of rare earth metals required for their manufacture, then each person might be limited to purchasing a new cell phone every five years. Additionally, new capital for this industry might be intentionally limited. However, this situation would be far from the downfall of civilization predicted by some “free market” advocates.
One major problem with the idea of allowing unregulated markets to determine the price of goods that are in limited supply (as opposed to rationing them) is that, on average, rich people will always be able to buy as many of these goods as they desire while poor people will be unable to do so. As usual, the reliance on markets raises many complex issues around justice and equity, since it is unacceptable for rich people to have better access to essential products. (Of course, this perspective also supports making incomes more equal.) The problem of allowing unregulated markets to determine the prices of products and services also applies to the current market for capital when it is not properly constrained. In capital markets, more capital tends to flow to industries that promise higher rates of profit, rather than socially significant industries that fulfill people’s basic needs. But since our vision of a new economy eliminates capital markets, this problem would no longer exist in the future.

Finally, the restructuring of the financial sector must grapple with the issue of how international markets in foreign currencies and securities should function in the US, as well as how and to what extent capital will be allowed to flow out of the US and across national borders. Also relevant is to what extent foreign investors and institutions may own various kinds of US investment instruments. These are obviously very complicated issues, and they point to some of the limitations of having separate nation states in the first place. But since our approach to a restructured US economy does not include financial instruments, and allows for much greater income equality in the absence of significant corporate profits, there would be little incentive or reason for people in the US to engage in foreign currency or foreign securities speculation. These types of activities might even be made illegal for US residents. And there would no longer be any US securities for foreigners to purchase.

Furthermore, if most major investments financed by government development banks required IRB approval, investments of US funds in foreign countries—even those purporting to help develop sus-

tainable economies—would likely be barred except when direct foreign aid from the US government is involved. One reason why wealthy countries like the US should not allow private investments in other countries—especially poorer ones—is that the owners of such investment funds should not take profits out of those countries. Doing so represents a continuation of colonialism as it still exists today. Even earning profits and reinvesting them in those countries is still essentially a colonial practice, since wealthy countries tend to own increasing percentages of the corporate and business equity of poorer countries over time. Only if a not-for-profit economic system existed in all countries could this be avoided. However, it might be permissible for rich countries to provide development grants to poorer ones on the condition that they grant the recipient full autonomy in terms of how the money is spent.
A. MARKETS

There are many common themes that emerge from our brief analyses of how some representative but very different sectors of the economy might function in a restructured economy. Many of these themes are consistent with the “Principles of a New Economy – 2012,” attached here as Appendix A. Most significant, perhaps, is that in many cases different kinds of existing market structures for goods and services are highly problematic. Either these markets would not likely be competitive—they would exhibit oligopolistic pricing tendencies—or they would overprice scarce goods—especially when the supply of these goods were limited by regulation or law—and they would naturally bias access to certain necessary goods and services to rich people who could easily afford them. In addition, traditional capital markets would not likely allocate capital to the priority areas needed to create or enhance a sustainable economy, thus strong regulation and government control would be necessary for determining to which industries capital should be allocated. The classical economic principle that “free” markets allocate capital and price goods “efficiently” is highly problematic since it fails to consider that the concept of efficiency can only be understood relative to what society’s goals are and how society wants to achieve its goals, which may not just be about maximizing financial income and wealth. We have seen that in certain markets it may even make more sense—in other words, be more efficient—to ration all essential goods and services according to clear rules and guidelines, instead of blindly following market pricing mechanisms that allow the rich to obtain anything they desire.

B. PUBLIC VERSUS PRIVATE OWNERSHIP

Private ownership of major corporate capital investments means that investors expect significant returns in order to motivate them to invest in the first place. This is the core idea of capitalism: non-employees of a firm earn money on their investments there, either in the form of stocks or bonds. Because the return on these investments tends to be much higher than the overall growth rate for labor productivity due to the workings of capital markets, capitalism tends to shift money to investors (capitalists) at the expense of workers (employees). This happens because average incomes (in real dollars) can only grow at approximately the rate of labor productivity, which has averaged about 1.5 percent per year over the long run in the United States. But if, for example, average returns on capital investments are required to be 5 percent per
year due to the workings of the capital markets, then capitalists will gain an additional 3.5 percent per year on their returns on capital relative to average incomes. If total returns on capital were 10 percent of total income, for example, capitalists would gain about 0.35 percent per year of the national income for their own incomes. Over the years, this produces growing income inequality between ordinary employees and capitalists, as we have seen in the United States since 1980. While some ordinary employees do invest in retirement plans and other savings instruments, they own only a small fraction of all capital investments in the US.

