

Crisis, Slump, Superstition and Recovery
Thinking and acting beyond vulgar Keynesianism

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ABSTRACT

The intellectual and practical response to the worldwide financial and economic crisis of 2007-2009 as well as to the subsequent slump has exposed the poverty of prevailing ideas about how economies work and fail. The transformative opportunity presented by the crisis has largely been squandered; but the opportunity for insight has not. Insight today can support transformation tomorrow.

The present debate about the crisis and the subsequent slump has largely suppressed two themes of major importance. The first theme is the relation of finance to the productive agenda of society. It is not enough to regulate finance: it is necessary to reshape the institutional arrangements governing the relation of finance to the real economy so that finance becomes servant rather than master. The second theme is the link between redistribution and recovery. A pseudo-democratization of credit has been made to do the work of the redistribution of wealth and income in laying the basis for a market in mass-consumption goods. The most important form of redistribution is not retrospective and compensatory redistribution through tax-and-transfer; it is the reshaping of economic and educational arrangements to broaden opportunity and enhance capabilities.

Fiscal and monetary stimulus is rarely enough to redress the effects of a major economic crisis. (It was the massive mobilization and the experiments in public-private coordination of the war economy, rather than any proto-Keynesianism, that took countries out of the depression of the 1930s.) The proper role of a stimulus is to play for time by preventing the aggravation of crisis and to prefigure a program of recovery and reconstruction.

The relative success of major emerging economies in responding to the crisis and in avoiding a slump fails to provide the model of such a program. Many of the policies and arrangements pursued in these countries stabilized markets and created the conditions for continued growth. But it would be wrong to assume that economic recovery in emerging economies represents the emergence of a superior economic logic. It should be understood instead as a series of second bests. For example, the forced continuation of credit flows through governmentally

controlled banks and development agencies has largely reinforced preexisting inequalities rather than democratizing access to resources and capabilities.

A preliminary to a program of broad-based economic recovery is the repudiation of the regulatory dualism that has characterized the regulation of finance: the distinction between a thinly and thickly regulated sector of financial activity. In one direction such a program must seek the institutional innovations that put finance more at the service of the productive agenda of society. In another direction, it must conceive and build institutional arrangements that give practical effect to the ideal of socially inclusive economic growth. It does so by basing growth on an institutionalized broadening of economic and educational opportunity.

The vulgar Keynesianism in which many contemporary progressives have looked for orientation fails to offer a theoretical guide to such a program of recovery. However, the fault does not lie solely in the vulgarized version of Keynes's ideas; it lies in those ideas themselves and indeed in the whole mainstream of economic analysis that grew out of the marginalist revolution of the late nineteenth century. The established economics suffers from a deficit of institutional understanding and imagination. Only a broadening of institutional understanding can provide the practical and conceptual materials we need to imagine alternative futures. And although this understanding remains foreign to the main tradition of thinking about economic policy and reform, the same cannot be said of law. Law and legal thought are integral to the theoretical alternative explored in this essay, because they provide the institutional imagination with indispensable equipment.

This essay takes a first step in the effort to develop an intellectual alternative. It does so by outlining an approach to our present problems of crisis, slump, and recovery.

STIMULUS, SLUMP, SUPERSTITION, AND RECOVERY

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The truncated debate about the slump: why the stimulus fails

Nothing astonishes more in the present debate about recovery from the slump that followed, in the richer economies, the crisis of 2007-2009 than the poverty of the ideas informing the discussion. It is as we were condemned to relive a yet more primitive version of the debates of the 1930's.

On one side, we hear the argument for fiscal and monetary stimulus: the more the better. The intellectual inspiration of this argument is almost exclusively vulgar Keynesianism; with each passing round in the debate, it becomes more vulgar.

The chief opposing conception is a market fundamentalism the major premise of which is that a market economy has, despite minor variations, a single natural and necessary institutional form. This form supports, according to the market fundamentalists, an economic logic that cannot be defied with impunity: they believe that every attempt to defy it will, sooner rather than later, prove self-defeating. One of the byproducts of this market fundamentalism has been a resurgence, in

response to the nostrums of the vulgar Keynesians, of the "liquidationist" view of the 1920's ("purge the rottenness out of the system"): fiscal austerity, monetary common sense, and a return to fundamentals -- that is to say, the established institutions of the market economy, with a minimum of governmental action -- is supposedly all we need.

The truth is that, under the conditions of a contemporary democracies and markets, no fiscal and monetary stimulus is ever likely to be large enough to help ensure a broad-based and vigorous recovery from a major slump. Long before it reaches the dimension needed to make a difference, the stimulus will encounter difficulties that are hard to overcome. A stimulus big enough to counteract the effects of a major slump is a gamble that will arouse opposition both because of the present interests that it threatens and because of the future evils that it risks producing.

In the practice of monetary policy, it is easy to jump from deflation to inflation, and then to see inflation combined, as it has been in the past, with, stagnation. It is a quandary that has particular relevance to the present situation of rich economies, as they suffer the aftereffects of the crisis. The major rich economies are awash in capital that has no place, or little place, to go. The scarcity of attractive opportunities for capital has helped arouse interest in emerging markets. Nevertheless, most capital remains at home, trapped. This abundance of liquidity coexists with a determined attempt by households and firms to free themselves from the burden of debt accumulated in the years leading up to the crisis. This effort has justified the description the slump that has followed the crisis as a "balance-sheet recession," driven, in part, by the desire of both households and firms to reestablish a sustainable level of indebtedness.

The coexistence of abundant liquidity with daunting private

indebtedness is only superficially paradoxical. It is itself largely a consequence of the inequality-generating forces that helped shape the pre-crisis economy. A vast portion of profits were concentrated in financial firms in the decades preceding the crisis. At the same time, in the real economy, the most innovative, knowledge-intensive practices, the source of greatest new wealth outside high finance, remained relatively confined to advanced sectors of production. These sectors have become closely linked to similar vanguards around the world. However, they remain weakly linked to other sectors of their own national economies. The inequalities resulting from such forces have become immense. No wonder vast stores of idle capital continue to pile up in economies populated by households and firms over their heads in debt.

In such a circumstance, the expansion of the money supply by central banks (called by a barrage of obfuscating names such as “quantitative easing”) may help avoid serious and destructive deflation without, however, ensuring a vigorous recovery. It cannot, however, help ensure a vigorous recovery in economies full of families and companies anxious to escape an overhang of debt.

Fiscal stimulus faces similar limitations and difficulties. When it takes the form of cutting taxes, the money saved by households (and in effect spent by the government) is likely to go disproportionately into the paying down of corporate or household debt rather than into increased consumption. To the extent that the beneficiaries of tax cuts are cash-rich individuals and companies, the windfall may simply stoke the already vast store of capital with nowhere to go.

Stimulus through spending seems more promising. One route is to put money directly in the hands of those who are more likely to spend it (for example, by extending and increasing unemployment benefits). Another path is to undertake an ambitious program of public works,

especially works designed to enhance the transport and communications structure of the country and to promote low-carbon alternatives to present lines of production. These activities are useful, both in themselves and as responses to the slump: they can have an immediate effect on the level of economic activity.

This positive effect, however, is subject to two weighty qualifications. They are connected in a way that remains poorly understood.

The first qualification is that the value of such forms of stimulus depends on what comes next. Will the extra money spent by the jobless cause more investment and employment? Will the infra-structure projects help entice more risk-taking and innovation, creating a physical basis for the diffusion of more advanced technologies and practices throughout broader sectors of the economy? The relation of cost to return cannot be read off from the public-spending and investment initiatives taken in isolation.

It depends on the role that they may play, or fail to play, in a broader process of economic growth. The most important elements of such a process – the ones with the greatest potential to enhance productivity, on the basis of wider opportunities and stronger capabilities -- are those that include a combination of technological and organizational innovations. Increased demand, aroused through fiscal stimulus, is far from enough to ensure that such a combination will take place.

The second qualification is that whereas the ultimate effect of such actions on economic growth is both speculative and remote, the burden that they impose on governmental finance is immediate. In the presence of a process marked by the mixture of technological and organizational innovations likely to shape a new cycle of growth, the burdens may be

wholly justified. In their absence, however, the short-term effect on increased demand may soon wane, while the worsened fiscal position of the government inhibits it from undertaking the next round of growth and innovation-friendly measures.

