In this issue:

- Frank Ackerman
  Priceless Benefits, Costly Mistakes:
  What's wrong with cost-benefit analysis?

- Trond Andresen
  Two Feasible Future Scenarios:
  A high-tech utopia and a high-tech dystopia

- J. E. King
  A Defence of King's Argument(s) for Pluralism

- Geoffrey M. Hodgson
  Is it All in Keynes's General Theory?

- James K. Galbraith
  The American Economic Problem
Priceless Benefits, Costly Mistakes: What’s Wrong With Cost-Benefit Analysis?

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The critique of economic theory is not just a theoretical problem. In the hands of conservatives such as the Bush administration, simplistic and misleading economic abstractions are incorporated into structures of political power. Ill-founded economic theories provide a seemingly scientific rationale for doing the wrong thing, time after time.

Consider the current abuse of cost-benefit analysis, which is now said to be essential for evaluation of health and environmental protection. John Graham, formerly head of the Harvard Center for Risk Analysis, is the Bush administration’s “regulatory czar,” charged with evaluating regulations proposed by federal agencies to be sure that the costs do not exceed the benefits. Graham has frequently sent regulations back for revision or for additional analysis, when he concludes that the proposed rules would fail a cost-benefit test. Unsurprisingly, the end result has been a slowing and weakening of environmental protection.

The concept of cost-benefit analysis has a soothingly reasonable sound to it: why shouldn’t we check that the benefits exceed the costs before adopting a new regulation? But move beyond comfortable rhetoric to rigorous theory, and the case for cost-benefit analysis of regulations fails on at least three grounds.

Failure #1: Incremental movement toward an unattainable theoretical ideal may not be desirable. Cost-benefit analysis of health and environmental measures requires monetization of non-monetary benefits, a process that is the source of most of the difficulties in the analysis (as described below). It might appear that monetizing and internalizing environmental externalities is bringing the economy closer to the welfare optimum described by the Arrow-Debreu “fundamental theorems of welfare economics.” Yet that optimum depends on a host of unrealistic assumptions, including perfect competition among small, powerless firms in every industry, perfect information for all market participants, universal adherence to an implausible and unattractive model of consumer behavior, and perfect internalization of all externalities (not just the few that environmental economists have studied and politicians have accepted).

Even if all these assumptions are granted, economic theorists have known for thirty years that the market equilibrium may be neither unique nor dynamically stable. Perhaps most damning of all, the “theory of the second best,” known to economists since the 1950s, shows that if any aspects of the free-market ideal are fundamentally unattainable (as is of course the case), then incremental movement toward that ideal is not necessarily a welfare improvement. This point is not limited to environmental policy: the theory of the second best is a powerful argument against incremental market-based or market-oriented policy measures of any type. Such measures may or may not be desirable on other grounds, but they cannot logically be defended as small steps on the road to an idealized competitive market, since that ideal is clearly unattainable.

Failure #2: There is no crisis of excessive regulatory costs that needs to be addressed. The argument for cost-benefit analysis of public policy often involves the suggestion that we can’t afford to do (regulate) everything, so we should be sure we’re getting the most bang for the buck. This claim fails for two distinct reasons. First, there is no single budget, no lump sum of resources that is being allocated to one regulation or another by cost-benefit analysis. Most of the costs of environmental compliance are borne by the private sector, typically by the firms that cause pollution. Cost-benefit analysis of cleaning up the Hudson River in New York involves costs that might be imposed on the industrial corporations that pollute the river. Cost-benefit analysis of the use of harmful pesticides in California agriculture involves costs that might be imposed on agribusiness, in a different industry from the Hudson polluters and thousands of miles away from New York. If one of these measures passes a cost-benefit test and the other does not, no funds are transferred from one industry to the other; one industry just ends up with less regulation, more freedom to pollute, and more profits.

In some ultimate sense, it is true that overall resources are limited and we can’t afford to spend everything we’ve got on environmental protection. However, no society has ever approached this
limit; no significant policy proposal has ever advocated anything of the sort. The limit on aggregate resources is so far from being a binding constraint on environmental policy that it can be ignored in practice, just as our inability to exceed the speed of light can be ignored in the process of automobile design.

Second, the most common evidence for the crisis of regulatory costs is simply erroneous. The tables showing widely differing costs per life saved by different regulations are so consistent with the worldview of mainstream economics that they have been repeatedly reprinted with little or no critical scrutiny. As my co-author Lisa Heinzerling has demonstrated, these tables and their claims of regulatory inefficiency rest on just a few widely cited studies, which commit a series of empirical errors in their haste to establish their desired conclusion. For example, many of the expensive-looking regulations in the familiar tables of regulatory costs are actually proposals that were never adopted, whereas the more cost-effective rules, such as removal of lead from gasoline, have often been completed and cannot be repeated for additional savings. There are no lives or money to be saved by moving imaginary resources from expensive proposals that were never adopted to cheaper regulations that have already been completed.

Failure #3: Compensation tests and “potential Pareto improvement” do not justify cost-benefit analysis. One of the underlying assumptions of cost-benefit analysis is that distribution can be ignored: costs and benefits to all economic agents are indiscriminately added together in calculating the bottom-line evaluation for society. This disinterest in distribution is justified by the Kaldor-Hicks compensation tests: if the winners from a policy could compensate the losers, leaving everyone as well or better off, then the policy is a potential Pareto improvement. There is no requirement that the winners actually pay compensation, and all too often, they choose not to do so; the Pareto improvement normally remains purely potential. As Amartya Sen has insisted, this potential improvement may not in fact be desirable. A policy that makes the rich much richer and the poor a little poorer is a potential Pareto improvement, but with enough of such improvements, the poor will starve. (If compensation is paid to the losers, then the policy becomes an actual, not just a potential, Pareto improvement.)

This and other problems with the Kaldor-Hicks compensation tests have long been known to theorists. Yet the practice of cost-benefit analysis continues to be justified in terms of the theory of compensation tests, along with the supposed crisis of regulatory costs and the general desirability of moving toward a competitive optimum. An old joke describes economists as seeing something working in practice, and asking whether it is possible in theory. In this case the joke is being told in reverse: having established that cost-benefit analysis of environmental protection is impossible in theory, its advocates have set out to see if it works in practice.

Why Benefits Are Priceless

In practice, cost-benefit analysis of health and environmental protection rests on an implausible process of monetization of priceless benefits. Human life, health, the natural world, and the well-being of future generations are priceless – not infinite in value, but fundamentally incommensurable with money. Here I will only summarize some of the arguments that Lisa Heinzerling and I have made at greater length elsewhere:

It is not meaningful to put a dollar value on human life. The benefits of many environmental regulations include avoided human deaths; the attempt to monetize benefits and compare them to costs requires a dollar value for life and death. Under the Clinton administration, US Environmental Protection Agency (EPA) felt the answer was $6.1 million, based on a literature review of a number of empirical studies. Most of the studies looked at the risk premium in wages for jobs that had differing risks of death, holding everything else constant. If the average male blue-collar worker gets a risk premium of about 30 cents per hour over equivalent risk-free work, that is arithmetically equivalent to $6 million per life.

The Bush administration, leaving no methodology unturned in its quest for lower benefits and weakened environmental protection, decided that it preferred the results of studies in which people are asked to assign monetary values to small hypothetical risks of death; this yields numbers as low as $3.7 million per head, or, in a particularly controversial version, only $2.6 million for those over 70.
These numbers do not offer a reasonable description of society’s obligation to control and eliminate life-threatening health and environmental hazards. Indeed, there is no reason to think that society should spend the same amount of money on avoiding every type of preventable death, ignoring the many differences in context that determine the meaning of and responsibility for these deaths.

**Valuation of non-fatal health hazards is conceptually and technically flawed.** An enormous number of diseases and health conditions are affected by environmental policy measures; there is little hope of valuing them all. Health economists’ attempts to measure QALYs (Quality Adjusted Life Years) have led to paradoxes and inconsistencies, and have not been widely accepted. Willingness-to-pay measures favored by environmental economists have foundered on the impossibly large data requirements, as well as underlying conceptual flaws. In EPA’s cost-benefit analysis of removing arsenic from drinking water, the analysts could not find a value for avoiding a non-fatal case of bladder cancer, and (as usual) did not have sufficient time or budget to do a new empirical study. So they simply used a value that had been developed for chronic bronchitis more than a decade earlier – based on a shopping mall survey in which respondents were asked whether they preferred their current neighborhood, or a similar one with a lower cost of living and a higher rate of bronchitis. Borrowing of values estimated for other externalities is called “benefits transfer” by practitioners. If, in elementary or high school, you copied someone else’s homework when you didn’t have time to do your own, you were engaged in “homework transfer.” As the practitioners discover at times, homework transfer can lead to grief if you do it carelessly and copy the answer to the wrong question. Despite its proclivity for similar mistakes, benefits transfer is ubiquitous in cost-benefit analysis, since in practice there is never enough time or funding to do a new, full-blown contingent valuation study for each relevant externality.

**The natural world has a very large but nonquantifiable value to many people.** In valuing impacts on nature, economists distinguish between use values and non-use values, such as the value placed on the existence of a species or wilderness. Use values are sometimes well-defined, but often small. Non-use values are often large, but poorly defined. In the case of the Exxon Valdez oil spill in Alaska, the losses to people who worked and lived in the affected area were estimated at $300 million, while the existence value of the area to the US population – the amount that American households were reportedly willing to pay to prevent a similar oil spill in a similar area – was $9 billion, or 30 times as large. If protection against oil spills is judged by a cost-benefit test, the existence value of the affected region justifies 30 times as much environmental protection as the use value.