To avoid the inevitability of the current system’s income (and wealth) inequality, the ownership of most large corporations should be transferred either to employees (cooperatives) or to government (public ownership). Although co-ops still represent the private ownership of capital, “profits” are distributed fairly among all employees rather than transferred to outside investors who do not perform the labor that generates profits. Public ownership of capital is inherently more just because returns on that capital will go to the public at large. As David Schweickart has proposed, one way of providing appropriate returns on public capital investments is to have a fairly uniform annual tax on the depreciated value of the remaining capital assets, which he calls a “capital assets tax.” For example, for high priority industries with major public capital investments, this assets tax might only be about 2 percent per year in order to keep the prices of the products or services that result from those public investments affordable to most consumers. For lower priority investments, the public development bank that provides these investments might want to charge a higher assets tax rate like 3 percent, while business loans from private co-op banks might carry still higher interest rates—4 or 5 percent—depending on the perceived risk and social purpose of the business requesting investment.

Given the current priorities of our society, it is likely that public investment and ownership will tend to dominate once the transition to a restructured economy is carried out. These priorities for public investments include: public infrastructure (especially public transportation); energy efficiency enhancements and renewable energy sources; subsidies for private electric vehicles; the conversion of industrial agriculture to sustainable agriculture through major land restoration programs; the preservation of ecosystems and endangered species, especially those that provide air, water, and food to citizens; the construction of new, upgraded educational and healthcare facilities, especially in urban and rural areas where they have been allowed to decay; and the construction of more affordable housing.

C. ENVIRONMENTAL PROTECTION

Although environmental protection laws and regulations have been in place for decades, much tougher regulations are warranted since the environment has continued to deteriorate in almost all respects. Traditional economic development plans have continued to desecrate the environment by producing air, water, and ground pollution that contaminate food supplies and poison plants and animals. This partly results from the introduction and use of numerous human-made chemicals over the last 100 years. Given the gravity of this situation, the production of various chemicals and consumer products in the future may have to cease altogether, or some of their components will have to be replaced by more benign chemicals or metals. Additionally, the mining of many types of natural resources will also have to stop if environmentally friendly mining techniques are not developed, including those that protect the health of miners themselves.

Furthermore, since the distribution of many natural resources is very uneven across both the United States and other parts of the world, the pricing of these resources cannot be left to markets, given that supplies are usually very limited in relation to demand so that “competitive” pricing is not feasible. Natural resources, in general, will have to be mined and supplied to other businesses by publically owned corporations that
should be carefully monitored to insure that all relevant environmental protection laws are enforced. This will also give government free reign to appropriately tax the sales of all natural resources on behalf of the common good. For example, some analysts have proposed that high taxes on natural resources like oil or gas be used to fund minimum incomes for the citizens of the region/country where the resources are mined.

The enrichment of certain regions with large quantities of natural resources due to such taxation raises inter-regional and international equity issues that have never been adequately addressed. This issue is well illustrated by the Norwegian sovereign investment fund, which is based on the sale of crude oil found off the coast of Norway. This is just one issue, among many, related to the existence of sovereign nation states. Why should Norwegian citizens become so rich just because they live in proximity to this natural resource? Shouldn't the benefits of global natural resources be shared in new and more equitable ways in our future restructured economy? This brings us back to a point raised earlier: if there is an inevitable shortage of certain natural resources or products, shouldn't they be rationed among members of the population rather than using markets for their distribution? This is an important issue, especially regarding essential goods or where markets are not being allowed to set the price of the product anyway. Under these two conditions traditional economic theory does not apply, making the need to consider rationing even more evident.

Environmental protection will also require new kinds of major investment to either restore existing damaged ecosystems or prevent and protect ecosystems from future damage. This will be especially difficult, even in theory, given that climate change is already altering ecosystems in ways that we do not yet fully comprehend. As climate change becomes more severe, scientists and engineers may not know how to best preserve and protect the world’s ecosystems, so experimental approaches, which may often lead to failure, will be necessary. Nevertheless, we need to begin making these massive investments now, so that we can learn from successes and failures with sufficient time to save many of the world’s ecosystems from destruction.