The worsening of the fiscal position of the state may in turn arouse the specter of a crisis of confidence in the sovereign debt: in the ability of the government to repay its obligations over the long term. The United States will continue to be the country least vulnerable to this form of pressure so long as it detains the world's reserve currency, and can pay all of its obligations in a currency that it is free to print as well as to count on the willingness of cash-rich countries and governments to help finance its profligacy. However, the risk of default is not the sole or normally the most significant form of declining confidence. The outward movement of capital, although less dramatic, can be nearly as decisive.

The truncated debate about the slump: why the stimulus can never be big enough

The intrinsic limitations of fiscal and monetary stimulus as a response to economic slumps are not a reason to foreswear stimulus programs. They are a reason to regard such programs as partial and inadequate responses to severe economic downturns. Moreover taken together with a second set of considerations, they help explain why the actual implementation of these programs is almost always half-hearted and half-baked, even in the hands of progressive governments intellectually predisposed (given the dominant ideas and scarcity of ideas) to vulgar Keynesianism.

The vigorous deployment of expansionary fiscal policies puts the state in more debt and, paradoxically, makes it at once weaker and stronger: weaker because it owes more, and has, in that sense, less room for maneuver; stronger, because its influence over economic activity increases and the dependence of all economic agents on its actions and

inactions becomes, if not greater, at least more obvious. The willingness to risk inflation for the sake of avoiding deflation is similarly an assertion of the power of government to influence the terms of exchange in the whole economy and to devalue its obligations to its own creditors.

Fiscal and monetary stimulus taken to the hilt threatens real interests and offends influential ideas. The ideas and the interests, mixed as they always are in real history, conspire to restrain, and sometimes to reverse, the assertion of governmental power that is implicit in the deployment of stimulus policies. In their campaign, the opponents are able to exploit to their advantage the inherent weaknesses in the efficacy of fiscal and monetary stimulus.

The result is that no fiscal and monetary stimulus, conceived in response to an economic slump, will ever be likely to satisfy the proponents of these policies. Always and everywhere, they will respond with the same litany. It has been done by half, they will complain. Had it not been done and all, the downturn would have been much more severe. But if only there were greater courage and clarity (further to inflate or to spend), the recovery would have come earlier and been stronger.

The exercises of stimulus that the world has seen since the Great Depression of the last century almost always appear, both at the time they were deployed and in retrospect, to have never been enough. Their quantitative inadequacy is so constant a feature of the economic history of the last hundred years that it cannot reasonably be dismissed as an accidental and occasional byproduct of misguided beliefs and perverted policies. It forms part of the reality with which we must reckon.

It is not a new reality. Even the briefest consideration of its most famous earlier example helps us to understand what we should and should not expect from peacetime stimulus. Contrary to what is often said, no major Western economy managed to overcome the Depression

before the Second World War, with the sole, partial exception of Germany. Roosevelt, contrary to common latter-day revisionism, had not brought the country to sustained, broad-based recovery, when he wavered and retrenched in his program of recovery through public spending, as every proponent in power of massive stimulus always has, and helped, through his wavering and retrenchment, to precipitate the frightening downturn of 1937-1938.

The truncated debate about the slump: the forgotten lessons of the war economy

What took the advanced economies out of the Depression was the wartime mobilization of people and resources. The war that brought about such massive mobilization had little in common with the costly but limited military adventures of today. It was world war conducted in the spirit of total war. Between 1941 and 1945, American GDP doubled.

The proto-Keynesianism adopted by the United States and other major Western governments during the worldwide depression of the 1930s was largely a failure. The war economy was, in straightforward economic terms, a success. It was not a success simply with regard to the expansion of output. It was also a success with respect to conventional progressive redistribution through the tax system as well as to the accelerated technological and organizational innovations that are generally associated with periods of major economic growth. The top marginal rate of the personal income tax, for example, reached levels in the United States that had never been seen before and have never been seen since then – in the midst of extraordinary expansion of output. Necessity, mother of invention, helped provoke connected waves of innovation in technology, in the organization of work and production, and in the arrangements governing the relations between government and the ways private businesses dealt with one another.

It is important correctly to understand the lessons of the war economy. The radical expansion of output cannot be attributed solely to the forced mobilization of physical, financial, and human resources, massive as that mobilization was. Such an extraordinary effort might have come at least partly to grief had it not been accompanied by even more surprising advances in the forms of coordination and cooperation between government and business as well as among firms.

Here was a country that was the world headquarters of the doctrine of the free market. Its perennial bias was to believe that its founders had discovered at the time of the establishment of the American republic the definitive formula of a free society, enshrined in the rules of contract and property as well as in the Constitution. The formula needed only to be adjusted from time to time under the pressure of crisis and the prodding of changed circumstance. There was room for dispute about the respective roles of the market and regulation. But there was little doubt about the arrangements defining the market economy itself. Any talk of reshaping the institutions of the market economy fell under suspicion of being a disguised form of dirigisme. Such were the beliefs that prevailed before the war and that came again to predominate after the war. Even today they are beliefs largely shared by the vulgar Keynesians and their conservative adversaries.

At their moment of national trial, in world war, however, Americans gave these beliefs, supposedly entrenched in their national identity, short shrift. They retook the experiments conducted during the First World War, under the aegis of the War Planning Board, in an orchestration of productive effort that was neither the market economy, as it had been conventionally understood, nor central planning. It amounted to flexible decentralized strategic coordination between government and firms as well as to cooperative competition among firms. It included a willingness to try out whatever way of organizing production at the plant level seemed to promise the most output with the

fewest inputs in the shortest time and the greatest prospect of continuing innovation both in products and in the way of making them.

It was as if all the nostrums about the sanctity and the immutability of the market economy were only a mask that could be cast off when they needed to be. They were not cast off in favor of centralized, coercive direction, although there was some element of such direction as well as of self-serving profiteering. They were cast off in favor of a series of pragmatic institutional experiments defying the supposedly inviolate barrier between market and non-market forms of organization as well as between cooperation and competition.

What turned out to be more important than the institutional and ideological dogmas, whether pro-market or dirigiste, was the capacity to cooperate the better to reach shared and pressing goals. That capacity, already highly developed in the United States, as well as in other advanced twentieth-century societies, was not the product of the war. It had roots in a form of social organization and of consciousness that had affirmed belief in equality in the midst of tremendous inequality and faith in experimentalism despite an attachment to institutional formulas. However, it found, in the circumstances of the war effort, occasions for its exercise.

The central attribute of the war economy was the coexistence of a forced mobilization of resources with this quickened pace of bold practical experimentalism in the ways of organizing the effort. That -- and not proto-Keynesianism -- was what really worked.

The traditional interpretation of the experience of the war economy, insofar as there is any interpretation at all, is that both its achievements and its methods are to be understood as pertinent only to the extraordinary conditions of wartime and are wholly inapplicable to circumstances of relative peace, such as those that prevail today. It is an

unwarranted conclusion. Every historical situation on which we can turn the tools of economic thinking is, by definition, special. Peacetime economies may differ from one another as much as they differ from a particular war economy. If, however, there is any hope of developing a science of economics as anything more than an analytic toolbox, void of causal theories, it can be only by discerning the more general and lasting implications of particular historical circumstances. There are no other circumstances that could serve as the subject matter of economic analysis.

When the lessons of the wartime experience are transported to the conditions of relative peace, in which today we face the slump, the main lesson to be carried over is that because the forced mobilization of resources is less feasible, the other element -- of institutional innovation, in the practices of production and in the forms of cooperation and coordination between public and private agents as well as among private ones, becomes all the more important.

Let us take the work of stimulus, especially fiscal stimulus, through public works or through governmental incentives for business investment, as the most plausible counterpart, under conditions of peace, to the all-out mobilization of resources in total war. For all the reasons we have enumerated, it will almost never be implemented in more than half-hearted form. Even when practiced more rather than the less, it faces the intractable limitations we earlier described. That is not a reason to fore swear fiscal stimulus. It is a reason not to rely on it as the sole or even as the mainspring of recovery. It is the other element of the wartime experience -- its institutional innovations in the form of the market economy and in the relation between government and business -- that deserve and repay greater emphasis. What the monetary and fiscal stimulus does not and cannot do all by itself, such innovations in the organization of production, exchange, and governance must accomplish.