But precise numerical existence values are conceptually problematical, as demonstrated by a brief digression on whales. The “use value” of whales is reflected in the amounts that people pay to go on whale-watching trips. This is an established tourist industry, with annual revenues of $160 million in the US. On the other hand, the existence of just one species, humpback whales, is, according to one study, worth $18 billion to the US population – more than 100 times the total revenues of whale-watching trips.

Suppose that you have bought the last ticket on a whale-watching trip, and someone offers to buy your ticket from you for twice the price you paid for it. You may or may not accept, but the offer is not offensive. Now suppose that someone offers $36 billion for the right to hunt and kill all the humpback whales in the ocean. Although this offer is twice the existence value, it would strike most people as offensive. The differing reactions reveal that the two types of “prices” are not comparable. The use value of whales is a real number; a seat on a whale-watching trip is a commodity with a meaningful market price. The existence of whales is enormously valuable to many people, but the $18 billion figure contains no quantitative information; it is not the price of a commodity that can be bought or sold. Existence values are real, but they are not really numbers. Some other way must be found to reflect those values in public policy.

**Discounting distorts and trivializes future health and environmental outcomes.** The process of discounting future costs and benefits is essential for short- and medium-term financial calculations. But the same mathematical techniques yield nonsensical results when applied to the far future, and to non-monetary values. There are two distinct problems that result from inappropriate discounting of the environment.
First, discounting is often used to suggest that events a century or two in the future don’t matter today. Discounting at any positive interest rate makes serious intergenerational harms such as the future impact of climate change look relatively small in present value terms. The conceptual error here stems from forgetting the rationale behind discounting: the calculation assumes that a single observer compares (usually) costs now and benefits later, coming to his/her own conclusion about whether to accept the tradeoff. But there is no individual who will have personal experience of both the costs of climate change mitigation today and the benefits that will be enjoyed one hundred years from now. Another method is needed for decision-making about future generations.

Second, in the analysis of exposure to toxic chemicals, it has become common to discount diseases such as cancer over their latency period. Since cancers often show up 20 years or more after the exposure that causes them, discounting has the effect of sharply reducing the “present value” of the health benefits from controlling carcinogens. Advocates of risk analysis and cost-benefit analysis argue that the benefits should be interpreted as the reduction of risk of death for large numbers of people, not the reduction of actual deaths for a much smaller number. While this argument is itself problematical (it ignores the different experience of the people who will actually die), it implies that health benefits should not be discounted over the latency period. Risk is reduced at the time when exposure to carcinogens is reduced, typically soon after a policy change – not decades later when there is a reduction in the appearance of cancers.

Theoretical Critiques and Practical Alternatives

Criticism of cost-benefit analysis inevitably leads to questions about the alternatives. If monetization of externalities, in the style favored by most environmental economists, is not a reliable basis for public policy, then how should decisions be made? One answer is that there is no need for a new decision-making system, since the old one works so well. The environmental laws and regulations of the last thirty-odd years have been extremely successful, reducing pollution and protecting health and nature; although adopted, for the most part, without complex economic calculations, none of these protective measures have bankrupted us or proved unaffordable.

While this simple response has considerable merit, there is more that can be said about right and wrong ways to make policy decisions. Three strands of theoretical critique of the cost-benefit methodology point toward desirable features of an alternative.

Values of risks and damages depend on context; they cannot be measured in general. Underlying cost-benefit analysis, and the related field of risk analysis, is the assumption that equal damages should be valued equally in every context. If a death is worth X dollars, whatever X may be, then 10 deaths are always worth 10X, regardless of how and why they occur. It turns out that people do not think this way: 20 times as many Americans died from diabetes in 2001 as from terrorism on September 11, yet there is no doubt which of these categories of deaths mattered more to public life and policy. To cite another example, the risk of death in the US is almost identical from working in the construction industry and from downhill skiing (about one death per two million person-days), but there is a much greater public responsibility to protect construction workers on the job than skiers on the slopes.

The implication of this critique is that there is no hope of creating a purely quantitative, context-independent system of decision-making. Context is everything in evaluating health and environmental damages; externalities have to be valued and addressed “in the field,” in the context in which they actually occur, not collected for later study in the laboratory. A political, not an economic, process is required to make the intrinsically context-dependent policy decisions.

Disaggregation of benefits makes the comparison of costs and benefits more opaque. There is a tautological sense in which everyone does “cost-benefit analysis” all the time — not monetizing benefits, but implicitly comparing costs and benefits of possible actions, perhaps according to rules of thumb or inarticulated personal standards. In this broad sense, every democratic decision can be said to have passed a cost-benefit test: policies are only adopted if the voters prefer the benefits of the policies to the costs.
The formal application of cost-benefit analysis to public policy employs a much narrower and more controversial methodology, assuming that the best way to compare costs and benefits is to disaggregate benefits into “elementary particles” of value – numbers of deaths and serious diseases avoided, hectares of wetlands preserved, and so on. Then the analysts supposedly can monetize each particle of value, and finally reassemble them into complex molecules of benefits, to be weighed against the costs.

This disaggregated methodology has failed in practice. It does not yield transparent or objective evaluations of benefits; rather, it renders the discussion of benefits obscurely technical, excluding all but specialists from participation. At the same time, political debate continues behind the veil of technicalities, as rival experts battle over esoteric valuation problems.

Rather than engaging in the hopeless effort to refine the disaggregated benefit estimates, we could ask people to judge costs and benefits on a more aggregated or holistic basis. Consider a policy proposal, debated in 2002-03, that would have increased the costs of many US power plants, in order to reduce the huge number of fish killed by their cooling water intake systems. One could, as EPA did, spend several person-years of effort in modeling the wide variety of fish populations and aquatic ecosystems, and in exploring intricately indirect ways to assign precise monetary values to the many affected categories of fish (most of which are not sold in markets). This led, in practice, only to more debate and disagreement about the minutiae of fish valuation. Or one could present the information on the costs of protecting fish, and the expected effect on electric bills, along with a description of the millions of fish that could be saved annually. Then voters, or their representatives, could decide whether the benefits as a whole – not monetized, but described in their natural units – justified the costs as a whole.

**Precise estimates of future environmental impacts are frequently unavailable.** Cost-benefit calculations rest on the best available estimates of health and environmental impacts. Much of the effort in cost-benefit analysis is required to develop these estimates; important effects are often omitted for lack of sufficiently precise data. EPA’s analysis of arsenic in drinking water recognized that at least a dozen serious diseases are linked to arsenic, but found sufficient data to estimate the numerical incidence of only two diseases, bladder and lung cancer. For lack of data, the other ten diseases were implicitly valued at zero.

An apparently common-sense, intuitively Bayesian approach to statistics can be seen here: why not use whatever information we have to develop the best possible estimates of impacts? But the focus on precise point estimates distracts attention from the tremendous uncertainty that surrounds many important impacts. Public health and environmental policy have always been matters of decision-making under uncertainty. The more uncertain we are, the more important it becomes to plan for the credible worst-case outcome. People act this way in daily life, in buying insurance against low-probability but high-cost outcomes like house fires or car crashes. (It’s possible in theory, too: just assume that people are liquidity constrained and risk averse, and the math works out perfectly.) Even such ordinary steps as arriving early at the airport or for an important appointment reflect precautionary approaches, based on planning for the worst, not playing the averages.

Cost-benefit analysis typically asks, what is the absolutely most likely outcome? But recognizing the pervasive uncertainty in our estimates and forecasts, we should instead be asking, what is the worst outcome that is at least as likely as risks that people normally pay to insure themselves against? Environmental activists are increasingly discussing the “precautionary principle” as a basis for decision-making; they might make more headway referring to it as the insurance principle.

Finally, in addition to these new directions, it is important to remember that the environmental decision-making of recent decades has been a remarkable success, without help from sophisticated new decision-making techniques. It may be a novel experience for critics of established economic theory to find themselves in the classically conservative role of defending history and tradition. (I’ve hardly been able to adjust to it myself.) But in the arena of US environmental policy, the radicals who want a sweeping, fundamental break with past practice are to be found in the White House and the halls of Congress, not outside in the street. The Clean Air Act, the Clean Water Act, and all the rest have, at entirely affordable cost, made you and your family much healthier. Don’t leave home without them.
Notes


5. This point was made, in almost these words (though not as a joke), by Eric Posner, a legal scholar and leading advocate of cost-benefit analysis, in a recent debate on the subject at the University of Chicago. After acknowledging the theoretical weakness of the case for cost-benefit analysis, Posner maintained that it was nonetheless important to use it in practice.

6. The points made in this section are elaborated and documented in *Priceless*.

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Two Feasible Future Scenarios:  
A high-tech Utopia and a high-tech Dystopia

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Introduction

The current political and ideological climate does not encourage the launching and discussing of truly long-range goals for societies (in this paper “long-range” means “a century or two”). Such topics are discouraged for several reasons:

1. The dramatic and complete collapse of attempts at socialist societies.

2. Related disillusionment also because of revealed theoretical and ideological weaknesses of socialism and communism.

3. The increasing “postmodernist” belief in many academic and intellectual circles that (even) such until now uncontroversial “programs” as enlightenment and progress are “simply not possible”.