Major environmental protection investments will be required to return air and water quality to acceptable levels of cleanliness. These investments will probably most impact people’s health in the short to medium term. Wealthy countries like the US will be required to provide large grants (not loans) to poor countries for this purpose. Much of the air and water pollution in poor countries has resulted from the activities of corporations from wealthy countries within their territories over the last century, as well as products sold by wealthy countries to poor ones, such as highly polluting power plants or vehicles.

**D. MITIGATING CLIMATE CHANGE**

The need to mitigate climate change is the most serious challenge to the survival of our planet and everything that inhabits it. Given recent scientific findings that show how quickly air and ocean temperatures are rising, we need to cease almost all greenhouse gas emissions by around 2050 in order to not exceed a two degrees Celsius increase by 2100. The planet has already seen an increase in air temperatures of about one degree Celsius, but most of the heat generated by the greenhouse effect is stored in the oceans, a fact not known by most people. The trillions of dollars per year that will have to be invested globally to mitigate climate change will reduce the investment funds available for other purposes preferred by consumers. Thus, mitigating climate change may impact almost every aspect and issue involved in attempting to restructure the economy in an equitable and democratic way. Among the most serious issues currently facing humanity is to decide on what processes should be relied on to decide how to invest for the indefinite future, and how to generate the necessary funds.

This essay has proposed that a set of Industrial Review Boards be established to carry out the mission of capital allocation—one for each major industry. (See the text box earlier in this essay.) In addition, there may need to
be duplicative IRBs for various regions of the country that are strongly affected by a given industry. At the top of the decision-making hierarchy would likely be a congressionally mandated investment bank that would determine the gross allocations of public capital among major industries and regions. For private capital, as long as private capital markets exist, each IRB would review and approve or modify all investment plans of every major corporation in the US.

One of the major problems related to climate change is that the above investment review scheme would have to focus primarily on transitioning the energy supply toward renewable energy and new more efficient industrial facilities, irrespective of the kinds of products they make. Since one of the key priorities for mitigating climate change is significantly investing in energy conservation and efficiency, alternative decision-making approaches are needed since these investments are required in relatively small amounts at the end-use and individual building level. For these purposes, in the past, new regulatory standards have been quite effective, and they have also been effective on the energy supply side of the economy, as well. Some examples of possible new regulatory standards include:

1. Mandate that all food sold by each retail store above a given volume be organic in increasing amounts per year until 100 percent organic food sales are reached. For example, if the percentage of organic food content increased by 5 percentage points per year, all food sold by supermarkets would be organic within twenty years. Similar standards could be adopted for smaller food stores.

2. The energy efficiency of all residential and commercial buildings would have to reach a state of the art level by a given year, such as 2040. In this way, the average energy consumption of existing buildings could be reduced by 30 to 40 percent, according to results provided by past studies. Much stricter standards could be adopted for all new buildings: for example, they could be required to be carbon neutral by 2030. Furthermore, all external energy sources would have to become renewable energy by 2040, which means that all buildings would have to be heated and cooled by 100 percent electricity. In general, renewable electricity is the easiest renewable energy form with which to heat and cool buildings. Old steam boilers that currently burn fossil fuels would not necessarily have to be replaced since they could be heated by electricity instead.

3. All use of pesticides and non-organic fertilizers could be phased out over the next twenty years for lawns, gardens, farms, orchards, and so on.

4. All new motor vehicles could become 100 percent electric within forty years, at 2.5 percentage points per year.

5. All industrial facilities would have to use 100 percent renewable energy by 2040 at a conversion rate of 4 percentage points per year. The exception might have to be where fossil fuels are used as feedstock, which could be allowed for somewhat further into the future even when carbon dioxide emissions from fossil fuels have been reduced to zero. This is because products made with fossil fuel feedstock may not emit carbon dioxide if they do not decay in the environment.

In dealing with the mitigation of climate change as well as with other issues of equality, democracy, and environmental protection, there are many trade-offs that need to be considered between new regulatory policies and new institutional forms for directing and regulating investments. Depending on the issue being considered, one of these approaches, regulation or directing new investment funds, will likely dominate.