The truncated debate about the slump: the missing structural agenda

In the light of this elementary appreciation of the limits of fiscal and monetary stimulus, and of the near inevitability of their truncation, it is possible to understand more clearly what is wrong with the present debate about the response to the slump.

The first thing that is wrong about it is that it consists largely in a polemic between the proponents of more stimulus and the opponents of such an exercise. The proponents say: if only the government had doubled the bet, if only it had shown itself willing to spend more or to put more money in the hands of consumers (by lowering taxes or by expanding the money supply), the slump would already have given way to a more convincing recovery. Their opponents claim that while the recovery-producing effects of such measures are at best fragmentary and delayed, their destructive effect on public finance is certain and immediate, with the future left to pay for the improvidence of the present. The proponents exaggerate, and the opponents understate, the benefits of the stimulus. Neither offer a realistic view of its uses and limits in the organization of a recovery.

The residue of this debate is what in fact exists today, and in one or another version, always existed before, in earlier instances of crisis and crisis management, by way of response to the slump. It is stimulus by half: halting, compromised, neither here nor there. The defenders of the stimulus are then able to say that their recipe for massive governmental spending or monetary expansion has not been adequately tried. The critics of stimulus can in turn respond that the integrity of public finance has been compromised, with long-term negative consequences for future growth, and that there is little to show for it. Each party to this contest is allowed keep its prejudices, to its own satisfaction, undaunted by the enigmas of the situation.

The second thing that is wrong with the present debate is that it is almost entirely deficient in any view of the institutional innovations that would be required to organize socially inclusive economic growth over the long term. The dominant perspective of the debate -- both from the standpoint of the proponents of stimulus and from the perspective of its opponents -- is that the slump represents an interruption, a threat, a shadow, to be averted. Once it is averted, we can return to how things were before.

However, there is a flaw in the hope of getting back to business as usual. The problem is that things were not well before the crisis and the slump; the crisis and its aftermath are expressions, among other others, of these fundamental defects. The far-reaching estrangement of finance from the real economy and the gross inequalities of the present organization of market economies form a large part of the causal background to the recent crisis. They also help account for the limited efficacy of conventional fiscal and monetary stimulus. These problems were aggravated by the loosening of regulatory restraints on finance in the closing decades of the twentieth century, but they pre-existed it.

Under the present arrangements of all contemporary market economies, the link between the accumulated saving of society and its agenda of production is weak. To a large extent, the finance of production relies on the retained and reinvested earnings of private firms, which is to say that production finances itself. Finance is then free to serve itself rather than to serve production, and to design successive layers of financial engineering with an ever more tenuous relation to any transactions in the real economy.

A relaxation of regulatory vigilance such as occurred in the second half of the twentieth century, merely magnifies these effects. Finance, relatively ineffective in helping support production, may be very

effective in disrupting it, as its innovations become more and more self-referential, and less and less useful to funding the production of actual goods and services. A crisis in finance, such as we have witnessed, will have major effects on the real economy chiefly by dissuading firms and households from running risks and maintaining high exposure to debt.

If the disengagement of finance from production formed part of the causal background to the crisis of 2007-2009 and to its continuing aftermath in the slump, another part was the effect of inequality, manifest both proximately and remotely.

As a proximate cause of the crisis of 2007-2009, in its American theater and its appearance in many countries around the world, inequality mattered chiefly as a provocation to put access to consumer credit in the place of redistribution of wealth and income as a basis for a market in mass consumption goods. Mass consumption requires in principle a popularization of purchasing power. Such popularization in turn seems to depend on widespread distribution of wealth and income: either through a broadening of access to economic and educational opportunities that influences the primary distribution of income or through the redistributive effects of taxation and social spending.

The economic growth that the advanced Western economies saw in the second half of the twentieth century relied heavily on the expansion of a market in mass consumption goods. In this as in many other respects, the United States took the lead. When asked what book he would like to see in the hands of every Soviet child, Franklin Roosevelt answered: the Sears Roebuck catalog.

What real redistribution fails to provide, fake redistribution, in the form of greater access to consumer credit, helped supply instead. Escalating household indebtedness, crucial to the continuing exuberance of the mass-consumption market, and therefore to the prosperity of the

firms that directly or indirectly produced mass-consumption goods, was in turn made possible in part by the overvaluation of the housing stock as collateral. Such an overvaluation, in the context of widespread abuse and regulatory laxity in the mortgage market, turned out to be one of the immediate triggering mechanisms of the crisis, in its American epicenter as well as in many of the countries that suffered most from the crisis, among them Spain, Ireland, and Britain.

Thus did a pseudo-democratization of credit replace a real redistribution of wealth and income. A fragile credit democracy came to stand in the place of a property-owning democracy.

The surplus countries, China first among them, had much of their mass-consumption markets abroad, in the countries to which they sold their goods and services. Such countries replaced redistribution not with credit but with exports -- exports to countries that had put credit in the place of redistribution.

Inequality matters, however, also in another, deeper and less direct way that has more to do with the supply side of the economy than with its demand side, and with firms rather than with households. In all major economies in the world, the most important, wealth-creating innovations have come increasingly to be concentrated in advanced sectors of the economy, strongly connected to comparable productive vanguards around the world -- with which they trade people, practices, and ideas -- but only weakly linked to other parts of their own national economies. The result is that the greatest engine for dramatic rises in productivity finds its potential diminished by the narrowness of its scope of operation and influence. It is a formidable constraint on any attempt to make the slump give way to a new cycle of enduring and broad-based economic growth.

Here are twin imperatives that the established debate about the

crisis has left almost entirely untouched: the need to put finance more effectively at the service of the real economy in general, and of production and innovation in particular, as well as the need to loosen the destructive restraints that inequality imposes on growth.

The ideas of regulation and reform that have thus far been presented in the United States and other advanced economies do not even come close to addressing these twin problems, much less to proposing solutions to them. These ideas can be classed under the heading of four main agendas of reform and regulation. Each of them has been prominently championed, by a distinct group of advocates and constituents, in the United States and in other rich industrial democracies.

The first agenda is a classic New-Deal style agenda (as exemplified, for example, by the proposals of the Volcker committee). It wants to reinstate precautions, such as the division between insured deposit taking and proprietary trading, that were prominent in the American and European regulatory response to the Depression of the 1930s but that have since been relaxed. Its characteristic concern is to insulate the part of the banking system on which the general public relies against the excesses of speculative finance.

The second agenda is a New Technocratic agenda. Its sponsors are the high governmental officials in the Finance or Treasury ministries of the United States and the other advanced economies, and their academic allies. Its defining concerns are the strengthening of supervisory and resolution authority -- that is to say, authority to take over, close down, or turn around failing financial institutions, especially when their instability threatens the stability of the financial system as whole. The perspective is very clearly, as one of the favorite metaphors to emerge in the crisis reveals, "to put out a fire." If it is an "eight-alarm fire," the available instruments are regarded as insufficient. Once the fire is put

out, everything can presumably go back to the good old days before the conflagration.

The third agenda can be called the Basel agenda. Its source is the intellectual and bureaucratic elite of international high finance, as represented in its iconic institution, the Bank of International Settlements in Basel. Its concern is to contain or counterbalance the risks of financial instability. It characteristically proposes to do so by imposing more severe standards on the relation between the capital structure of banks and the risks and liabilities to which they are exposed. It wants, for example, to make the banks conform to more stringent capital adequacy requirements.

The fourth agenda, the only one with overtly popular concerns, is a Consumer Protection agenda. It seeks better to protect the public against the abuses of the finance industry, through a combination of regulatory paternalism and mandated transparency. Its favorite instrument is a Consumer Protection Agency in the area of finance.

Taken together, these agendas of reform fail to deal, even in fragmentary and oblique fashion, with the twin structural problems that are central to the genealogy of the crisis and the slump. They also do nothing to remedy the consequences of the relative inefficacy of monetary and fiscal stimulus. It may well be said that it was never their purpose to do so. Their intent, so the argument would go, was to discipline finance and to prevent it from continuing to do, or from one doing once again, the harm that it has just done to the livelihood and welfare of millions of people. It is therefore fair to ask whether any or all of these agendas are in fact able successfully to address the trouble with finance. The answer to this question is no.

