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Addressing the Crisis in Employment and Consumer Demand: Reconciliation with Environmental and Financial Sustainability

By Nicholas A. Ashford, Ralph P. Hall, and Robert Ashford



For a long time, the earlier sustainability literature focused almost exclusively on environmental sustainability, which included resource exhaustion, toxic pollution, ecosystem destruction, and global climate disruption. The sources of environmental problems were acknowledged to stem from industrialization and the ever-increasing consumption of materials and energy. Some attention surfaced on environmental justice, reflecting the disparate effects of environmental deterioration on poor people and poor nations. Recently, concerns with environmental sustainability have become dominated by global climate change, almost to the exclusion of other environmental concerns.

The United States is suffering from the greatest income inequality since 1928 with an unprecedented concentration of wealth.

While concerns about poverty and earning capacity were raised now and then, it was only after the 2008 financial crisis that employment and the earning capacity of people were catapulted into the center stage of political discourse. Part of this discourse has focused on the relationship between employment and consumption, where the tension between providing jobs and decreasing the environmental footprint of industrialized and industrializing states was acknowledged. This relationship has historically focused on increasing production and consumption with insufficient or little regard to their effects on the environment, and energy and resource limits.

The Perfect Storm: Sustainability at a Crossroads

The crises we encounter today could be described as the 'perfect storm' (see the box). Now in the still-unfolding aftermath of the global financial crisis that began in 2008, it is imperative to understand its related structural causes and effects. This will help us discover what solutions might be worth pursuing to deal with this perfect storm of several crises: financial, production and economic, employment, consumption, and environmental.

The financial crisis has left consumers with too little money and/or willingness to spend. In the United States, a loss of some forty percent of family wealth has forced a cut in spending. The experience in Europe has been worse in some countries. The United States is suffering from the greatest income inequality since 1928 with an unprecedented concentration of wealth.¹ Similar disparities are seen in Europe. This results in too few goods and services being produced (an investment and production crisis) and too little being purchased (a consumption crisis).

This in turn causes increasing unemployment and underemployment (an employment crisis). As a result, a vicious circle is created in which there is less money spent in consumption and in investment in subsequent and repeated cycles, further exacerbating the crisis in consumption.

In reality, there are several different, but related, crises in consumption: (1) not enough products and services are demanded, consumed, and produced leading to lower or negative growth of the producing sector and thus smaller GDP for the economy; (2) some people do not consume enough of the *essential* things to lead a healthy and productive life, exacerbating poverty; and (3) some people and economic actors consume too much from an energy and resource perspective, exacerbating environmental problems.

Financial and fiscal mismanagement and de-regulation created an economic system in which supply-side production costs were kept artificially low by both subsidies to production and excessive credit to producers and service providers

To the extent that the economy becomes “greener” through technological innovation and turnover in energy systems and manufacturing processes, modernization can actually lead to more under- and un-employment if labor is replaced by physical capital.

Increasingly, in many countries, there is insufficient political will to address environmental problems – from global climate change and environmental pollution, to worker injury and disease – and public health impacts related to unsafe food, drugs, and other consumer products. Critics of government involvement decry “job-destroying regulation” and call for a “regulatory freeze” to keep agencies from acting to protect the environment, and public and worker health.

Many advocates of so-called reform implicitly assume that the economy can actually “recover.” In contrast, Robert Ayres argues with conviction that the prior era of cheap energy – mostly responsible for the historic high rates of GDP growth – is over.² He concludes that we have reached the end of exponential growth.³ Reliance on more-difficult-to-extract petroleum and natural gas from fracking, nuclear energy, and bio-fuels is unlikely to return us to an era of cheaper, safer, and environmentally-sound energy, so recovery of the economy to what it once was may be unrealistic.

We have been living, producing, and consuming in a bubble. Financial and fiscal mismanagement and de-regulation created an economic system in which supply-side production costs were kept artificially low by both subsidies to production and excessive credit to producers and service providers – and by too much credit given to individual and economic consumers. Both the supply and the demand side of the economy were artificially

pumped up. Throw in a good dose of toxic assets, unrealistic credit ratings of financial investments by the government, financial industry-inspired de-regulation, greed and corruption of the political process, and you have the perfect storm. We not only created enormous financial risk, we privatized the profits made by selling that risk and we socialized the losses. We encouraged spending by those who already have enough or too much, not by those at the bottom of the economic ladder for whom government assistance is increasingly inadequate.