E. FAIR (COMPETITIVE) PRICES
In a capitalist economy every major seller of products and services devises strategies to develop noncompetitive prices for the products they sell in order to generate higher profits. This trend would likely continue even if there were no “for-profit” corporations or businesses because higher revenues produce higher employee incomes, especially in co-ops. Contrary to economic myth, no business wants to sell at competitive prices since doing so minimizes the profits or income they make. Indeed, there are many fairly obvious ways of selling products and services at above-“competitive market” prices. One way is branding. All brands try to convince the potential buyers of their products that their brand is superior in some way so that they can charge more, even if the only difference is the name on the label. This is especially true in the clothing and automobile industries. Another problem of trying to determine if competitive pricing is even possible in a certain industry is the issue of transparency regarding important product information provided to the consumer. If consumers are not informed about product quality and capabilities, it is hard for them to determine a product’s worth, or to compare the merits of different products. If such a determination cannot be made, the concept of establishing a competitive price makes no sense at all. Even sophisticated buyers of industrial equipment might not be well informed enough to evaluate what would be a fair and competitive price for such products. This problem is exacerbated when the price for a professional service—law, medicine, or education—is being evaluated. In the medical field, the price of high-cost services is often set by health insurance companies based on the kind of service provided, rather than the quality of the service or the customer’s satisfaction.

Another problem with the concept and reality of competitive pricing is specific to a globalized economy in which workers in some countries earn much less per hour than those in wealthier ones. As has become evident in the current (2016) presidential campaign, allowing the sales of goods from poor countries in a wealthy country like the US is understandably still quite controversial. The US has lost many jobs to poor countries like China over the last several decades because transportation costs are generally far lower than what it would cost to pay American workers to make the same products. The main argument in support of globalized trade is that it both “allows” American workers to be “freed up” from mundane manufacturing jobs in order to perform higher paid service sector jobs and it makes the economy more “efficient.” But this has not happened; rather, many workers have lost lucrative manufacturing jobs only to end up in much lower paying service sector jobs. So the idea that price “competition” between rich and poor countries is just or fair is simply incorrect. This predicament is at the forefront of any discussion regarding a transition to a just future economy. Paying all foreign workers at least as much as American workers would solve the problem, but this would take decades to accomplish if it were even possible. At the same time, a just economy in the US should be structured in a way that would not harm workers in poorer countries, if possible.

Another possible solution would be to protect existing American jobs, and this could include service jobs that could be “exported.” This approach could include training younger workers not yet employed to go into the new kinds of higher-paying service sector jobs that were promised. This solution is more realistic but is still very hard to accomplish, and it explains why many economists have encouraged the pursuit of higher education. However, this strategy has backfired given the rapid rise in college costs and the resulting debt incurred by so many young Americans. Thus, a key component of our vision of a just economy is the establishment of tuition-free universities funded by tax revenues, as is the case in most of Europe. Without a reversal of this alarming trend toward higher university costs, young American workers will be unable to compete with foreign workers. For example, China already produces more university graduates than the United States, without the incursion of excessive student loans.
The discussion of the complex issues briefly outlined above provides some direction for further consideration of research in the following areas:

1. More detailed structural analysis of all industries and sectors of the economy, including engineering analyses of likely environmental impacts. Most progressive commentaries on possible structures for a new economy ignore the major differences between the opportunities and constraints that may continue to exist in different economic sectors. This is especially true because most progressive commentaries fail to acknowledge the distinct roles that markets can and should play in different sectors for different products and services. Furthermore, additional research is needed on the appropriate balance between the use of markets and regulation to solve environmental problems in different industries. In the past, regulation has proven to be the more effective of the two, but appropriate pricing mechanisms to deal with environmental issues have seldom been attempted.

2. Much more refined analyses and discussions of the possibilities for competitive pricing for goods and services in different sectors of the economy, as well as an analysis of constraints on competitive pricing due to the possibility of market power in certain sectors, even in the absence of for-profit businesses. The potential for market power must also be discussed in relation to various ownership and management models for different economic sectors. Even if a future economy is entirely comprised of employee-directed democratic businesses, some may still be able and tempted to exercise market power. Yet, exercising market power, even as a co-op, would not be just for consumers, especially for the pricing of essential products and services.