This paper holds that the baby is being thrown out with the bathwater. If utopias – grand visions for qualitatively better societies – do not play a part in public debate, this has detrimental effects on political choices made today, also and even when the visions in themselves are maybe infeasible and can never be completely realized. In this context the metaphor of an asymptote may be useful. An asymptote in mathematics means a straight line that a given graph approaches with an always-diminishing gap, but which it will never reach completely. The utopian society to be presented is feasible in an asymptotic sense.

Another important concept for this paper is the self-fulfilling prophecy: Political processes, as opposed to natural or “physical” processes, are subject to this mechanism. If some new view or proposal for big change is disseminated only by some individuals or fringe groups, and only mentioned occasionally in the media, it may easily be disparaged as “crackpot”. But attitudes and ideas that are repeatedly disseminated and talked about will after a while seem feasible and “realistic” even if they were initially met with skepticism – what was controversial becomes conventional wisdom by repetition. An example of the latter is how public opinion of what constitutes a “realistically” achievable level of employment has (been) changed since the early seventies, and how this change in opinion has made possible political reforms to that disadvantage the unemployed. But the mechanism of the self-fulfilling prophecy should also give grounds for optimism, since it can work the opposite way: It indicates that unconventional or “grand” ideas should not necessarily be considered crackpot because they are initially derided.

In the above spirit, with the (somewhat pretentious) notion of contributing to self-fulfilling prophecy processes, this paper will present both a utopia and a dystopia. The first one should be strived for, the second one avoided (the author brashly assumes that most readers will agree on the attractive, respective repulsive, characters of the two scenarios to be presented).

Both future visions have something in common: They presuppose that science and technology progress in a relentless manner, and is not something that may or will be hindered or retarded significantly by human interference. (Thus the possibility of a grand collapse of modern civilization into barbarism for some reason is not considered.)

With the assumption of progress in science and technology (I should note the term “progress” is used in a strictly descriptive way – not implying any positive value per se), it follows that employment in all types of work that can be automated will contract: in the dystopia, to increase profits without a second thought to those that lose their jobs, in the utopia as a deliberate tool to liberate labour for meaningful “service” jobs – creating, interacting, teaching, entertaining or caring for other people.
The utopian scenario

Maybe the most famous single quote describing the essence of a future utopia is this from Karl Marx:

In a higher phase of communist society, after the enslaving subordination of the individual to the division of labor, and therewith also the antithesis between mental and physical labor, has vanished; after labor has become not only a means of life but life's prime want; after the productive forces have also increased with the all-around development of the individual, and all the springs of co-operative wealth flow more abundantly – only then can the narrow horizon of bourgeois right be crossed in its entirety and society inscribe on its banners: From each according to his ability, to each according to his needs!” (Marx, 1875).

Marx' visions for communism is (sadly) somewhat out of fashion these days, so let us turn to literary (science) fiction, which is less constrained by what is considered “realistic”. The novel The Dispossessed by Ursula K. LeGuin (1974) describes a communist society in the Marxian sense (with one important exception). In the language spoken in this society, the word for “play” and “work” is the same. But there is a separate term for “drudgery”. This is an important point for the utopia to be discussed: Work must be attractive in itself. LeGuin’s utopia diverges strongly from the Marxian one however, in the sense that “to each according to his needs” is difficult to fulfill. Hers is an anarcho-communist society with scarcity. This society is realized on an arid planet with few natural resources, and is constrained by this in spite of advanced science and technology. While individuals are not restrained by rationing or the need for money (which does not exist in a communist economy), and therefore in theory may consume or take whatever and as much as they want of the output of society, they hold back voluntarily only by the (more or less internalised) fear of losing the respect of their fellow citizens, and/or their self-respect.

Another utopian novel is Voyage from Yesteryear by James P. Hogan (1982), where a robotic expedition arrives at the abundant and pristine earth-like planet Chiron. The expedition has a cargo of the necessary genetic material to “hatch” a new generation of humans. These children grow up under benign robotic supervision, and – free from the influence of any earthly society – spontaneously create a utopia without a state, coercion, money, wages, formal authority and hierarchies. As opposed to LeGuin’s utopia, this is a society with nearly limitless abundance due to technology (robotics, tamed fusion energy) and a low population in relation to the resource base. So what makes people behave in Hogan’s utopia? Something similar to that in LeGuin’s society: Respect and self-respect. A second and much later wave of colonisers, this time consisting of actual grown-up human beings with all the conventions and hang-ups due to socialisation in a competitive capitalist society (Earth) arrives on Chiron and is confronted with attitudes and values which they simply do not grasp: “When in a store, and you don’t have to pay for anything, why not grab all the attractive goods you can lay your hands on, and come back for more?” “– You will learn”, the Chironians reply, cryptically. And most of the new colonisers do. The Chironians also have an interesting “informal command structure”: Authority exists only to the degree workers in a plant accept that a certain person aspiring to a leading or coordinating role has the talent for this. If not, the person will simply be disobeyed or ignored. But if the person is considered competent, her right to take decisions on behalf of the collective is readily accepted, and “orders” are loyally implemented.

With Marx and these books in mind, let us now discuss the material basis for a(n) (at least “asymptotic”) utopia. What enables today’s high living standards in industrialised countries (abstracting from exploitation of poor countries and unsustainable use of the environment) is

- a high level of education,
- modern infrastructure (communications and transportation),
- automated manufacturing, process industry, and information-technology mediated services.

The last factor is underestimated and will therefore be discussed. Let us begin with the question: What sort of work can be automated, and what sort of work cannot – or should not – be automated? A former Norwegian conservative prime minister once replied in an interview that it was the government’s goal to “increase the productivity in our day-care centres”, which demonstrates that he had not reflected much on this. For work where people care for, teach or entertain other people must necessarily remain labour-intensive, regardless of technological advances. One should instead pose
the question from another angle: Isn’t the point of automation where it is technically possible and not detrimental to people or the environment, to increase our capacity to “work” instead with and for each other? Should not working with/for other human beings be less – not more – “efficient” in a throughput sense? (“Work” is here placed in quotation marks in the spirit of LeGuin). A future car assembly plant, or a paper factory, or industrial cleaning, can be run with hardly any staff. Such automation has no adverse side effects (cars or paper or floors or other non-living things do not need human caring). The only argument for upholding such jobs is in a type of society that cannot offer alternative employment. But if “liberated” workers had (more) meaningful work to go to, shedding workers because of automation would be just the way to go.

The future utopia then has a tiny workforce (a couple of per cent) in highly automated and roboticised plants, churning out manufactured consumption and investment goods, and processing raw materials for inputs to other factories². The public transport system is also highly automated and (at least for the urban stretches) free. Over 90% of the workforce is employed a few mandatory hours a day or per week (but if they like they may of course work more – most work is play anyway) with jobs consisting of interacting with other humans, or doing individual creative-type work, which also cannot and should not be automated. Tasks are

- sports
- cultural and creative activities
- media
- research
- teaching, also in a wider sense: Mountain-climbing, horse riding, diving, chess-playing
- day-care, health services, care for the elderly – with a dramatically reduced workload

All these services are cost-free for the users.

Another type of task that also has a limited potential for automation is working with non-human living organisms, like in

- ecological restoration
- ecological agriculture, which will be more labour intensive than today’s industrialised version

The reader may protest that not all of these tasks are purely work/play in the LeGuinian sense, but contain elements of drudgery. This is an important objection. In spite of automation and information technology, some necessary work will – due to its character – not change much, and remain boring or unpleasant. The answer to this is (even) shorter mandatory working hours for such jobs, and job rotation – which has merits in itself. In Marx’ words:

“In communist society, where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticize after dinner, just as I have a mind, without ever becoming hunter, fisherman, shepherd or critic.” (Marx, 1845).

A bit more prosaically one could say that a small amount of drudgery (changing napkins in the nursing home) qualifies for a lot of pure work/play (hiking in the bush with the kids).

Another objection is “why should people work at all in/with factories and manufacturing plants when instead they can do all this more meaningful and/or entertaining stuff?” The answer to this is twofold:

- A minority of people are deeply fascinated by tinkering with technical processes, and gradually making them run even better. And they are not very interested in interacting with people as the central point of their job.
- Pride: The select few that control the utopia’s manufacturing plants and process industry are the persons enabling society as a whole to enjoy its very high living standard. They know it, and the others know it too.

This utopian scenario assumes that there is a reciprocal understanding and respect between the “producers” and “non-producers” – an understanding that is lacking in today’s societies. In the author’s Norwegian experience, debates on government budgets and macroeconomic choices to a large degree take the form of an entrenched conflict between two camps: The employers and some
union leaders in the “competitive private sector” emphasise that “the rest of society lives off the values
created here”, and therefore public sector spending and wages should be curbed. Public sector union
leaders on the other hand, hold that spending should be based on “what is needed”, and their wages
should track those of industrial workers. They have little interest for or understanding of the
importance of an industry exposed to the efficiency demands of a world market. This is a deadlock
that could be ameliorated by discussing scenarios of the type that is presented here. The solution
should be to get the “warring factions” to agree on the following:

Automated state-of-the-art manufacturing and process industry is a prerequisite for affording
a comprehensive free (public) service system. But manufacturing and industry is not a goal in
itself. A comprehensive free essential services sector is the goal – automated manufacturing
is mainly a means.