The two troubles with finance

Grant that the policies of stimulus espoused by the vulgar Keynesians cannot and will not be deployed at the scale that, according to their proponents, would be necessary to ensure a vigorous recovery. Concede that even if they were, they would not, all by themselves, suffice to secure the benefits that they are hoped to produce. Admit that the agendas of reform and regulation that have thus far commanded attention and authority have little potential to reach the deeper causes of the crisis and the slump.

Even so, you may protest, what has been accomplished is to reaffirm, in practice as well as in discourse, the need to control finance and never to forget that it is “the squeaky wheel of capitalism,” the flaw through which an otherwise vibrant economy may become vulnerable to calamitous disruption. At least here, it might be supposed, there has been success: advance in insight, making possible progress in law and policy.

An indisputable merit of the economics of Keynes as well as of the economics of the vulgar Keynesians is that the latter as well as the former view a market economy as having problems and possibilities very different from those of a barter economy, and refuse to see money as merely a transparent and innocuous instrumentality of real economic transactions. In the academic analysis of the crisis and the slump, as well as in the policy debate about how best to respond to them, finance has loomed large. Together with proposals to extend or to retrench fiscal and monetary expansionary policies and ideas about how best to redress the mass imbalances between surplus and deficit countries in world trade and capital flows, the call to regulate or re-regulate finance holds the center of attention in every country touched by the slump and by the crisis from which it resulted.

To no avail. The ruling ideas continue to prevent us from grasping the real trouble with finance. The discussion of finance has followed the psychological bias of pre and post-marginalist Anglo-American

economics, aggravated by the abuse of mathematics (as a substitute for causal reasoning rather than as an expression of it) in contemporary economic analysis.

A characteristic idea emerging from the present discussion of finance is that there is tendency, entrenched in our habits of mind, to underestimate the significance of uncommon and extreme events. Such events, we are taught, fall outside the established data sets. They occur more frequently than even the most sophisticated are inclined to expect. When they occur, they break the bank, literally and metaphorically, and give force to the expression: all bets are off.

The rough and hazy distinction between ordinary and extraordinary calamities, bearing on finance, gains a specious semblance of theoretical clarity and grounding when it is interpreted in the context of a contrast between quantifiable risk and unquantifiable uncertainty. The distinction confuses flaws in knowledge with features of the world; it trivializes our ignorance as if it were simply a failure to register a natural difference between two classes of economic phenomena. Our quantification of risk can be only as precise and as reliable as our insight into the causal processes that change pieces of reality. If there are changes that seem unexpected and unaccountable on the basis of our established causal ideas about economic activity, that must be because those ideas are defective. Whether or not we are able to correct their defects, our first interest is to acknowledge them.

Both the occurrence and the effects of traumas and catastrophes in the realm of finance are shaped by the institutional arrangements and the enacted beliefs that organize financial activity and determine its relation to the real economy. They are not natural phenomena. For all these reasons, it is safe to say that the trouble with finance is not that we have thus far failed to recognize and to guard against a category of extraordinary financial calamities forming an intrinsic and perennial

feature of economic reality.

The real trouble with finance is two-fold. To appreciate the nature of these two sources of trouble and the relation between them is to acquire part of the intellectual equipment that we need the better to address, without superstition, the problems of the slump.

The first trouble with finance is that it operates in an institutional setting not of its own making from which there arise destabilizing forces that it cannot control. In fact, financiers can only partly understand these forces, much less manage them, from the vantage point of their activity. Each of these sources of instability represents at least a partial cause of one of those varieties of danger that, according to the now fashionable discourse, generate unquantifiable uncertainty rather than unquantifiable risk.

That finance operates in an institutional context not of its own making is simply a special case of a more general truth: that the market economy cannot produce its own institutional framework. The institutions of the market are not created in the market. They are fashioned in politics as well as in thought, and embodied in law. The idea that the market in general, and the financial market in particular, generate their own institutional form becomes plausible only in the light of another idea, the practical influence of which in the affairs of modern societies can hardly be overestimated. This is the idea that a market economy has a single necessary and natural form, expressed above all in a particular system of rules and rights of contract and property.

It is an idea underlying much of the contemporary discussion of finance and of the regulation. One of its implications is that the proper task of regulation -- of finance or of any other branch of market activity -- is to remedy particular market defects, of imperfect competition or asymmetrical information. What this idea disregards is what may be the

most important in the work of regulation and reform: the reshaping of the arrangements that define the market economy in every area including finance. If, as is in fact the case, the market economy has radically different institutional forms, expressed in law, with distinct consequences for the path of economic growth as well as for the distribution of wealth, power, and income, a discourse about localized market flaws and remedies for such flaws is incomplete. The issue is always also: which market economy do we want, and what way of solving today's problems will help us move toward it.

Consider an open, partial list of attributes of the institutional setting in which finance operates and from which there may arise destabilizing forces that overwhelm the calculations and expectations of the money men.

A first attribute of this setting is at once negative and fundamental. It is that the institutional context within which finance operates at any given time is a relatively ramshackle construction; it is not the unavoidable expression in legal detail of the necessary organization of a market economy. It is the surprising and contingent outcome of practical and visionary contests, stretching back in time. It is susceptible at any moment to piecemeal revision, no less decisive in its influence for being fragmentary.

Consider, as an example, the institutional context of American finance at the time of the outbreak of the recent crisis. A simple way to describe it is to say that it was the product of a partial hollowing out of the regulatory framework of finance established at the time of the New Deal. The uneven hollowing out took place under the prodding of that loose combination of practical and intellectual influences that is responsible for much of institutional change in history: the economic power gained by high finance, translated into political influence, and the intellectual influence of theoretical and practical ideas that came to

prominence in that period. Among the theoretical ideas were doctrines such as rational expectations theory and real business-cycle theory that discounted the efficacy of governmental action in a range of economic affairs. Among the practical ideas were the view that the untying of investment banks from some of the restraints imposed in the New Deal period was a requirement of competition among large-scale financial firms in the global economy; the New Deal restraints came to be disparaged as burdensome remnants of a bygone era.

Such a haphazard institutional compromise can be hard to change on account of all the powerful interests and prejudices that shield it. Yet, once that shield is punctured, in any direction, by opposing ideas and interests, the compromise can change. Even a partial change can decisively alter the situation and the evolution of finance.

A second attribute of the institutional setting in which finance operates is to be subject to the effects of technological innovation or revolution on economic life. These effects are never direct and determinate; they are always mediated by institutional arrangements. The role of institutions in mediating them only increases the uncertainty of their impact.

A third attribute of the institutional context of finance is the variable divergence between two forces that operate upon it: popular support, wielding the suffrage, and economic power, manifest in the granting or the denial of confidence. In all contemporary democracies, these two forces regularly diverge. A force that loses in the course of electoral politics and public policy can hope to strike back through disinvestment and capital flight. A line of action that claims to conform to the dictates of financial confidence can be defied and defeated in politics. The relation between these two sets of outcomes conforms to no higher logic; it is open to the consequences of the next step in economic or political action.

A fourth attribute of the institutional framework in which financial activity now takes place has to do with the intractable limits to the extent to which the popularization of credit can replace the progressive redistribution of wealth and income. Within a narrow range of experience, the broadening of access to credit, especially consumer credit, can produce some of the same effects of a progressive redistribution of wealth and income, whether such redistribution occurs through an organized broadening of access to economic and educational opportunity or through the retrospective means of taxation and social spending. That a democratization of credit, however, cannot match the work of redistribution, even in the narrow task of sustaining a market in mass consumption goods and services, the genealogy of the recent crisis has once again shown. The consequences of this failure in the functional equivalence between greater access to credit and greater sharing of wealth and income can at any moment generate destabilizing forces.

A fifth attribute of the institutional context in which finance operates is its susceptibility to the effect of the intellectual fashions influencing the conduct of monetary policy by central banks. What will be the contrasting attitudes to the evils of inflation and deflation? Or the relative weight placed on the goals of monetary stability and full employment? Or the trust placed in policy regimes such as inflation targeting and its rivals? The answers to these questions lack a secure basus in any economic analysis with a rightful claim to the authority of science. Yet they may exert powerful effects, generating another series of destabilizing forces.

A sixth attribute of the institutional ground on which finance operates is international anarchy. There is not now a commonly accepted monetary basis for the world economy. The periods in which such a basis was widely accepted -- the heyday of the gold standard until its collapse in the 1920s and the rule of the original Bretton Woods system

from its conception in the aftermath of the Second World War to its collapse in August 1971 -- have been followed by periods of relative national autarchy and international disorder. The precarious and contested role of the dollar as the international reserve currency merely masks this disorder and attenuates its consequences.