Past economic recessions have taken longer and longer to recover full employment.⁴ What is needed is a fundamental transformation. Although Keynesian spending, as recommended by Paul Krugman, will relieve immediate pressure on unemployment, arguably the most immediate political problem in need of attention, neither Keynesian spending nor recapitalization of the banks (which are sitting on excess cash and are unwilling to lend) can revive the economy. More fundamental reform of the dynamics of the economy is needed. The historically high profit-taking, and the resulting increasing concentration of wealth, which is suppressing growth and crippling democracy, cannot be reversed by lowering taxes on the rich and eliminating tax loopholes. There is overwhelming empirical evidence for this.⁵ Why too many in the media continue to frame this alternative as a legitimate policy option for improving the economy reflects the concentrated and skewed ownership and influence of those who have gained disproportionately from the system, and seek to continue to gain. Unequally meritorious ideas do not deserve equal space and time in the public debate. Inconvenient truths should not be dismissed as merely

opinion, to be balanced in the media by opinion not grounded in facts.

The Need for Better Government

Contrary to what the critics of regulation would have us believe, governments have in fact been intervening in the market for a very long time, but on the wrong side of equity. The perfect storm we find ourselves in provides a unique opportunity to address the imbalance.

Government has an important, indeed necessary, role to play in structuring an economy that works for all people. That role includes maintenance of fair and inclusive rules for market participation and private property; opportunities for individual self-actualization by way of freedom, education, and skills training; market participation both by way of labor employment and capital acquisition; protections of individual rights; correction of market failure including protection of the environment and future generations; investment in public goods that market mechanisms cannot provide; and promoting the production and consumption of energy-saving, environmentally-sound, and less material-intensive *essential* products and services, even for those people who cannot afford them.

In order to incentivize the maintenance of high levels of employment, we need to stop taxing labor and start taxing the carbon footprint and pollution, as long-advocated by Herman Daly and other ecological economists. Consideration should also be given to taxing excess profits, raising the tax on capital gains, taxing the movement of productive capacity offshore, and closing the corporate tax loopholes. A GDP-focused industrial policy that encourages a “growth fetish” and obsession with increasing GDP is a major structural and cultural

problem, fueled by advertising and those with large market and economic power. A throughput economy that absorbs and uses enormous amounts of energy, resources, and physical capital in order to employ a small amount of labor needs to be seriously re-conceptualized.

An economy that provides an adequate level of meaningful, rewarding, and safe jobs is essential, but it should be remembered that the right kinds of jobs can do more than create purchasing power; they can enhance self-esteem, create meaningful social engagement, and develop human creativity, invigorating a nation. Together, these elements form what we consider sustainable employment. Increasing the value of (and payment to) labor in production and services needs to be crafted by a deliberate and well-conceived jobs policy, one that provides employment without consuming large amounts of energy, resources, and physical capital. There are also creative ways to create earning capacity by facilitating individual ownership of economic activity, in addition to earning wages (see the companion article by Robert Ashford et al.).

Keeping people employed at a steady pace and wage is the key to a stable and growing economic system.

The Relationship between Employment and Policies that Affect Growth

Simply priming the pump to encourage economic growth is a blunt instrument for creating more employment, especially because replacing old facilities with new facilities usually results in the shedding of jobs. Likewise, greening the economy without attention to the redesign of jobs may return only a small double dividend. Those who are encouraging the shortening of the workweek to 21 hours over a

decade – and sharing the opportunity to work with those who are not gainfully employed – are perhaps unwittingly endorsing the transfer of wealth primarily within the working population – from the not-so-poor people who are working to the poorer who are not; this is not a redistribution of wealth from the rich to the poor.⁶ Policies that maintain workers in their jobs, such as the German Kurzarbeit policy (discussed below), need to be considered, as well as work-sharing policies that some US states and some regions in Europe⁷ are implementing. Keeping people employed at a steady pace and wage is essential to a stable and growing economic system.

Without other fundamental changes, which ought to be the focus of reform, redistributing purchasing power to those at the bottom might actually increase total consumption, since compared to spending by those who are better off, the propensity to spend tends to increase for those who have little disposable income to begin with. Allowing more people to be lifted out of poverty would be good as a matter of equity, but there are other pathways to this end.

Developed countries (and pundits within them) seem deeply divided on whether Keynesian spending to stimulate the economy in order to create jobs and lead to greater consumer purchasing is what is needed to address low economic growth and high unemployment, or whether creating more flexible work rules, allowing for wage concessions, or relaxing hiring/firing practices is needed. Germany instituted more liberal labor policies, as well as the Kurzarbeit (short work) policy by which employers were encouraged to retain workers in times of economic slowdown. When a firm needed to reduce its output, employees could either be on furlough or a shorter work schedule, with the wage shortfall made up by a government fund to which employers had contributed in better times.⁸ In 2009, around 1.4 million jobs in Germany were supported by

government subsidies.⁹ These employment policies supported a form of German miracle where an annualized growth rate of 9 percent was achieved based on 2010 second-quarter growth. This reinforces the view that direct protection of jobs, rather than indirect monetary and fiscal policies, may be a better policy direction. The costs of protecting jobs are likely to be lower than the costs of recovering economic capacity once demand re-emerges.