(A note about the term “essential” used here: The utopia is organised such that the type of private
services which we see on the rise today will not be very much in demand: Finance, security,
marketing, catering to the rich. These are here termed “non-essential”; see also the section on the
“dystopian scenario” below.)

Another issue that should be discussed in the light of the utopian scenario, is whether a country today
should do something to uphold and develop manufacturing, or should it all be outsourced to countries
like for instance China. An argument in favour of today’s trend is that these countries need to export
to richer countries to lift themselves out of poverty. And wages there will increase as they develop, so
these countries’ competitiveness will decrease correspondingly. Then automated manufacturing may
be revived in those of today’s importing countries that temporarily gave it up for overblown non-
essential service like for instance finance, marketing and similar businesses. This is possibly an
acceptable strategy, but it is not at all publicly discussed today. Seen in the time perspective
suggested in this paper, it is self-evident that any country that wants the type of near-utopian society
that is sketched must have its fair share of state-of-the-art automated manufacturing. Note also that
this implies a critique of today’s widely publicised opinion in academia and among media pundits that
western developed societies have reached an advanced “post-industrial” stage. The reality is that
these societies have simply outsourced their manufacturing to countries with low wages.

The following should also be discussed in connection with the utopian scenario: What is a “high living
standard” and does this not imply environmental damage? But work consisting of interacting with
other people is not ecologically unsustainable. “A high living standard” in our context does not mean a
large consumption of resources and energy, and corresponding waste generation. The necessary
energy may be generated from renewable sources and through efficiency improvements, particularly
in end-uses. The feasibility of this even with today’s technology has been demonstrated by – among
others – Reddy, Golemberg and Johansson (1989). And with comprehensive use of information
technology and robotics, goods may be efficiently produced and recycled, and waste minimised.

A final point in this section about a long-term utopian scenario is “can we get there gradually”? Ignoring
the controversies on the political left about “reform versus revolution”, I will here suggest that
a modern market economy may (at least in theory, assuming that persons/parties with the political will
for it are in power) be gradually changed in the direction of the utopia, by – among other things –
carefully selecting activities that are “ripe” for being made public and cost-free for the users. Such
selection can be done based on at least one of the following criteria being fulfilled for the product or
service in question:

1. Limitless consumption is no problem, capacity- or environment-wise (example: local phone
calls, Internet access). (This is the sole – and therefore unrealistic – premise of Marxian
“higher-stage communism”.)
2. Consumption is due to its nature inherently limited or rationed (example: schools, hospitals,
funeral services, local public transport but not long-distance travel).
3. Neither, but attitudes have changed, so that people voluntarily abstain from over-consumption
of a certain good/service.

By these criteria, a fair share of modern industrialised societies are already somewhat “utopian” or
“communist” (“ . . . from each according to his ability, to each according to his needs”), in the sense
that essential public services are free or with low fees (even if there are forces at work trying to – and
to some degree succeeding in – rolling things back). This paper proposes that today’s developments
should be discussed and evaluated in the light of the long-term utopian (and alternative dystopian –
see below) scenario. If we do that, this gives an extra argument for keeping services like health and
schools free and in the public sector, and this will then be an indicator that a society is advanced and modern. Note that this contradicts the current conventional wisdom that privatisation and “user pays” are signs of modernity.

Having an eye for the long term also gives an incentive to look for and evaluate examples of already implemented “utopian” reforms in sectors where they are the exception to the rule. An example is the Belgian city of Hasselt, which has made all public transport free.

The third criterion is the most challenging (and interesting), because it concerns change in public attitudes and behaviour. This is “LeGuinian internalisation”, so that citizens automatically – without experiencing it as a “sacrifice” on their behalf – restrain themselves. This is not something that could be implemented on a significant scale today: Imagine an experiment where one made basic foodstuffs free for the taking. Such a system would break down since a large share of the population would over-consume and also throw away untouched or half-eaten food. But an area, admittedly somewhat trivial, where voluntary restraint works to a fair degree even today, is littering. A large share of the population does not throw waste on the street, even if it would be more convenient for them to do so. The “sacrifice” of taking the litter with you for later appropriate disposal is not considered as such, because the action is internalised and automatic. Most people also don’t leave their discarded TV sets and washing machines at the roadside, even if that is more “convenient” (and one can easily get away with it) than getting rid of such things in the mandatory manner. Such altruistic behaviour may be the exception to the rule, but gives grounds for optimism.

It gives support to those who hold that responsible socialisation of new generations by schools, the media and in entertainment is not futile. Note that this is not arguing the obvious, it is taking a position that is today seen as outdated and futile among many intellectuals. I refer to the eighties’ and especially nineties’ attitudes in advertising and entertainment (and even “post-modernist” esthetic-academic circles) – deriding enlightenment and the possibility of progress, and cultivating violence, chaos and decay for “esthetic” – or pecuniary – purposes. (A striking example of this intellectual current of the nineties was reported in the British newspaper The Independent 16 May 1995, where some TV commercials were criticised. One used a teenage suicide as a vehicle to advertise a product. Confronted with this the advertiser replied that this was not meant for the public in general. The target group were those who were “nihilistic, narcissistic and hedonistic”). The last decade has seen an unusual alliance between the powers that be (“there is no alternative”), and the cultural/media avant-garde (“working for a better society is futile – and since we can’t do anything about it anyway: isn’t today’s world fascinating in all its cruelty?”)

In the light of the above it seems that one must start from scratch again, to restore the legitimacy of the view that socialisation towards responsible behaviour in relation to one’s community is both necessary and feasible. And this does not need to be promoted on moral or religious grounds – it may (also or alternatively) be promoted on the basis of a long-range utopian vision.

**The (feasible) capitalist dystopia**

A school in Marxism holds that capitalism cannot sustain itself indefinitely, due to a system-inherent persistent decrease of the profit rate (Shaikh, 1978, pp 232 - 235): Capitalists have to substitute workers with machines to keep up with the competition, whether they want to or not. This will increase their capital and mercilessly reduce their profit rate in the long run. Following this logic, as production becomes possible with only a small number of workers, conditions for creation of surplus value, exploitation and capital accumulation gradually wither. There is also a related Marxist argument that since only “productive” workers create “value”, and most service and/or public sector work is considered non-productive, a completely service-dominated capitalist economy cannot uphold capital accumulation. There are, however, contradictions among Marxists (and in Marx’ own writings) about how to define what is “productive” work. (Hunt, 1979).

Regardless of these theories and positions, I will argue that there is a feasible scenario for viable “eternal” and strongly class-stratified capitalism – even when production is comprehensively automated. Such a future seems the more probable since it may be seen as an extrapolation of current trends. This dystopian society has the major share of its workers doing wage labour in capitalist service/servant (“s/s”) firms. Such activity is labour-intensive, and with low capital intensity. I
use the term “servant” here to indicate the presence of firms catering to the rich – such as domestic help, leisure activities, security, luxury tourism, etc. This comes on top of (mostly privatised) services for the general population like (health)care, education, entertainment, media – which are also labour-intensive activities. A small minority of workers (just as in the utopian scenario above) is employed in the high-tech automated manufacturing and process industry sector. As long as a major share of the employed is in labour-intensive activities, this will ensure that the profit rate can be upheld, even if manufacturing is nearly wholly automated. And the profit rate in the highly automated manufacturing sector will be equalised with that of the s/s sector through the price mechanism. A large share of the population is unemployed, which ensures compliant labourers and high profit rates.

The prospect of chronic and very high unemployment in a capitalist future world is something that is not only described by critics of capitalist globalisation. It is considered natural or unavoidable by some far-seeing thinkers among the elite. Martin and Schumann (1997) report from a conference of the world’s most powerful in late September 1995:

. . . 500 leading politicians, businessmen and scientists from every continent – a new ‘global brains trust’ . . . which is supposed to point the way to the ‘new civilization’ of the twenty-first century.

. . . .

From this point on [in the meeting], the top-class group discussing ‘the future of work’ concerns itself entirely with those who will have none [this future scenario, having been launched at the conference, had an 80% unemployment rate].

. . . .

The expression on everyone’s lips is Zbigniew Brzezinski’s ‘tittytainment’. The old Polish-born warhorse, who was Jimmy Carter’s national security adviser for four years, has continued to occupy himself with geostrategic questions. He thinks of ‘tittytainment’ (‘tits’ plus ‘entertainment’) in terms not so much of sex as of the milk flowing from a nursing mother’s breast. Perhaps a mixture of deadening entertainment and adequate nourishment will keep the world’s frustrated population in relatively good spirits.

Top managers soberly discuss the possible dosage and consider how the affluent fifth will be able to occupy the superfluous rest.

The pressure of global competition is such that they think it unreasonable to expect a social commitment from individual businesses. Someone else will have to look after the unemployed."

A future world with 80% unemployment seems unrealistic. But the point of the above is that the world’s power elites are willing to accept such scenarios and prepare for them. Based on today’s trends, it seems more probable that employment will be higher, but in a dominant low-wage and very insecure s/s-sector.

Investors are especially eager to take over such activities that have until now been in the public domain. Critics of this have to a large degree explained this trend as being “ideology-driven”, i.e. that it is due to a strong neoliberal belief among decision makers that these activities will be run much more efficiently if privatised.

I suggest instead that the reasons are mainly material, not ideological. Consider these special characteristics of public sectors like health, caring, education:

1. They are – as opposed to other non-essential services – socially necessary so they will always be in demand.
2. The costs will therefore at least to some degree be covered by the state.
3. These services will be locally and predictably demanded, sales are not dependent on success in a risky world market.
4. They are inherently labour-intensive and cannot be automated.