An expression of this disorder is that in choosing which two aims marked out by the so-called trilemma of fixed exchange rates, monetary sovereignty, and free capital flows, they are to prefer (given that they cannot have all three of them at once), the major national and regional economies of the world have made divergent and contradictory choices. China has chosen the first and the second elements of this trilemma; the United States, the second and the third.

The present anarchy in the monetary arrangements of the world has helped make possible the vast imbalances between countries (beginning with China) that run huge surpluses of trade and saving and countries (the United States first among them) that import and consume much more than they produce and live off borrowed money.

The international anarchy and its expression in these imbalances represents yet another source of tremendous destabilizing mechanisms in the setting of finance, even for the capital that continues to stay at home, as most capital does.

This enumeration of attributes of the context of finance amounts to an open list of forces that, both separately and in conjunction with one another, can at any moment wreak havoc on financial calculation. The identity of the particular sources and phenomena is constantly changing: a generation hence it will not be what it is now, and what it is now is not what it was a generation ago.

The forms of destabilization that arise from these sources cannot in

principle be avoided by any financial innovation. In fact, even the first source of instability -- the fateful but haphazard, contingent, and therefore revisable character of the institutional setting within which finances operates -- cannot be easily understood, much less controlled, from the vantage point of the financiers. For them, the sole sufficient antidote is a defensiveness so guarded that it contradicts the requirements of risk-taking and entrepreneurship.

From the perspective of government and society, however, there is a possible response to the problem presented by the first trouble with finance. The generic character of the response is what we call -- bending the meaning conventionally given to the term -- financial deepening, by contrast to financial hypertrophy. By the hypertrophy of finance, we understand increase in the size of the financial sector, of its share in profit, talent, and influence, regardless of the service that it renders to the real economy. By financial deepening, we mean the intimacy of the relation between finance and the real economy: not only consumption but also and above all production and innovation. The more broadly based the engagement of finance in the whole cycle of production and exchange, the greater the number of independent sources as well as consumers of finance, the less likely is it that there be a specifically financial crisis that is not simply the expression in finance of a crisis in the real economy. Financial deepening thus understood is the development of which financial hypertrophy represents the perversion.

Regulation as conventionally understood -- the correction of localized market deficiencies, such as inequalities of bargaining power and asymmetries of information -- cannot ensure financial deepening the better to avoid financial hypertrophy. Regulation cannot do so unless it is practiced as the first step toward innovations in the arrangements governing the relation of finance to the real economy that put the former more effectively at the service of the latter.

The first trouble with finance, then, is its perennial vulnerability to the destabilizing forces that arise from an institutional setting beyond its control or even beyond its field of vision. The second trouble with finance is that, regardless of the interests and intentions of individual bankers, entrepreneurs, and consumers, it may not be able to perform its supposed goal of channeling the saving of society into productive investment. Its ability to serve this goal is hostage to the institutional arrangements governing the relation of finance to the real economy. Those institutions may either tighten or loosen the relation of finance to the real economy and to the possibilities of production.

The standard identity of aggregate saving with aggregate investment makes it difficult even to formulate the problem. It becomes even harder to do so because the categorical language of national accounts, established after the Second World War under the influence of Keynes and his followers, turns this identity into a terminological tautology.

In this way, it reinforces the tilt of dominant thinking about the economy and the role of finance within it. The market will route saving into its most efficient uses, the available language of national accounts as well as the predominant doctrines in economics prompt us to believe. To the extent that it fails to do so, the failure must be due to a localized market failure -- imperfect competition, unequal power, asymmetrical information -- that it is the proper aim of regulatory rule and policy to redress or to counterbalance. Such is the approach that has, despite all, continued to shape almost all contemporary thinking about the regulation of finance.

Finance: turning the bad master into a good servant

The familiar categories and the prevailing ideas may make it difficult to study how different institutional arrangements may either tighten or

loosen the link between finance and the real economy. They may make the very statement of such a problem seem nonsensical. It is nevertheless a real problem in a real world. It will not vanish simply because our preferred ways of talking and thinking fail to accommodate it.

That institutional arrangements, expressed in law, decisively modify the extent to which saving is channeled into production and productive investment can be shown by homely examples. All agents of finance, including all manner of banks, are themselves legal constructions, subject to a long, variable, and often surprising institutional evolution. The pension regimes of the present -- a major way in which saving has come to be held and deployed -- are relatively recent creations. The ways in which pension saving becomes available for productive investment is entirely determined by the rules under which they operate. A particular form of financial activity such as venture capital that seems very directly to exemplify the putative major role of finance is an innovation with an uncertain future: what, for example, can and should be the respective roles of private and public venture capital?

Under the institutional arrangements of present-day market economies, we earlier remarked, production is largely self-financed on the basis of the retained and reinvested earnings of private firms. The extent to which it is self-financed, although always overwhelming, is nevertheless variable. We have reason to suppose that the existing variations are only a subset of a much broader range of possible variation.

We have only to consider historical experience to appreciate how in the past institutional innovations have succeeded in making finance more useful to production. If they have made it more useful in the past, they can again make it more useful in the future. The early nineteenth century United States, for example, witnessed a struggle over the

national banks. This struggle culminated, during the presidency of Andrew Jackson, in the disbanding of the national banks and in the subsequent development of the most decentralized system of credit that had ever existed in a major country: a network of local banks the potential of which remains to this day far from being exhausted. This banking network placed finance more effectively at the service of the local producer as well as of the local consumer than it had previously been, in the United States or elsewhere.

An advance of this kind can be achieved again, not by repeating the institutional formulas of an earlier epoch but by institutional innovations suited to the present circumstance. Such innovations would give practical content to the idea of financial deepening. Their working assumption must be that it is not enough to cut finance down to size, by requiring for example more stringent capital-leverage ratios or even by imposing absolute limits on the size of financial firms, if we fail to establish arrangements that make finance more useful to production and innovation. We do not serve the deepening of finance -- in the sense in which we have defined it -- merely by combating its hypertrophy.

The relation between the two troubles with finance becomes clear in the course of the effort to deal with these troubles. In the spirit of a pragmatist experimentalism, the answer to the speculative question comes in practice.

To the susceptibility of finance to destabilizing forces that arise from the institutional setting in which it operates -- forces beyond its reach and even beyond its view -- there is no effective response other than financial deepening: the broadest possible grounding of finance in the whole work of the real economy: in every step of the cycle of production and exchange. Such a grounding does not advance spontaneously or automatically as a result of the sheer quantitative expansion of financial activity; it depends on the institutional

arrangements governing finance and its relation to the real economy.

Such arrangements may so disfavor the connection that they help generate financial hypertrophy without financial deepening. This is a recurrent phenomenon in world economic history. We have seen an example of it in the events leading up to the recent worldwide financial and economic crisis.

This reasoning shows that the only way in which we can effectively deal with the first trouble is also the generic character of the response to the second trouble. The idea of financial deepening marks out the conceptual space in which to address, through institutional innovation detailed in law, the relation of finance to the real economy in general and to production in particular. Just as economic institutions can organize a market economy in different ways, with different consequences of the trajectory of growth as well as for the distribution of advantage, so the part of this institutional order that deals with the role of finance can either tighten or loosen its link to production and to the real economy as a whole.

It is this simple but vital fact that our established ideas and nomenclature prevent us from fully acknowledging or even describing. A discourse about regulation that identifies as its guiding task the redress of localized market failures further entrenches this way of thinking and talking. In every real dispute about regulation, the subtext has to do with alternative pathways for the reorganization of the area of social and economic practice in question. Regulation, properly understood, is the first step toward institutional reconstruction.

Nothing in this view implies any reason to deny or to suppress the speculative element in finance. These ideas do not contradict the conventional view that speculative financial activity can be useful in generating information and in organizing risk. It is an intrinsic feature of

finance to make informed bets about future states of affairs. Some of these gambles may function (as in hedging devices) to limit rather than to extend risk. Others may have no such risk-containing use without thereby ceasing to be useful and legitimate.

One of the many dimensions in which one way of organizing a market economy in legal detail may be better than another is that it encourages greater diversity and experimentation in the forms of production and exchange. That means making use, in the organization of a market economy, of the principle that market economies can take alternative legal-institutional forms.