3. Further development of the regulatory implications of environmental impacts and market power analyses for different sectors of the economy, and how new regulatory agencies should be structured and operated to maximize democratic input and decision making. For example, the concept of an Industrial Regulatory Board for each major industry requires further elaboration and critique. Even if all businesses functioned to a considerable extent as cooperatives, employees would still be likely to protect their own interests more than those of society as a whole when making concrete management decisions. It will already be sufficiently challenging for employee-owned businesses to establish truly democratic internal decision-making processes; it
is too much to expect that they would automatically consider a wide range of social issues. Thus, regulatory processes and institutions that are external to each business and workplace will always be necessary in order to guarantee that businesses attempt to achieve social goals in a timely manner.

4. Further analysis of the implications of different ownership and board structures on processes in favor of more fair and transparent internal management of businesses and nonprofits of all sizes. For example, should outside managers ever be hired by employee-directed businesses, or should managers all be promoted from within the ranks? To what extent should salary disparities be regulated in employee co-ops in order to avoid internal conflicts and best incentivize employees at all levels? How should democratic decisions be made when a high degree of technical expertise is required to make important decisions in a particular workplace, such as within a research laboratory? How involved should external stakeholders be in internal workplace decision making, and under what conditions? Can internal representative democracy always work, or should most decisions be made via universal suffrage?

5. A range of stories or descriptions of “best practices” for a representative set of businesses, workplaces, and government institutions would be useful to further develop and elaborate all of the above issues.

6. More research is needed to determine how the capital flows to old and new enterprises should be coordinated within, and directed toward, the regional and national levels so that social goals can be best achieved as set out by legislative and regulatory bodies. Having an economy comprised entirely of employee-directed businesses and institutions does not, in itself, address the issue of where growth, shrinkage, and stability should occur, and how these changes will be implemented. Employees of firms that need to contract may need external assistance to manage employee success—for example, through job retraining and further education, or even via subsidies to relocate to other parts of the country.

Regulatory processes and institutions that are external to each business and workplace will always be necessary in order to guarantee that businesses attempt to achieve social goals in a timely manner.
While there are many existing proposals for certain aspects of a future sustainable economy, most descriptions focus almost solely on the issue of workplace democracy and ownership structure, especially for small to medium-sized businesses like small manufacturing plants. Yet most of the economy does not consist of such enterprises. Most business is currently conducted by large for-profit corporations and large nonprofit institutions, which may have to be broken up in the future if democratic workplaces are to be established. But businesses with the largest number of employees are small family-owned and -operated firms, where the concept of employee co-ops may not even apply should society be hesitant to legislate intrafamilial relationships.

As noted above, many workplaces are nonprofit institutions where there are different incentives for successful employment. Government institutions are also a very large part of the economy, and how they should be ideally managed is often neglected when discussions of employee ownership and workplace democracy are presented. Most importantly, there is little discussion in the literature on future just societies as to how the capital necessary for this transition will be raised, or how it will be allocated to all economic sectors to produce social outcomes that most benefit society as a whole. Finally, it is crucial to construct a new vision of the financial sector, clarifying why it should be limited to only those roles that provide socially necessary support for the “real” economy, as described in this essay. It will be particularly important to resolve how the future financial sector will relate to the capital allocation mechanisms established by new types of government institutions, such as regional development banks and IRBs.

1 By “sustainable economy”—and similar terms used throughout this paper—I simply mean an economy that is consistent with achieving and maintaining sustainable development around the globe.
PRINCIPLES FOR A NEW ECONOMY 2012

Preamble

The purpose of an economic system is to organize human activities in ways that support healthy and resilient human communities and ecosystems for both present and future generations.

To achieve this purpose, deep, system-wide change to existing economic institutions is urgently needed to reverse conditions typical of contemporary global, regional, national and local economies that exhibit one or more of the following serious flaws:

- **Unsustainable**: They over-consume and degrade the resources upon which their long-term prosperity depends.
- **Unfair**: They multiply financial advantages to those already advantaged at the expense of those most in need.
- **Unstable**: They lack resilience in a time of growing volatility and rapid social, political, technological, and ecological change.
- **Undemocratic**: They operate with inadequate democratic controls and accountability on the part of their most powerful organizations - corporations, financial institutions and governments.