These characteristics make investment especially attractive, the first three obviously so. The fourth characteristic may at first glance seem not to fit, since capitalists will always try to shed workers to reduce costs. So why is it attractive to enter a field where there are few possibilities for this? The keywords are “inherently” and “cannot”. These services will be in demand, and they cannot be much automated. When these are stable and lasting conditions for all competing firms in the field, the inherent labour intensity becomes an advantage, not a drawback. For when a large share of
capitalists’ costs are for wages, and a small share for capital, the possibilities for significantly enhancing profits by a given percentage reduction of wage costs are greater than in a highly automated plant where capital costs dominate and wage costs are minimal. That said, the capitalist dystopia would also ensure acceptable and stable profits for the owners of capital-intensive automated plants, via the price mechanism: If profitability becomes low, plants will shut down and production will decrease. Demand for scarce goods will lead to increased prices, until the profit rate equals that in the s/s sector. The distribution of output between owners and workers in the large labour-intensive s/s sector – which depends on the balance of power between these two groups – then sets a benchmark for the profit rate for the economy as a whole. Hence, as long as there are plenty of workers employed by capitalists – regardless of this being in so-called non-productive jobs – strongly class-stratified and profitable capitalism may continue forever.

Conclusions

Long-term and even “unrealistic” scenarios for future societies ought to be regular topics for public debate. Both positive and negative scenarios are useful. Dissemination and discussion of such scenarios will have positive impact on important political choices and decisions being made today. Contrarily, lack of such visions and discussions have detrimental effects.

One should be unafraid and confident about launching and supporting unconventional proposals or visions. For the mechanism of self-fulfilling prophecies is at work, for good or bad. One should work for awareness of this among those controlling the arenas for public discourse. Based on the recognition of this mechanism, one may argue that unconventional ideas should not be disparaged out of hand, but be given a fair chance in the media and elsewhere to compete with established thought.

Capitalism should not be considered a “stage in history” by its critics, but a system that may continue forever. Here it would appear that there is an element of agreement between critics and supporters (one of the latter is Francis Fukuyama with his “end of history”). The difference however, is in the analysis of the probable characteristics of such a system, and whether there are better alternatives.

Notes


2. There are also service sector jobs that can and should be automated – examples of this are the ATM and Internet banking, reducing the need for banking personnel dramatically. So “automated manufacturing” in this paper should be interpreted in a wide sense, also incorporating a part of service sector activity.


References


SUGGESTED CITATION:
Paul Davidson’s critique of my ‘Three Arguments for Pluralism in Economics’ raises a host of important questions. To reply to them all would require a very long article. In the interest of conciseness, I shall restrict myself to twelve points of disagreement between us.

1. ‘Keynes’s “General Theory” is the sole correct alternative to neoclassical economics’ (Davidson 2004, p. 1). This prompts three questions. Is it unambiguous? Is it correct in all essential details? Is it complete? I would answer ‘No’ to all three. There are Old, New and Post Keynesian interpretations of the ‘General Theory’, and those who call themselves Post Keynesians themselves disagree on many issues concerning it (see King 2002; Davidson 2003-4, King 2004b). ‘Paul Davidson’s interpretation of Keynes’s “General Theory” is the sole correct alternative to neoclassical economics’ is a less ambiguous, but also less acceptable, statement. One reason for rejecting it is that the “General Theory” itself contains elements that many Post Keynesians find unacceptable (Marshallian microeconomics, marginal productivity theory, neoclassical capital theory, to name the three most prominent examples; Paul would dispute the presence of the third). Finally, the “General Theory” is demonstrably not complete, since it neglects long-period issues and open economy problems, not to mention any systematic discussion of macroeconomic policy dilemmas. ‘An extremely valuable source for alternatives to neoclassical economics’, to be sure, but ‘the sole correct alternative’? I think not.

2. ‘All reality is complicated. But that is not a sufficient defense for pluralism’ (Davidson 2004, p. 2). Paul follows this statement with a physical example: gravitation affects the tides in a complicated way, but this does not require plural explanations for the observed tidal phenomena. This is a most unexpected assertion of the unity of the natural and social sciences – an entirely legitimate (if controversial) position, but one which is surprising when it comes from someone like Paul who has spent the last quarter-century arguing that economic phenomena are non-ergodic. As he explains in his latest book, ‘The ergodic axiom asserts that the future can always be statistically reliably calculated from past and present market data’ (Davidson 2002, p. 43). There are good reasons, which Paul himself has identified, for doubting that this is possible in the economic world, where human beings have to make decisions in circumstances of fundamental uncertainty. But the ergodic axiom is true where the data are geophysical in origin; thus Paul’s example misses the point. Metaphors aside, the problem of the completeness of the “General Theory” remains. Part of the complexity of the economic world is due to the multiplicity of problems that require solution, and another part is due to the fact that these problems often change – sometimes very rapidly – over time. On both counts it is improbable that a book published 68 years ago contains all the answers.

3. ‘If one wishes to analyze (explain, discuss) feudalism, or the economies of biblical times, one must add additional restrictive axioms to Keynes’s general theory to obtain a special case theory of feudalism, or of biblical economics [economies?], etc.’ (Davidson 2004, p. 2). This is an astonishing claim. One might wish that Keynes had been more consistently clear in stating it, but it is undeniably true that his “General Theory” is about a capitalist economy, and therefore necessarily about a monetary economy. Money has special properties, which entail that a monetary economy cannot be analysed in terms of a theoretical framework appropriate to the analysis of a barter economy. To cite Paul again: ‘Keynes denied that money was simply an “extra complication” on the operation of a barter economic system’. Like Davidson, he would therefore have been a strong critic of the neoclassical so-called ‘monetary approach’ to the balance of payments, since it ‘analyses the operation of a real or barter economy in which (a) money has no real role to play and (b) liquidity considerations are irrelevant’ (Davidson 2002, pp. 150, 153). Exactly. So what conceivable ‘additional restrictive axioms’ could extend a theory of ‘employment, interest and money’ to an economy in which there is no wage-labour and thus no employment, and also no money, and therefore no interest? Why would anyone wish to perform such an exercise? Is there a shred of evidence that Keynes did? It is clearly true that some form of ‘common general theory’ will ‘underlay [sic] all these specific cases of historical economies’ (Davidson 2004, p. 2). Neither I nor Geoff Hodgson, whom Paul also criticizes, would deny this. Such a ‘common general theory’ would have to say something about the conditions of reproduction (economic, social, ideological), and would probably draw on Marx and Weber to do so (see Hodgson 2001, part IV). It would have very little to do with Keynes. The ‘general’ in Keynes’s “General Theory” refers to its ability to account for involuntary unemployment, which ‘classical’ (pre-1936) macroeconomics could not do. Note that unemployment presupposes employment, which
presupposes wage-labour, which presupposes capitalism. Keynes does make this (reasonably) clear. His book was, after all, about ‘the economic society in which we actually live’ (Keynes 1936, p. 3). It was not about the economic society in which some of his ancestors used to live, in past centuries or previous millennia.

4. ‘Hodgson, as well as King and many others, have confused the concept of a general theory with that of Debreu’s concept of general equilibrium as the mother of all economic theory!’ (Davidson 2004, p. 2). I cannot see any justification for this charge, either in my short article or in Hodgson’s long book. I have many criticisms of Hodgson (King 2003), but on this point we agree: some statements can be made that apply to all economies, at all stages of human development. They have nothing to do with Debreu, or Keynes, but relate to the fundamental conditions for economic, social and ideological reproduction (see 3. above). They are important, but extremely limited in their range, and most definitely do not constitute a ‘sole correct alternative to neoclassical economics’.

5. ‘Keynes’s general theory analysis is an axiomatic based approach that required fewer restrictive axioms than any other economic theory’ (Davidson 2004, p. 2; stress removed). Again, this is an astonishing proposition. It may be true that the “General Theory” can be formulated (more precisely, reformulated) axiomatically. There might be some merit in doing so, though there would also be costs (most obviously, a dramatic decline in readability and rhetorical impact). But Keynes never did this, and nor, up to the present day, has Paul Davidson or anyone else. Once it had been done, it might then be possible to evaluate Paul’s claim that Keynes requires fewer axioms than anyone else. This itself, however, is not an unambiguous statement. Fewer axioms to do what, precisely? In reference to what sort of economy? In what sort of economic theory? On my reading, Keynes was a Marshallian in matters of microeconomics. The problems that he tried to solve were thus different from – and more interesting than – those of Walras, and to rejoice in his (supposed) ability to solve them with fewer axioms is a bit like praising a pear tree for having fewer branches per ton of fruit than an apple tree has.3

6. In addition to his view of ‘economics as a mathematical (axiom-oriented) logical analysis’, Keynes also ‘had a pragmatic vision of a physical real world process in mind’ (Davidson 2004, p. 2). True. I rather suspect that in 2004 Keynes would line up with the scientific realists (and perhaps even with their Critical Realist fraction) in opposing the postmodernists, who deny our ability to understand ‘physical real process(es)’, and sometimes appear to deny the existence of such processes in the first place. But it is difficult to comprehend the connection between this ‘pragmatic’ (practical? policy-oriented?) approach and the supposed axiomatic basis of the “General Theory”. Which axioms would be necessary, and sufficient, to justify each version of the ‘Keynes Plan’ that Skidelsky documents in such detail in volume 3 of his Keynes biography? What axioms would be necessary, and sufficient, to justify Keynes’s support for the across-the-board 10% money wage cut imposed in Australia by the Arbitration Commission during the Great Depression? (Keynes 1932). And so on, almost ad infinitum.