The conventional idea of freedom to recombine factors of production within an institutional framework of production and exchange that is left unchallenged and unchanged can and should be broadened into an unconventional idea of greater freedom to experiment with the institutional forms of a market economy. Among such forms are its regimes of contract and property. A national economy should not be fastened to a single version of itself. Its institutional organization should radicalize the organized anarchy that is the genius of a market economy.

One of the many terrains for such variation in the legal-institutional regime of a market economy regards the room for speculative activity, which may properly be much greater in some economic sectors and contexts than in others. Instead of allowing only a modicum of speculation, it may be better to prohibit speculation altogether in some settings and to give it the freest rein in others. In that way, we refuse to entrench as institutional dogma what can and should be open to experiment and to collective learning.

Whether, however, society gives greater or lesser space to speculative activity, it must still shape the relation of financial speculation to the agenda of production in the real economy. In this

respect, neither what the government wants nor what the financiers want is decisive. The crucial point lies in the institutional arrangements that make finance, including the most speculative forms of financial activity. either more or less useful to the expansion of output and to the enhancement of both total factor and labor productivity. The problem of speculative finance turns out to just one more field in which to confront the distinction between the hypertrophy and the deepening of finance.

Stimulus reconsidered

These ideas provide a point of departure for the design of a response to the slump that is adapted to a wide range of circumstances. Underlying the response is a conception of the path to socially inclusive economic growth -- which, together with national independence, is the most widely professed policy goal in the world today -- and of the role that public as well as private finance can play in the achievement of that objective. If the central topic of this essay is the road to recovery, its second subject is the intellectual practice that can free us from the superstitions that continue to block this road.

In the end, it is not enough to reorganize the economy; it is also necessary to reorient economics. A text like the present one can address this ulterior subject only by indirection and suggestion, but must address it nevertheless. The problem is not simply that much of the world, especially its richest part, has chosen the wrong response to the slump under the influence of powerful interests that have already profited, and stand to gain much more, from this misdirection. The problem is that policy continues bent under the yoke of illusion -- at the end of the day, illusion about the possible institutional arrangements of a market economy.

Let us begin by retaking the thread of the earlier argument about why a stimulus, deployed in the circumstances of a contemporary

society, is always likely to be too limited in its magnitude as well as in its instruments to achieve its proposed objectives. Under the conditions of a slump preceded by a crisis of confidence in the debt burden weighing on both households and firms (a “balance-sheet recession”), expansionary monetary policy conducted by central banks is likely to be relatively ineffective. A minimal or even negative cost of money will not, in and of itself, induce firms and households to invest or to consume if their income or profits have already collapsed and their debt exposure has come to seem dangerous or even unsustainable.

Under such conditions, fiscal policy is likely to be the sole relatively effective instrument, and indeed more fiscal policy in the form of governmental spending than fiscal policy in the form of tax reductions. The reason for this fact is simple and well established: the money saved by a lower tax obligation will tend to be used to pay debt down rather than to spend or to invest. It is the circumstance to which the policy tools of vulgar Keynesianism are most directly suited.

When, on the other hand, a dynamic of exorbitant indebtedness does not form a major part of the circumstances of the crisis and the slump, monetary stimulus, together with fiscal stimulus in the form of lower taxes rather than of higher public spending, may take the upper hand.

Whether the crisis and the slump are of the first nature or of the second, and whether therefore fiscal or monetary stimulus must perform the leading role, the same basic constraint will hold for the reasons we have examined. Under peacetime conditions, the stimulus will be too small to secure a decisive recovery. The proponents of more stimulus will protest, but to little avail, and their frustrated insistence will form a predictable part of the situation. A half-hearted stimulus, appearing (to its proponents) to be disproportionately small in relation to the severity of the slump will be the only stimulus ever to be achieved.

If the crisis and the slump are significant -- as they have been in many countries in the course of these recent events -- the stimulus will fail to secure a vigorous and broad-based recovery. It will fail not only because it is too small but also because it is unaccompanied by the institutional innovations that can favor socially inclusive economic growth. In both these respects, the practice of the stimulus will be unlike the experience of the war economy. That experience, we have argued, benefited from the combination of a much higher mobilization of physical, financial, and human resources with bold experimentation in the arrangements of production and exchange, coordination and competition.

None of this provides a reason to forego stimulus, designed according to the nature of the crisis and the slump. However, the stimulus should be practiced and pressed with no illusion that it is sufficient to ensure strong and inclusive recovery. Its true role, in the real conditions in which any contemporary stimulus can be wielded, is two-fold.

Its first role is to prevent the aggravation of the crisis or of the subsequent slump. In so doing, it gives time to develop the intellectual content and the political basis for a program of broad-based and inclusive growth.

Its second role is to serve, so far as feasible, as the first step of such a program, a down payment on its intentions. With ingenuity and luck, the stimulus can be so designed that it incorporates, in fragmentary and anticipatory form, some elements of the inclusive growth project while helping to create more favorable conditions for the adoption of other elements.

The crucial attribute that would enable a short-term program of

recovery to perform this role is some limited combination of the two elements of the war economy: heightened demand for consumption and investment goods and a series of institutional innovations suggesting the proposed direction for advance. Consider each of these concerns in turn.

Both monetary and fiscal stimulus may strengthen demand for consumption and investment goods. However, expansionary monetary policy does so only indirectly. It can create a circumstance in which households and firms are not discouraged from going further into debt in the pursuit of entrepreneurial or consumption opportunities. In circumstances in which the household and the firm already find themselves bent under the yoke of debt, and the anticipation of a benign economic future has already dissipated, such encouragement is likely to prove insufficient. That is precisely the circumstance of a balance-sheet recession.

And what if the cost of borrowing money is made negative? The government may in effect pay firms and households to borrow by any number of devices. They may still prefer to use the money simply to pay down their debts rather than to extend them. Or the central bank (were it free from the worship of sound money) might simply opt to debase the currency by any number of other devices, thus redistributing wealth from creditors to debtors. It would do so under cover of the bias of the law, which refuses to recognize in this redistribution through the debasement of the currency a taking of property, requiring compensation.

The redistributive effect may weaken the unwillingness to risk and to invest only at the cost of a planned inflation, with all the sequel of social consequences and political reactions that such an event has regularly produced. The remedy may be universally regarded as worse than the evil that it is designed to correct.

Even if monetary policy could be effective in the circumstance of a slump subsequent to a debt overhang, it cannot, by its very nature, serve as the means with which to prefigure a project of inclusive growth. Monetary stimulus may perform the first role of the stimulus -- to avoid the worsening of the crisis or of its aftereffects and to buy time. It may do so either because the economic downturn is not contaminated by excess debt or because, even if it is, cheap money may help. It is, however, incapable of performing the second role of a stimulus: to foreshadow a different economic future.

For that role, only fiscal stimulus suffices. In fact, only one species of fiscal stimulus can do the job: the species that involves public spending as opposed to tax abatement. For the diminishment of taxation is likely to suffer, in the performance of the foreshadowing role, limitations similar to those faced by monetary policy. At least it will suffer such limitations unless the grant of the tax favors is subject to the requirement that tax-payers use the money foregone by the government to invest in certain ways and to specific ends. The imposition of such requirements, however, turns the tax favors into the equivalent of a public-spending program.

A fiscal stimulus, understood in this restricted sense, should emphasize each of the components of the growth strategy we later outline. Its chief concern should not be further to divert public resources to failing big financial organizations or inefficient mass-production industries. It should prefer those uses of governmental resources that strengthen the supply as well as the demand side of the economy. It should also give priority to the commitment of public resources that combines such two-sided stimulus with an opening to the institutional innovations useful to broad-based and inclusive economic growth. In this way, the stimulus mimics features of the war economy.

Imagine three large directions for such a project. We later discuss

each of them in greater detail.

One direction has to do with the tightening of the link between saving and production: the diminishment of the extent to which the production system is required to finance itself, as it does in all contemporary market economies, while much of the productive potential of saving gets squandered in a financial casino. That implies investing in the organizations that most directly connect saving to productive investment: the country's network of local banks. It also suggests use of independent public entities -- administered independently and professionally and subject to the discipline of market competition -- to imitate the work of private capital.