At the root of these flaws is an implicit, dominant theory of economic purpose: namely to achieve continuous economic growth, as measured principally by GDP, by relying on “free markets” without regard to their negative impact on human and ecological well-being. At the core of a New Economy is the need to decouple the achievement of well-being from limitless economic growth by restructuring economies to:

- Fully realize individual potential through the advancement of human rights, including the right to fulfilling livelihoods, quality education, effective social safety nets, affordable nutritious food, clean water, secure health care, adequate shelter, and freedom from unjust persecution.

- Protect and nurture the richness and resilience of the natural world in ways that confront and rectify intensifying threats to humans and other species, including those associated with climate change, biodiversity loss, ecosystem degradation, and polluted air and water.

The following Principles are designed to guide the actions of all economic actors and organizations whose decisions and actions affect, or would be affected by, the transition to a New Economy.
PRINCIPLES

1. **Measuring Progress** - Economic progress shall be measured in terms of the well-being of all human societies, other living species, and ecosystems.

2. **Respecting Natural Limits** - The economy shall draw from, and inject into, ecosystems only what is compatible with maintaining a healthy and resilient natural world over the long run.

3. **Democratizing the Economy** - All institutions that manage, regulate and execute economic activity, including private corporations, shall be democratically controlled by all affected stakeholders in order to serve long-term societal goals.

4. **Ensuring Economic Progress** - Governments, on their own and in conjunction with private markets, shall work to ensure prosperous and resilient economic outcomes by making adequate investments in health, education, nutrition, shelter, physical infrastructure, and technology.

5. **Localizing Control** - Economic policy shall favor subsidiarity, i.e. the localization of economic decision-making and control to the greatest extent possible consistent with democracy, equity, efficiency, and resilience.

6. **Taming Finance** - All monetary systems and financial institutions shall be regulated as essential public utilities for the benefit of society as a whole, and for nurturing the “real” economy.

7. **Enhancing Fairness** - Significant economic inequality shall be understood to be inherently and profoundly antithetical to achieving human and ecological well-being, and shall be rapidly reduced.

8. **Providing Fulfilling Livelihoods** - Individuals shall be ensured of substantial opportunities for decent paid work, employee ownership, and the right to organize in the workplace, and shall be accorded proper recognition for work performed outside the formal wage economy owing to its fundamental role in enriching community and family well-being.

9. **Fostering New Values** - Economic values shall be redirected, by all fair and reasonable means, away from excessive materialism and shifted toward values that prioritize flourishing communities, individual happiness, and a healthy and resilient natural world based on lower material flows.

10. **Redefining Globalization** - International economic relations shall rest upon the same principles enumerated above that apply to economic activities within nations, such that economic justice also becomes embedded in such relations.
About the Author

Dr. Richard A. Rosen received a Ph.D. in theoretical physics from Columbia University in 1974. Soon thereafter, Dr. Rosen switched his area of research to energy systems and energy policy at the Department Of Energy’s Brookhaven National Laboratory in New York. In 1977 he helped to found what became the Tellus Institute, and until 2015 pursued his research and consulting interests there in the fields of energy policy, economic system alternatives, electric utility policy, planning and operations, and climate change economics and policy. Dr. Rosen has written or coauthored dozens of reports, papers, and items of testimony that he presented before professional conferences, public utility regulatory proceedings, federal courts, and in peer-reviewed scientific journals.

The Next System Project

The Next System Project is an ambitious multi-year initiative aimed at thinking boldly about what is required to deal with the systemic challenges the United States faces now and in coming decades. Responding to real hunger for a new way forward, and building on innovative thinking and practical experience with new economic institutions and approaches being developed in communities across the country and around the world, the goal is to put the central idea of system change, and that there can be a “next system,” on the map. Working with a broad group of researchers, theorists, and activists, we seek to launch a national debate on the nature of “the next system” using the best research, understanding, and strategic thinking, on the one hand, and on-the-ground organizing and development experience, on the other, to refine and publicize comprehensive alternative political-economic system models that are different in fundamental ways from the failed systems of the past and capable of delivering superior social, economic, and ecological outcomes. By defining issues systematically, we believe we can begin to move the political conversation beyond current limits with the aim of catalyzing a substantive debate about the need for a radically different system and how we might go about its construction. Despite the scale of the difficulties, a cautious and paradoxical optimism is warranted. There are real alternatives. Arising from the unforgiving logic of dead ends, the steadily building array of promising new proposals and alternative institutions and experiments, together with an explosion of ideas and new activism, offer a powerful basis for hope.