7. ‘Bourbaki did not accept Keynes’s search for the “maximum” general theory’ (Davidson 2004, p. 3). Quite possibly true. I had not realised that this composite French mathematical genius4 had made any comment on Keynes’s “General Theory”, or any other economic issue, and would be very interested in pursuing the appropriate references. More generally, I find Paul’s discussion of Bourbakism very difficult to follow, and its relevance to pluralism in economics is not immediately apparent.

8. ‘It is this Bourbian view that, I believe, the proponents of “pluralism” are protesting against – even though they do not know it’ (Davidson 2004, p. 3). Not true. Speaking for myself, I’m protesting against the pretensions of any school of economics, mainstream or heterodox, to have discovered the truth, the whole truth and nothing but the truth, since I do not believe that such claims are correct. That is to say, I’m protesting against unsystematic and non-axiomatic neoclassicals like Milton Friedman, in addition to the few remaining unreconstructed Walrasians, if the latter really are/were Bourbaki. I am also protesting against heterodox economists who make similar bold claims. In olden times many Sraffians seemed to me to fall into this category, which is why I was so pleased to see Heinz Kurz and Neri Salvadori coming out in support of pluralism. Today, the culprits are usually sectarian Marxists – and now also, alas, Paul Davidson.

9. ‘Formalism can be consistent with “open models”’ (Davidson 2004, p. 3). True. Babylonian thinkers would probably agree with this. After all, Richard Feynman, whose work on scientific methodology
inspired Sheila Dow to promote the Babylonian mode of thought among Post Keynesians, was a theoretical physicist by trade. But formalism can also be consistent with closed models, used dogmatically. This is what I, and other pluralists, object to.

10. ‘I believe that Hodgson’s view of what is good economics is a matter of style, politics and taste on Hodgson’s part’ (Davidson 2004, p. 4). Hodgson can answer for himself, as can Chick and Dow, against whom this accusation is also made. Unlike Roy Weintraub (and Paul Davidson?) I am not at all sympathetic to postmodernism, and I deny that ‘style, politics and taste’ should play the dominant role in economic theory or economic methodology. Judgement is certainly involved, as Keynes himself recognised in a famous passage: ‘…. the master-economist must possess a rare combination of gifts. He must reach a high standard in several different directions and must combine talents’ not often found together. He must be mathematician, historian, statesman, philosopher – in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. No part of man’s nature or his institutions must lie entirely outside his regard. He must be purposeful and disinterested in a simultaneous mood, as aloof and incorruptible as an artist, yet sometimes as near the earth as a politician’ (Keynes 1933, p. 141). ‘Style’ and ‘taste’ may be part of this, but only part.

11. ‘But how can we assure [ensure?] that different models are not logically inconsistent unless we have a benchmark “general” model with a minimum number of well-specified axioms that acts as the foundation of all other models?’ (Davidson 2004, p. 4). Fine, at some level(s) of generality. (Aristotelian logic might constitute such a model, at a very high level of generality indeed). But such a ‘general’ model is almost inevitably going to be highly abstract, perhaps to the extent of being almost empty of implications when it comes to specific questions concerning the macroeconomics of advanced capitalism, for example. (Again, see 3. above).

12. ‘I believe that encouraging pluralism in economics without a common general theory foundation merely encourages heterodox economists to erect a modern Tower of Babel, thereby making it easier for Mainstream economists to ignore the resulting incomprehensible babel coming from this heterodox structure’ (Davidson 2004, p. 5). This proposition seems to imply that we should permit the mainstream to set the agenda for heterodox economics, and thus to define its structure and content. Suppose that we were, nevertheless, to accept it. What would our ‘common general theory’ be? At one extreme it might be Paul Davidson’s interpretation of Keynes’s “General Theory”, line by line. At the other extreme, we could settle for something very much weaker, and therefore very much more capable of attracting support: rejection of Say’s Law, as understood by Keynes, and therefore a recognition that aggregate output and employment are more likely to be demand-constrained than supply-constrained. Perhaps we should take as our ‘common general theory’ something in between, like Tony Thirlwall’s ‘six central messages of Keynes’s vision’. Output and employment are determined in the product market, not the labour market; involuntary unemployment exists; an increase in savings does not generate an equivalent increase in investment; a monetary economy is fundamentally different from a barter economy; the Quantity Theory holds only under full employment, with a constant velocity of circulation, while cost-push forces cause inflation well before this point is reached; capitalist economies are driven by the animal spirits of entrepreneurs, which determine investment decisions (Thirlwall 1993, pp. 335-7, cited in King 2002, pp. 5-6). Presumably we can then continue to disagree on everything else. Should we embrace Marshallian microfoundations, or some other sort? Is the quest for microfoundations itself a methodological mistake? Are we to endorse fixed exchange rates, like Paul Davidson, or floating rates, like Thomas Palley and Randall Wray? What is the correct position on the Wray-Mosler-Mitchell-Watts ‘employer of last resort’ proposal to combat unemployment? At what point, precisely, does vigorous debate on questions like these degenerate into Babel? Keynes’s “General Theory” was surely ‘never intended to be a theory of everything’, to cite Terry Eagleton only slightly out of context. It is not ‘some form of cosmic philosophy along the lines of Rosicrucianism’ (Eagleton 1996, p. 111), and it does not offer an answer – still less the guaranteed-correct-only-possibly-answer – for all the world’s problems, 58 years after the death of its author.

Notes

1. Davidson 2004; King 2004a. (My article was first published in Journal of Australian Political Economy, an excellent eclectic journal which will interest many northern hemisphere readers of Post-Autistic Economics Review (details from Frank Stilwell at the University of Sydney: franks@econ.usyd.edu.au)).
2. I do not attempt to answer the accusation that I have misrepresented Paul’s views in this matter (Davidson 2004, p. 1), as I do not understand the grounds for his complaint. I shall of course be happy to make amends if I have done so.

3. This assumes that Marshallian economics can be formulated axiomatically, without contradiction, which Sraffians – and Walrasians – might deny.

4. The Bourbaki project was begun in the 1930s by a group of seven mathematicians who as ‘an elaborate joke….gave themselves the name of an obscure nineteenth-century French general, Nicolas Bourbaki, and agreed to operate as a secret club or society’ (Weintraub 2002, pp. 104-5).

5. Incidentally, I can’t make any sense of the sentence that straddles pp. 3-4 of Paul’s article (‘In my vie … predictable future’). Perhaps a word or words are missing?

6. Economic policy, of course, is another matter altogether, since this by definition does involve politics.

7. I am grateful to Frank Stilwell for his advice on this question; he is not implicated in the outcome.

8. I owe this important point to Therese Jefferson.

9. I have already stolen this phrase for the title of another paper, this time on Manism (Jefferson and King 2001).

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King, J. E. 2004b. ‘Unwarping the record: a reply to Paul Davidson’, La Trobe University, mimeo.


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SUGGESTED CITATION:
Is it All in Keynes’s General Theory?

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In two preceding issues of this Review, John King (2004) and Paul Davidson (2004) raised some of the arguments that I put forward in my 2001 book How Economics Forgot History. Here I take the opportunity here to engage with Davidson’s discussion of Keynes’s General Theory and Davidson’s claim that it is not only a true general theory, but also the single true alternative to neoclassical orthodoxy.

In his contribution, Davidson wrote: ‘If one wishes to explain (describe) the production, exchange and financial features and operations of a market-oriented, money using, entrepreneurial economy, then Keynes’s “General Theory” is the sole “correct” alternative to neoclassical economics. Neoclassical theory is, as Keynes specifically noted (on page 3 of his 1936 book) merely a “special case” of his general theory.’

What Davidson fails to notice is that even if this extraordinary claim of exclusive veracity were correct, then there would be strong arguments for supporting a pluralism of theoretical approaches in departments of economics. This is because even correct theories have to be visibly tested by counter-arguments and alternatives. Even the medieval Catholic Church recognized this, with its institution of the ‘Devil’s Advocate’. A priest was employed to make the strongest possible arguments against Catholic doctrine, in order to test and demonstrate its strength. Even today, if a single theory were correct, it would become stronger through its demonstration of superiority against its rivals. If it contained flaws or blemishes, such dialogue could assist in its clarification and refinement. This is the case for pluralism that Davidson neglects.

There is another aspect of Davidson’s argument that I shall discuss at greater length here. This is his defence of Keynes’s claim that the General Theory was just that. I am an enthusiast of Keynes and I do not wish to pick other flaws in his detailed analysis. I simply wish to show that the title of his book was misconceived. The demonstration of one significant imperfection is enough to show that even Keynes was fallible. Hence there is a case for dialogue, criticism and for the existence of a plurality of approaches within the academic discipline of economics.

In How Economics Forgot History I argued that the General Theory was not truly a general theory. Joseph Schumpeter (1946) made this claim long before. Schumpeter rightly pointed out that the General Theory was not truly general, and that instead of attempting to derive specific policies solely from a theory that claimed to be general, Keynes should have analysed a historically specific situation. But, unlike Schumpeter, I do not believe that Walrasian-type general equilibrium theory is truly general either, because, as Frank Hahn (1980) and others have admitted, it excludes money and other key phenomena. Also, unlike Schumpeter, I do not uphold that a more general theory is necessarily a better theory.