A second direction is that of the enhancement, through governmental action and investment, of the productive apparatus of the country. The most important addressee of such action is the multitude of small and medium-size businesses responsible for generating the vast majority of jobs and of output in every contemporary economy. The most promising method is the propagation of successful local practice and the opening of access to credit, technology, knowledge and knowledge-based capabilities. The favorable institutional setting is one that organizes a form of coordination between government and firms that is decentralized, pluralistic, participatory, and experimental.

The radicalization of the experimental impulse so important to innovation and thus to growth ought to count for more than any dogmatic preference for a particular sector of the economy. To this principle, however, there are two important exceptions.

The first exception is the most traditional object of any program of public expenditure: public works undertaken to improve the physical infrastructure of productive activity. Here the reason for the exception is the contribution of such investment to the feasibility and productivity of

first-order productive activity.

The second exception is public investment, or public incentives to private investment, in the technologies, products, and services of a low-carbon economy. The ground of this exception is the need to prepare a growth strategy that is not self-defeating.

The third direction of priority public investment, in a fiscal stimulus foreshadowing another future, is the development of human capabilities through the generalization of a form of education that marshals information selectively as a tool for strengthening our powers of analysis, prefers cooperation to the combination of individualism and authoritarianism in learning, and approaches every subject dialectically through contrasting points of view. Generic and flexible conceptual and practical capabilities, rather than task-specific skills, and freedom from the mental constraints of the immediate circumstance are its overriding concerns.

We shall soon have occasion further to elaborate the content of such of an alternative. What matters for the moment is to appreciate the role that a stimulus can perform in anticipating it. Each of the three directions we have just described combines a target for investment with a principle of reorganization.

Fiscal and monetary stimulus cannot be the core of a program of vigorous and inclusive economic recovery. If properly understood and designed, however, it can represent the first step of such a program. The mistaken view of its potential professed by the Vulgar Keynesians gets in the way.

The false alternative presented by the example of the emerging economies

The large emerging economies, especially three of those that have come to be known under the label BRIC -- Brazil, India, and China -- have been relatively successful in dealing with the consequences of the recent crisis. This relative success has sometimes supported the belief that these countries have already discovered the secret of an alternative. To some, it has seemed that we need only to bring into the light of theory, and them to implement as policy, the path that they have already opened up. Before addressing the program of recovery, to be foreshadowed by the design of the stimulus, we should pause to consider to what extent their experience offers a road map, indeed a short cut, to a recovery plan. For this purpose, we take Brazil as the chief focus: free of some of the complications that attend the experience of its much larger Bric equivalents, its experience enables us directly to grasp something unexpected.

The relative success of the large emerging economies (at least insofar as we can take Brazil as the example) in mitigating the consequences of the crisis, and in averting a slump, fails to provide a model worthy of imitation. It is not so much that the relative success has depended on conditions that are too peculiar to be readily reproduced throughout the world. It is rather that this success is bought at too high price with regard to the task of the future. It illuminates certain vital aspects of the workings of contemporary economies without, however, marking a path to vigorous, broad-based, and socially inclusive recovery. It has helped avoid a greater evil without ensuring access to a yet greater good. It deserves to be understood as a revelation rather than to be followed as an example.

A first factor explaining the relative success of these emerging economies is the use of governmentally controlled banks to ensure the continuation of credit flows. It is a great advantage to count such banks among the instruments of public policy. However, it is not as great an advantage as genuine financial deepening would be: a tightening of the

link between finance and production, enhanced by a broadening of access to credit, especially credit for producers, by enterprises in all sectors and of every scale. Better to decentralize and democratize the whole of finance than to use banks controlled by the state to make up for the deficiencies of an unreconstructed banking system.

There is no reason in principle why the governmentally controlled banks could not be used to help fund small and medium-size businesses, start-ups included, and to mimic the work of private venture capital. In this way, they would work -- and in fact they have sometimes worked -- as a front line in the deepening and the democratization of finance. However, in a very divided and unequal society, as the large developing countries generally are, the distribution of subsidized credit has more often favored a relatively small number of big enterprises, with sweetheart relations to the state. In Brazil, for instance, the major part of these resources has been used to benefit a small group of big private business, under the pretext of helping to turn them into “world champions.” In China it has served largely to maintain the funding for governmentally owned enterprises.

Dualism in the credit market – two different markets for credit, organized by different rules and with unequal prices for money -- has been characteristic of these economies. Such dualism has repeatedly created the means with which to favor a few and to disfavor many. Sometimes the dualism takes the form (as it does now in Brazil or China) of a contrast between an administered market in subsidized credit and a relatively freer market in non-subsidized credit. At other times it takes the form (as it has in economies marked by financial repression) of credit rationing: someone in the government gets to decide who has access to scarce credit. One or another, the expansion of credit under the conditions of credit dualism, although motivated by the effort to prevent a slump, magnifies the impact of the preexisting inequalities.

A second factor is relative autarky: the degree to which a national economy is independent of the world economy. Despite the vast changes of recent decades that have brought the large emerging economies into the global economy, they remain relatively autarchic. It is obviously true of Brazil; foreign trade is still only % of GDP. However, it is more surprisingly true even of China, a driving force in the world economy today; its foreign trade still amounts to % of its GDP, by comparison to % for Japan.

A paced and limited integration into the world economy, subordinated to the requirements of a national development strategy, is better than an unconditional integration. By an unconditional integration we mean one that accepts the present allocation of comparative advantage among national economies as the basis for place in the world economy, and then goes on to subordinate national strategy to the constraints imposed by this global niche.

However, the best is a movement that enhances integration but seeks to shape it in the service of a project designed to create new comparative advantages. The most effective way to create them is not dogmatically to choose sectors that are supposedly bearers of the future (as if the future did not have to make its own choices). It is to empower experimentalism: by establishing arrangements that broaden economic and educational opportunity, by giving small and medium-size business access to forms of credit, technology, marketing, and knowledge normally reserved to big businesses, by propagating successful local practice, and, above all, by creating the means and the conditions for pluralism and experimentation in the institutional forms of the market economy – that is to say, in the ways of organizing production and exchange.

Every path of globalization and toward globalization must then be judged by the standard of whether it serves such a program. By this

standard, the conditional integration of the large emerging economies into the global economy cannot be judged a success; it is simply the avoidance of a danger, a lesser evil rather than a greater good. Success would have been more integration achieved under the aegis of a systemic project friendlier to experimentalism and to pluralism than the form of globalization that has thus far prevailed.

Such a project would put free trade in its place as a means rather than an end. It would take as its goal not the maximization of free trade but the construction of an open world economy in forms allowing for the coexistence of alternative national development strategies and alternatives experiences of civilization. It would reject the institutional maximalism that now characterizes the trajectory of globalization -- the requirement that trading countries accept, as the condition of engagement in an open world economy, a particular version of the market economy: the version suiting the interests and the prejudices of the dominant powers. In the place of this institutional maximalism, it would put an institutional minimalism: the maximum of economic openness with the minimum of restraint on institutional diversity and innovation. It would attenuate the contrast between the freedom accorded to things -- and then to money -- to cross natural frontiers and the denial to labor of any such equivalent prerogative. And it would require such respect for rights and labor standards as could assure that free labor, as the human basis of the world economy, be really free, not servile subordination under the disguise of the employment contract.

In no area is the contrast between the lesser evil and the greater good more striking than with regard to finance itself. A simple reason why many of the large emerging economies -- and the Bric economies in particular -- did relatively better in the crisis than the advanced economies is that they had refused fully to open their capital accounts. In this way, they limited their vulnerability to the national effects of international financial turmoil.

Consider, again, the case of Brazil. Brazil had generally followed the major Latin American economies in accepting what was in effect a proxy for the nineteenth-century and early twentieth-century gold standard. Of gold standard it has been rightly said that its guiding purpose was to make the level of economic activity depend on the state of business confidence -- confidence, that is to say, also in the policy of the government. Most of the Latin American republics had accepted in the closing decades of the twentieth century a constellation of policies and ideas yielding a similar effect: acquiescence in a low level of domestic saving, consequent dependence on foreign capital, and openness to foreign capital, whether loan capital or portfolio capital, including greater freedom for capital to enter and leave. The practical result was to make the national government relatively more dependent on international financial confidence. However, this dependence rather than being seen as a problem was embraced as a solution: it tied the hands of national governments, inhibiting, or so it was supposed, the pursuit of economic adventurism in the double form of populist hand-outs and trade protectionism.