Decreasing demand for the consumption of material and energy-intensive products and services may not alleviate unemployment or underemployment, but using more human rather than physical capital may yield that result. For years, capital has replaced labor in the production of goods and the provision of services.¹⁰ Reversing decades-old trends of designing labor out of production and services by redesigning the use of labor in both manufacturing and services may actually be cost-effective. It will certainly utilize unused human capital and have social benefits as well.

Moreover, instead of a household spending its disposable income on material and energy-intensive goods and services beyond the basic necessities, it could engage persons to deliver services that employ mostly human capital, such as tutors, language teachers, music and art teachers, financial advisers, and persons engaged in providing other social services. Also, increasing the teacher-to-student ratio in schools would be an important start. The multiplier effect of employing human rather than physical or natural capital could be significant. Increasing the demand for human capital in this context would, of course, require significant medium- to long-term cultural changes¹¹ and large corporations that have organized the current means of production driven by economies of scale and that use advertising to create artificial demand would be less likely to be interested in selling these services.

Finally, too many critics of prior attempts to make progress toward

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more sustainable industrial systems may have given up too soon on the importance and power of government, as well as succumbing to overly romanticized expectations that cultural transformations driven by social forces and grassroots organizing alone, without a strong government, will establish a new American narrative. There are many more ways to do things wrong than to do things right, but there have been plenty of successes in government, in addition to failures. A stronger government is not necessarily a bigger government. Integrating governmental functions not only connects social goals that need to be achieved in mutually supportive ways, it may also downsize the fragmented bureaucracies.

Societal and industrial transformations are indeed needed, but establishing and enforcing clear rules of a new game through law are essential ingredients. Cultural transformations require inspirational and uncorrupted political leadership, as well as direct participation in governance by citizens. We need to ask continually what and who are standing in the way of progress toward a more sustainable future and to be prepared to challenge mainstream beliefs that limit possibilities and perpetuate the unsustainable practices and thinking of the past.

In the United States, wages and salaries make up roughly three-fourths of total family income, but that portion is much higher for the broad middle class. Policies which produce uneven and adverse impacts on various groups within a nation are not socially or politically sustainable, even if aggregate growth were to increase. Addressing worsening mal-distributions of income, wealth, and opportunities for people in the world's nations needs to be a central focus of transformation policies.

Options to Address Insufficient Purchasing Power and Earning Capacity

The earning capacity of ordinary people can be enhanced by some combination of two contributions; wages earned through employment, and money earned through the ownership of productive capital. The latter includes ordinary investment from wage savings that people might make through the purchasing of stocks, bonds, and property; changes in ownership structures of businesses, employee stock ownership plans (ESOPs), and enabling people to acquire capital with the earnings of capital based on binary economics. This article focuses on employment and the restructuring of work to enhance the contributions and productiveness of labor – as opposed to increasing labor productivity by enhancing the productiveness of physical capital.¹² A companion article in this issue expands upon increasing earning capacity through the ownership of productive capital. The various pathways to increasing earning capacity can have different ramifications for consumption and for the environment.

If the authors of this paper are correct in their prediction that earning capacity, purchasing power, and sustainable livelihoods of people are destined to become the major social concerns facing not only developing countries, but developed nations as well, then what are the options for addressing this concern?

1. Transfer wealth or income from capital owners and highly-paid workers to those under- or unemployed. *A redistribution of wealth or income.*¹³
2. Engage in Keynesian spending for labor intensive projects improving infrastructure, with government and taxpayers footing the bill. *This*

*represents job creation in the face of insufficient current demand for public services, probably by deficit spending; effective over the short term, but not likely to become a successful long-term strategy.*¹⁴