Davidson (2004) alleges that I ‘have confused the concept of a general theory with that of … general equilibrium as the mother of all economic theory!’ Clearly he has not read my book, where I argue that general equilibrium theory in the tradition of Léon Walras, Gerard Debreu and others is also not a general theory, because such models exclude money, production and other crucial factors (Hodgson, 2001, pp. 16, 225). Davidson makes reference to a passage in the General Theory where Keynes attempts to explain the sense in which his theory is general. Keynes (1936, p. 3) wrote:

I have called this book the General Theory of Employment, Interest and Money, placing the emphasis on the prefix general. … I shall argue that the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience.

Unfortunately, Keynes does not make it sufficiently clear what he means by ‘the general case’. Later passages of this work suggest that what Keynes meant by the term ‘general theory’ is one that would apply to a diverse range of phenomena, including other forms of economy. Keynes claimed that his
theory had sufficient generality to apply to several different types of ‘economic society’, by virtue of its supposed foundation on universal ‘psychological laws’.

Keynes was concerned to criticise those ‘classical’ theories that claimed to show that markets would clear and the economy would automatically reach a full-employment equilibrium. But the fact that Keynes clearly considered disequilibria, and other equilibria below full employment, was not enough to make his theory truly general. There were other types of system – such as economies without money – that in fact had no place in Keynes’s theory. The classical theory is not general, in part because it assumes price flexibility, excludes radical uncertainty and underestimates the role of money as a store of value and means of dealing with an uncertain future. Neither, for different reasons, is the General Theory. While Keynes dropped several of the classical assumptions, he imposed other restrictive conditions. For instance he assumed a monetary economy, without extensive barter, where money plays a special role, with hegemonic and well-developed capital markets. While Keynes made his theory more general with one move, he made it less general with another. Overall, it is difficult to say whether the classical or the Keynesian theory is more general. And if one theory is more general that would not necessarily mean that it is a better theory.

Keynes did little to ground his theory upon historically specific economic institutions. Although institutions, such as the joint stock company and the stock exchange, inevitably protrude into his narrative, he did not start from the specific institutions of capitalist society and then develop a theory that illuminated their principal causal processes and relations. Instead, Keynes (1936, pp. 246-7) appealed repeatedly to ‘fundamental psychological factors’ as the foundation for his theory. His invocation of supposed psychological factors in his discussion of economic processes is more prominent than any discussion of historically specific institutions. Specific institutions appear casually in the General Theory as the mechanisms through which seemingly ahistorical psychological forces express their power. Keynes attempted to develop a ‘general theory’ that would apply to a number of different types of socio-economic system. He conceived of this general theory as having a universal and psychological foundation.

A striking piece of further evidence confirms this interpretation. Davidson (1996) himself has translated the key passage from Keynes’s 1936 Preface to the German edition of the General Theory:

This is one of the reasons which justify my calling my theory a General theory. Since it is based on fewer restrictive assumptions than the orthodox theory, it is also more easily applied to a large area of different circumstances.

Davidson (2004) emphatically endorses Keynes’s claim that his analysis ‘required fewer restrictive axioms than any other economic theory.’ According to Keynes in this Preface, his General Theory applied not only to the ‘Anglo-Saxon countries … where laissez-faire still prevails’ but also to countries with strong ‘national leadership’ such as Nazi Germany. He made this statement on the basis that his analysis was based on ‘the theory of psychological laws relating consumption and saving’. Hence Keynes clearly claimed that his theory was not based on historically specific institutions but on general ‘psychological laws’. But he gave little guidance on the psychological literature from which these supposed laws were derived. Neither does Davidson, and it is unclear whether he endorses Keynes’s specific claim that the generality of the General Theory is grounded on ubiquitous ‘psychological laws’.

Keynes did not in fact deliver what he had promised: a general theory. Keynes did make some universal statements, such as when he stressed aspects of human psychology. But he could not show how psychological propensities worked out in practice except by introducing an explicit or implicit institutional framework. Human psychology had to play out its part on some specific institutional stage. It had to be applied to quite specific institutional structures, such as to financial markets, state-issued money and legal contracts. Hence the famous discussion of the psychology of speculation in chapter 12 of the General Theory requires a specific type of institutional framework, principally the stock market. Other parts of the book, such as Keynes’s theory of money or interest have a greater degree of generality, although these are not universal to all types of human society. Again they refer to historically specific phenomena.

The General Theory of Employment, Interest and Money did not provide a general theory of the nature and level of employment in all past, present or possible human societies. What Keynes analysed was the quite specific relationships in modern capitalism between employment, expectations and effective demand. Rather than providing a truly general theory of interest or money, Keynes (1936, p. 173) explored the quite specific, capitalist type of system in which ‘money is the drink which stimulates the system to activity.’ Money has existed for thousands of years but it did not become
such an elixir of production until the rise of modern capitalism. Keynes favoured the ‘general theory’ rhetoric but always ended up exploring the particular circumstances of the contemporary capitalist system. Absent in the General Theory is a truly general theory of employment, interest or money. Keynes’s book applies to modern capitalism, and not to all forms of economic society. Davidson (2004) negotiates this question in the following passage:

Keynes’s General Theory is meant to explain a modern, money using, market economy. If one wishes to analyze (explain, discuss) feudalism, or the economies of biblical times, one must add additional restrictive axioms to Keynes’s general theory to obtain a special case theory of feudalism, or of biblical economics, etc. Nevertheless, a common general theory will underlay all these specific cases of historical economies.

Again, Davidson is insufficiently clear what this ‘common general theory’ is, and whether (as with Keynes) it is based on ‘psychological laws’ or not. He is also unclear as to what ‘additional restrictive axioms’ must be added to Keynes’s theory to make it adequate for the analysis of feudalism or earlier socio-economic systems.

Keynes’s General Theory depicts a socio-economic system in which there are well-developed capital and labour markets. Such markets were insignificant under classical feudalism, such as in England and France from the eleventh to the fifteenth centuries, where serf labour prevailed and markets were mostly restricted to commodity surpluses and luxuries. In contrast, Keynes implicitly assumes highly developed labour and capital markets in his General Theory. Presumably these are ‘restrictive axioms’ that would have to be removed from the General Theory to make it applicable to feudalism, along with the addition of other assumptions such as serf labour, and so on. Davidson’s argument that the General Theory can be applied to feudalism and other non-capitalist societies by the addition, but not the removal, of restrictive assumptions is undemonstrated and unconvincing.

Overall, I find Davidson’s argument in defence of Keynes’s arguments for generality to be unclear and unpersuasive. The case for pluralism is made, especially once it is admitted that Keynes could possibly have been wrong in at least on respect.

References


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At present writing in early 2004, nearly nine million Americans remain unemployed. Millions more are underemployed, and most of all, underpaid. Forty-four million lack health insurance. Our schools, colleges, universities, roads, water systems, power lines are in decay – and the funds required to repair and expand them are being cut. Not least, we are in a war with no end in sight. That is our economic problem.

George Bush did not entirely create this problem. The late 1990s were a moment of genuine prosperity and that rarest of economic achievements, full employment. But they were based on dreams, illusions and mortgages. The bubble in high technology, the rise in inequality, the debt build-up of American households, the squeeze on public investment, Al Qaeda – these existed before we got George Bush.

Mr. Bush’s essential contribution has been to make the problem harder to fix. The 2001 and 2003 tax cuts flowed, notoriously, to the very wealthy, who do not repair power lines and whose spending is little affected by extra income. Meanwhile middle-class and working Americans faced property and sales tax increases at the state and local level, alongside drastic cuts in education and health services. Team Bush is bent on eroding pay and working conditions, as in their recent assault on fair labor standards affecting overtime.

Possibly, this is intentional. The men in charge under George Bush talk about growth. Certainly they appreciate the positive growth rates that war spending has brought them. But do they really want full employment prosperity, strong labor unions and rising wages? Probably not. The oil, mining, defense, media and drug firms who form their constituency rely on monopoly power, patents, and the control of public resources for their profits. They are threatened by strong labor and do not depend, very much, on strong consumer demand.

Stagnation, moreover, will help to justify even more tax reduction. The administration’s core policy objective in this area is the simple distributive goal that financial wealth should, eventually, be freed of tax. In 2001 estate and income taxes were cut. In 2003 it was capital gains, dividends and again the top tax rate. In 2004, if plans are followed, the sunset provisions in these measures will be removed. As things are going, quite soon, federal taxes will fall mainly on payrolls and on current consumption. Such taxes are paid mostly by the middle class, by the working class and by the poor.

Stagnation also promotes plans to cut essential services, including health, education and pensions. As financial wealth escapes tax, neither states, nor cities, nor the federal government can provide vital services on their own – except by taxing sales and property at rates that will provoke tax rebellions, especially when middle class incomes are not rising. Every public service will fall between the hammer of tax cuts and the anvil of deficits in state, local, and federal budgets. The streets will be dirtier, as also the air, and the water. Emergency rooms will back up even more than they have; more doctors will refuse public patients. More fire houses and swimming pools and libraries will be closed. Public universities will cost more; the public schools will lose the middle class. Eventually – and perhaps as soon as the year following the election – federal budget deficits will collide with Social Security and Medicare, putting privatization back on the agenda.

In the near term, more military spending – the Iraq war, the occupation and military restocking – and the portion of the tax cuts that did flow to the middle class are bringing what may perhaps best be described as a false dawn. Indeed in 2003 we again learned two Keynesian truths. First, that a big increase in government spending is a fast and efficient way to pump up the economic growth rate. Second, that most households are income-constrained; increasing their disposable income will increase their spending. But the future tax cuts are weighted even more heavily to the wealthy, and the pace of military spending is unstable and in any event unsatisfactory way to generate an enduring economic expansion.

The Federal Reserve Chairman, Alan Greenspan, has done his best to keep the American housing bubble blown up, through low and stable interest rates. But not even Mr. Greenspan can forever
prevent bubbles from popping, and eventually the housing boom will reach its climax. Big deficits and easy money, though necessary, will not, by themselves, bring full employment.

Because of the damage already done, no matter who takes office in 2005, full, effective and sustainable economic recovery for America will be difficult. It will not be merely a matter of spending more, of «stimulus» – an ugly metaphor that falsely depicts full recovery as a one-shot affair and reminds most people of a hypodermic stick. It will not be a mere matter of finding the right taxes to cut – or to increase. It will certainly not be a simple matter of balancing the budget.

Rather, full recovery will require understanding needs and designing and implementing programs to meet them, both at home and in the international sphere. It will be truly a matter of new departures. Along the way, it will be a matter of overcoming the obstacles left by the legacy of the late 1990s and compounded by the present administration.

These obstacles include excess capacity and depressed expectations, which affect the future of business investment. This will not last indefinitely; in due course the overbuilding of the late 1990s in telecommunications and other sectors will cease to matter. But this will remain a problem for some considerable time yet.

There is also the fact that the reputation of American financial markets has been damaged by fraud and abuse, by a corporate crime wave. Many believe that law enforcement in this area by the Justice Department and Securities and Exchange Commission have been compromised by a political fact – namely, the prevalence of criminal practices among companies with close ties to Mr. Bush. Enron, whose CEO was one of Mr. Bush’s largest contributors, is only the most notable example. This perception may impede the enduring recovery of asset values, or perhaps the value of the dollar itself – though no one can say to what extent.

Low interest rates, tax rebates, and increased military spending have kept households afloat so far. The ultimate barrier to household debt acquisition is the ability to pay interest, and so far this has not reached the crisis point. Mortgages have continued to be refinanced, and debt has continued to grow. That households were willing to take on more debt than anyone could have foreseen has kept the slowdown from being far more severe. But while this is good news for the present, it is bad news for the future. It remains the case that what cannot go on forever will eventually stop.

The potential therefore remains for a substantial future deceleration in household spending. Consumer spending is over sixty percent of national income, and the pace at which households increase their spending is a key determinant of the pace of economic expansion overall. If and as household spending decelerates, then large increases in the other major, but much smaller, components of spending – government, business investment, and net exports – are necessary to keep the economy growing. And a consumer deceleration would be much aggravated by increasing interest rates, which might even convert a deceleration into an actual decline in total spending, at least for a short period of time.

Conversely, for household spending actually to lead a recovery, household debt would have to resume its rise in relation to household income. Such a turn of events would be normal at some stage in most recoveries, when initial debt ratios are lower. But under current conditions it seems unlikely, and if it does occur, it probably will not endure for very long. The basic reality is that the boom of the 1990s created conditions that were highly abnormal, and therefore the path of recovery is likely to be abnormal as well – abnormally weak and abnormally fragile.

The other big problem going forward is America’s very weak position in foreign trade. We have a propensity, now deeply entrenched, to run very large foreign deficits at full employment. This is the product of a witches’ brew of international economic factors: the high dollar over many years, the decline of the financial system supporting international economic development, and the erosion of parts of our own manufacturing base. Given this structural weakness, extra purchasing power leaks abroad and it is all the more difficult to reach full employment.

In sum, so long as households, businesses and also state and local governments are still retrenching, an expansion sufficient to generate return to full employment would require one of two improbable events. Either federal budget deficits must rise by a phenomenal further amount – probably to
somewhere between eight hundred billion and a trillion dollars annually. Or, in the alternative, the U. S. must find a way to increase exports and reduce imports relative to GDP, thus making it possible for a smaller budget deficit to do the job on domestic employment.

Can the now-fallen dollar square this circle, giving us lower foreign deficits and so reducing the need for fiscal expansion? It appears unlikely. On one side, estimates of the price elasticity of American exports suggest that a lower dollar will not increase European demand for American products by leaps and bounds. On the other side, U. S. consumer goods imports come very substantially from countries (such as Mexico and China) against whose currencies the dollar has not declined, and who are prepared to suffer considerable hardship to prevent such a decline, in order to maintain their present access to the U.S. market. Therefore these imports are not becoming markedly more expensive and the demand for them is unlikely to be choked off by considerations of cost. Things could change on their own: American households might tire of cheap clothing, athletic shoes and electronic toys. But given how much these items contribute to the modest comforts of working class American life, this also seems very unlikely.

Further, one may doubt the willingness of the Treasury and Federal Reserve to tolerate a declining dollar – even one that is falling only against the euro – for an indefinite period. At some point, considerations of national pride will be raised, Latin American debtors may default and U.S. banks may begin to object to the erosion of their international position. A dollar defense, if effected by raising interest rates, would of course only make the domestic position much worse. This will not happen before the election, but afterward it is a possibility.

The baseline outlook then is not one where a return to full employment prosperity is likely to be achieved on the current course, nor by small policy changes. Pushing a few well-chosen buttons in the tax code will not do it, however desirable pushing such buttons may be on other grounds. And the Federal Reserve has largely run out of magic tricks, however much its officials may hint otherwise. The baseline outlook is for a period of strong growth immediately before the election and stagnation afterward – just as the administration anyhow prefers. Any new administration, committed to a better economic result, will have to be prepared with strong measures, capable of changing the underlying macro-dynamic.

To round out the current economic picture, we need to consider the world outside. To the Bush administration, the world outside is mainly a supplier. Cheap labor and cheap oil are the mainstays of the administration’s external policy, so far as it has a clear economic dimension (extra soldiers and contributions to military campaigns are also required from time to time). Cooperation, national development and mutual gain are no longer high on the external agenda, which means that many export markets in which U. S. firms have a strong comparative advantage (for example, electronics, telecommunications, and aerospace) are not flourishing. This represents a failure of vision and strategy on the international economic front.

The inevitable fact is, as we pursue a policy of attack and control overseas, we are acquiring an empire – consisting so far of Afghanistan and Iraq, with smaller garrisons in place in numerous other places.

The difficulty of empire is that it is expensive in material and moral terms. In Iraq, for a very brief period, the administration pretended that a vast country could be governed from the outside by a skeleton crew, consisting mainly of very young soldiers, trained well for combat but poorly for civil administration in an Arabic-speaking country. The provision of security, infrastructure and civil administration was not adequately prepared for. Instead, the administration has chosen to pursue a version of »shock therapy« – of conversion to unregulated private markets – that would have seemed extreme even to the market Bolsheviks of the collapsing Soviet Union in 1991.

Meanwhile the burdens of empire are growing palpably as time passes. While success against the Iraqi resistance remains possible, it is also possible that the U. S. will be forced eventually to choose between leaving Iraq or putting in the full force required to control and to run it. One way we lose control, while the other can only add to the miseries of our balance of payments, while forcing the mobilization of hundreds of thousands of young Americans into military and occupation service and exposing them to a high level of violence. In such a contest, the local adversary has great advantages, including considerable cover among the local population and access to cheap and
effective means of resistance, including explosives, mines, automatic rifles and rocket-propelled grenades.

How can the cost be met, especially, if the coin of our realm, the U. S. dollar, is at the same time vulnerable? It may not be impossible, but it won’t be easy. The problem of empires, historically, is not military defeat. It is bankruptcy: moral, political, and also economic.

Empires do not tend to business at home, and they tend to lose out to rivals who do. Investments made in distant places are sunk; once the empire ends they bring no more benefit to the country that bore the cost. By contrast, investments made at home accumulate and yield a return for centuries into the future. Although Europe faces formidable problems of economic governance, it is not too difficult to foresee a day when this difference in current behavior will give Europe an economic advantage over the United States.

There is irony here for America’s wealthy. It is true that a group of great wealth holds the levers of power in the country today. But this group, in large measure a coalition of contractors and monopolists, does not have interests in common with the full range of wealthy individuals in this wealthy land. There are many others – exporters, retailers, the residents of large cities, providers of services to the broad population and many passive investors – whose interests align with those of working Americans and who would prosper even more under an economy investing vigorously at home. They are not well served by a program of stagnation and empire, even partially compensated by tax cuts on capital income.

Ultimately, nations prosper or decline as a unit. An economy that fails for working Americans cannot work for the wealthy either. While the Bush administration may leave wealthy individuals relatively untaxed, they will not escape from it as rich, as comfortable, or as secure as they were before. Already their stocks are off by trillions, reflecting the diminished outlook for their business holdings. Soon it may be their houses as well as those of the middle class. If and as the dollar declines, it will be their cash holdings. If they choose to lend their children to the tasks of empire, they will lose a few. And if they don’t, it is certain that those actually doing the fighting will remember who did, and who did not, contribute to that burden. Ultimately there will be political consequences from that choice, as from all the others.

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