3. Spread existing work out over a larger population by shortening the workweek, but *without* maintaining wage parity. *A redistribution of wage income from existing workers to a larger pool of potential workers, an initiative that involves no wealth transfers to labor as a whole, nor a transfer from the owners of capita to labor.*
4. In contrast, spread out existing work over a larger population by shortening the workweek, but with the *maintenance of wage parity. More of the fruits of industrial production and services going to labor; requires a redistribution of income from either profits or the tax base.*
5. Limit the elimination of jobs during economic downturns; supplement the shortfall in paid wages for workers on furlough or working shorter weeks from a government-administered employer-financed fund. *Allowing a quicker recovery of fuller employment when demand – especially foreign demand – increases; used in Germany.*¹⁵
6. Increase labor's contribution and therefore its claim on the profits from production and services by upskilling and redesigning work back into production and services. *Requires a redesign of labor's role in commercial activities that will reverse the decades-old trend in replacing labor with capital.*¹⁶
7. Meet essential human needs in a less-expensive and less resource-intensive way by redesigning products, production, services, and systems. *Requires a re-conceptualized national industrial policy and restrictive trade practices.*
8. Change the nature of consumer and human-centered demand by encouraging cultural change more focused on using disposable income on services with significantly less capital and energy intensiveness and much more labor-intensiveness. *Requires a shift of demand from "stuff" to human services.*
9. Better enable poor and middle-class people to become owners. *Extending*

to them effective market opportunities to acquire capital with the earnings of capital, based on binary economics, is one way to accomplish this and is the subject of a companion paper in this edition by Robert Ashford et al.

The 2008 financial crisis has exacerbated income inequality.¹⁷ However, looking at the G20 countries, labor-market institutions (employment protection legislation, unemployment benefits, and active labor market/job creation programs), which provided strong internal flexibility in combination with relatively strict employment protection (like Germany), were able to stabilize employment, however, with the marginal workforce bearing the brunt of the crisis.

Deliberately focusing on these options, rather than attempting to return to a growth-based, export-led economy, allows for creative experimentation with what is likely to become the major social concern of government, without subordinating the interests of poor and middle class people to the more affluent. Such subordination causes redistributions that exacerbate the disparity among economic winners and losers, with many people ending up as the losers. Some of these options have the potential to limit wasteful growth (6, 8) and limit underutilized human capital (4, 5, 7, and 8). Some options (1, 2, 3, 4, 5, 6, and 9) require other complementary policies to limit wasteful consumption as well.

The alternatives are to act as if the crises will soon be over, to assume that recovery without transformation is possible, to continue the failed policies of the past, to assume that technology and ingenuity will be sufficient to save us, to accept the inevitable that there will be winners and losers, and to fail to distinguish policies which aid the financial sector from those that improve the real economy.

This article is based on a recent major work published by N. A. Ashford and R. P. Hall: Technology, Globalization, and Sustainable Development: Transforming the Industrial State (Yale University Press, 2011, 772 pages). See <http://yalepress.yale.edu/yupbooks/book.asp?isbn=9780300169720>

THE PERFECT STORM

1. FINANCE: **Origin:** reckless provision of (leveraged) credit + issuance of dubious financial instruments. **Aftermath:** collapse of the housing and financial markets; reluctance of lenders to lend, and producers and consumers to borrow in uncertain and volatile futures. This affects the concentration of wealth and employment prospects ▼

2. WEALTH CONCENTRATION: As financial practice increases the concentration of wealth, political and economic power is also concentrated, leading to erosion in fair and inclusive market rules, government capture and intervention on behalf of the few, exploitation and exclusion of poor and middle-class people, manipulation of democratic preferences, and erosion of widespread opportunities for ownership and employment ▼

3. EMPLOYMENT: The financial/credit crisis exacerbates the prior long-term crisis in increasing high un- and under-employment, with declining skills, wages, and purchasing power (demand) for some. This affects ▼

4. CONSUMPTION: The decline in purchasing power and easy credit further lowers consumer demand and production ► further unemployment. This affects ▼

5. INVESTMENT AND PRODUCTION: Firms have historically focused on increasing productivity ► over capacity (unrealized profits), with increasing reliance on trade to generate revenue and the shedding of labor. Decreasing demand globally and the end of cheap energy increasing costs, decreasing profits and increasing economic volatility ► reluctance to expand production and hire workers ► greater preference for using capital rather than labor. This affects employment and investment.

6. ENVIRONMENT: Excessive and polluting production, throughput, and consumption by part of the society using too much energy and resources; pressure to relax or avoid regulation, making things worse.

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- See Kochan, note 1, for a revealing discussion of the increased time the US has needed to recover from its past recessions.
- See Stiglitz, J. (2010). *Freefall: America, Free Markets, and the Sinking of the World Economy*. New York: W. W. Norton & Company; and Stiglitz, J. (2011). "Of the 1%, by the 1%, for the 1%." *Vanity Fair*, May 2011, Available at <http://www.vanityfair.com/society/features/2011/2005/top-one-percent-201105>.
- See Jackson, T. (2009). *Prosperity Without Growth*. Earthscan, London and Sterling, VA and Schor, J.B. (2010). *Plenitude: The New Economics of True Wealth*. Penguin, New York. Contrast these proposals with those who are explicit in the need to maintain wages and transfer wealth from government or others in order to do so. See Spangenberg, J. H. (2007). Defining Sustainable Growth: The Inequality of Sustainability and Its Applications, *Frontiers in Ecology Research*. S. D. Antonello. New York, Nova Science Publishers, and Stutz, J. (2011). "Going for a Better Life," paper presented at the SCORAI Conference.
- See the Mondragón enterprises in the Basque Region of Spain (Kelly, G. and Massena, S. (2009). Mondragón Worker-Cooperatives Decide How to Ride Out a Downturn. *YES Magazine*, June 5, 2009. Available at <http://www.yesmagazine.org/issues/the-new-economy/mondragon-worker-cooperatives-decide-how-to-ride-out-a-downturn>).
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- See Rifkin, J. (2004). *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*. G.P. Putnam's Sons, New York; and Vivarelli, M. and Pianta, M. (Editors) (2000). *The Employment Impact of Innovation: Evidence and Policy*. Routledge, London.
- Investing in better education and lifelong learning is, of course, central to cultural change and shifting demand toward the use of more human capital.
- The metric "labor productivity" is commonly used in the design and evaluation of economic policies. Productivity is a ratio; it is not a measure of output. It is calculated by dividing an output by a factor of input (labor or capital), that is, it is the amount of output per unit of input. In contrast, *productiveness* is a measure of the quality of being productive or the capacity for producing. Examples are a more productive machine that is capable of faster output (an example of capital productiveness) and a more productive worker who is capable of more creative or faster work and higher-quality outputs (labor productiveness) if his/her skills have been enhanced. As a statistical artifact, either can increase labor productivity. Productivity does no work; (physical) capital and labor do work.
- For a discussion of the redistribution of income through taxes, social transfers (social insurance, pensions, and unemployment insurance), and social expenditures (education, health, water, and other social services) – see Prasad (2008). *Policies for Redistribution: The Uses of Taxes and Social Transfers*. Geneva: International Institute for Labour Studies, International Labour Organisation. Looking over the previous fifteen years in a large number of both developed and developing countries, Prasad (2008) found that the redistributive impact of taxes and social transfers, which have become increasingly regressive over time, have thus not been able to reverse income inequality. On the other hand, as experience in Mauritius, Malaysia, Nordic countries, and for low-income people in Brazil has shown, social policy can be used more aggressively without adversely affecting growth or employment objectives. Both tax and social policy are needed to support employment objectives specifically.
- For details of options for fiscal interventions to increase economic growth and employment assembled by the U.S. Congressional Budget Office, see CBO (2010a, 2010b). Also see the endnote above. Sources: CBO (2010a). *Policies for Increasing Economic Growth and Employment in 2010 and 2011*. Available at <http://www.cbo.gov/ftpdocs/108xx/doc10803/01-14-Employment.pdf>, and CBO (2010b). *Policies for Increasing Economic Growth and Employment in the Short Term*. Statement of Douglas W. Elmendorf, Director, CBO, February 23, 2010. Available at http://www.cbo.gov/ftpdocs/112xx/doc11255/02-23-Employment_Testimony.pdf.
- For a detailed explanation of stable employment in Germany, even in the face of decreasing export activity see Eichhorst, W., Escudero, V., Marx, P. and Tobin, S., (2010). "The Impact of the Crisis on Employment and the Role of the Labour Market Institutions," International Institute for Labour Studies, International Labour Organisation, Geneva, pp. 27-29.
- Knowledge applied in an iterative way (knowledge injected periodically or continuously over time) can have a cumulative effect, with new knowledge building on past knowledge acquisition and investment. This is akin to adding financial flows to previous investments that have accumulated and appreciated in value and is unlike investments in physical capital that depreciates in value over time because its functionality decreases due to regular utilization. Knowledge capital, even if it sometimes becomes less valuable over time, may nonetheless grow (accumulate) from using it and adding to it over time – see Foray, D. (2006) *The Economics of Knowledge*. MIT Press, Cambridge. This observation has direct relevance for the choices that are made as to which factor endowments to invest in to produce a product or provide a service. Hardware deteriorates, but knowledge held by a skilled person who continues to learn can appreciate in value for many years. This calls into question the replacement of labor by physical capital as a growth strategy.
- Eichhorst, W., Escudero, V., Marx, P., and Tobin, S. (2010). *The Impact of the Crisis on Employment and the Role of the Labour Market Institutions*. Geneva: International Institute for Labour Studies, International Labour Organisation.