There was, however, an exception to this surrender to the functional equivalent of the gold standard, in the form of continuing limits to the openness of the capital account. These limits proved important in explaining the relative success of these emerging economies in resisting the effects of the crisis of the early twentieth century.

Nevertheless, in accord with the spirit of our argument, closure to world finance is not as desirable as openness to it on the basis of financial deepening, a mobilization of national resources (in a direction of a which a war economy without a war is the limiting case,) and an institutional broadening of economic and educational opportunity. Such a basis provides elements of a strong national project. The dangers of

financial openness do not grow simply, as the conventional discourse assumes, in proportion to the absence of regulatory precautions. They grow, also and above all, in proportion to the avoidance of conditions that bring the national economy to its knees by making it dependent on foreign finance and financial confidence.

A third factor accounting for the relative success of some of the large emerging economies but not others was the boom in commodity prices. It is a factor that, among the Bric countries, was wholly pertinent only to Brazil. Russia's extraction of rents from nature, in oil and gas, was narrowly focused and made the Russian economy susceptible to volatility in the price of those natural resources. Brazil's established comparative advantage was already secure over a wide spectrum of primary products, from food stuffs to minerals and fuels, and it found in China a market of almost boundless appetite. China in turn was able to use the export of manufactured goods as an alternative to the deepening of its internal market.

The significance of an extended boom in commodity prices was and is relative to what came next. Would the wealth generated from the production and export of primary products be used to help finance a qualitative change oriented to total higher labor and total factor productivity and to the generalization of advanced, experimentalist practices of production? Or would it turn into the opposite, an easy escape from the need to undertake any such transformation? The bounty of nature was again not the best, only a second best and a temptation, until converted into a resource for reconstruction.

We cannot find in the recent and relative success of the large emerging economies the lineaments of a program of recovery and reconstruction of enduring and general interest to humanity. What we can find is a record of fragmentary insight and luck in the avoidance of disaster: a series of distant second bests rather than the demarcation of a

reliable path.

Recovery: a direction

A crisis of the size that the global economy has undergone is an opportunity to remake the market through institutional innovations designed to serve two commanding aims: to place finance more fully at the service of the real economy and to organize a national and global growth strategy based on a broadening of economic and educational opportunity. Such a project is distinct from both vulgar Keynesianism and market fundamentalism. It differs as well from an equally traditional emphasis on public works to rebuild infra-structure, whether or not associated with the cause of a "green" recovery. Such a program is likely to face the same limits that constrain expansionary fiscal and monetary policy.

The alternative we need is one shaped by two overriding and connected goals. The first goal is to prevent the productive potential of saving from being wasted in a financial casino by placing finance more effectively at the service of production than it is under the established institutional arrangements. The second goal is to prevent the constructive potential of the labor from being squandered or diminished by the denial of economic and educational opportunity to the majority of working men and women. The keynote to the fulfillment of these goals lies in a trajectory of innovations in the institutional arrangements of the market economy.

We do not need a crisis such as the one from which we are only now emerging to embrace and to advance a program marked by commitment to these twin goals. However, a crisis supplies a fast track to its advancement. It does so by weakening the obstacles, of interest and of prejudice, that it must face as well as by making more visible the links between the innovations it proposes and the concerns of ordinary

men and women. At the same time, it represents an experiment, offered by history, in causal connections that are normally hidden from view.

In the design and implementation of such a program, there is today a preliminary requirement to fulfill. That requirement is decisively to cast aside the division between a densely regulated and a thinly regulated sector of finance. This regulatory dualism has been for over half a century the dominant regulatory approach to finance. It has been justified in the name of the idea that the high net-worth individual and financial professionals who operate in the sector to be subject to diminished monitoring dispense close supervision.

The consequence has been to make it possible to repackage and implement in the thinly regulated sector everything that is prohibited in the densely regulated one. Regulatory dualism set the stage for massive evasion of regulatory strictures. The most important form of this evasion was the growth, alongside the banking system, of "shadow banking" – financial organizations that acted as banks but were not classified as banks and not made subject to the regulatory requirements that recognized banks had to meet. The result was to help turn part of finance into a self-regarding free-for-all, with the concerns of the real economy demoted from subject to pretext.

Regulation should be inclusive and apply to the world of high net-worth individuals and financial professionals as much as to the general public. It should also be designed to foreshadow, insofar as possible, the structural recovery program we now outline.

Such a program would advance along three lines of reciprocally reinforcing initiatives.

The first line consists of measures intended to make finance serve the real economy rather than serve itself. We have remarked that under

the present arrangements of market economies the production system is largely self-financed on the basis of the retained and reinvested earnings of private firms. Theoretically, the role of banks and stock markets is to finance production as well as consumption. In fact, the financial markets and intermediaries at the heart of the financial crisis – and responsible for much of the increase in financial activity in the past few decades – had little to do with the funding of long term investment and increasingly more to do with financing of asset trading and position taking by highly leveraged financial institutions.

Under these established arrangements, the real economy risks becoming the alibi rather than the concern of finance. Each successive layer of ingenuity in the design of new financial products and services, composed out of derivatives of the underlying, unified property right, takes the previous layer as its subject, as the transactions of the real economy recede in an ever more distant and irrelevant horizon. Wealth, influence, and talent, debased and wasted, accrue to a form of economic activity that has lost any close and real connection to the imperatives and the opportunities of production. In this direction, finance does relatively little good to the real economy in good times and threatens to do immense harm to it in bad times.

We can do better. We can innovate in the arrangements governing the relation of finance to the real economy and make the accumulated saving of society better serve the productive potential of the economy. For example, we can establish rules and taxes that discourage credit in operations unrelated to expansion of GDP. In the United States we can tap the country's remarkable, unappreciated and underutilized network of local banks, helping them better to combine decentralization with sophistication.

Such an effort is not mere regulation as conventionally understood.

It is regulation as a first step to reorganization.

The second direction of this program of broad-based and socially inclusive economic growth is the reinvention of industrial policy. Its chief target should be the small and medium-sized businesses that in every major economy in the world represent the chief sources of jobs and output. Its method should be the expansion of access to credit, to technology, to advanced knowledge and practice, to facilities for the organization of networks of cooperation that combine the benefits of flexibility and of scale. Its characteristic concern should be to propagate successful organizational and technological innovations wherever they may arise. Its temper should be that of a patient and fearless experimentalism.

The major developed and developing economies have moved beyond form of industrial organization that emerged in the late nineteenth-century century and that came to prevail in the first half of the twentieth: the mass production of standardized goods and services, with rigid machines and production processes, dependence on semi-skilled or narrowly skilled labor, stark contrasts between jobs of supervision and of execution as well as among specialized tasks of execution, and clear-cut separations of areas of activity considered appropriate to cooperation or to competition. However, no contemporary national economy has gone beyond such mass production in all its activity, only in particular sectors.

The rich and emerging economies alike boast advanced sectors characterized by the relatively decentralized and flexible production of non-standardized goods and services, by knowledge-intensive labor, by the softening of contrasts between supervision and execution as well as among rigid specialities at the factory or office floor, by a more thoroughgoing mixture of cooperation and competition and, above all, by a practice of permanent innovation. Under the aegis of this form of

production, the best firms come more closely to resemble the best schools. The thrust of this shift is toward an economy in which the relation between labor and machines is so arranged that labor time is increasingly devoted to those operations that we have not yet learned to repeat and, consequently, cannot yet express formulaically and embody in machines.

However, even in the richest and most egalitarian contemporary societies (some of the European social democracies), such vanguard practices remain confined to relatively isolated parts of the economy, from which the majority of the workforce continues to be excluded. The power of the state can and should be used to open the economic and educational gateways of access to this productive experimentalism. To this end, we need a form of association between governments and firms that is neither the American model of arm's-length regulation of business by government nor the northeastern Asian model of formulation of unitary trade and industrial policy, imposed top-down by a governmental bureaucracy: a form of strategic coordination between governments and firms that is pluralistic, participatory, and experimental. Its aim is to help make the conditions and instruments of advanced production available to larger parts of the economy and the society.

The third axis of this structural program is the educational counterpart to the second. Such an alternative requires an enhancement of the capabilities of ordinary men and women and, consequently, a significant advance in the quality of education. In the United States today there are in fact two separate educational systems. One system, restricted to the best private schools and to the top tier of public schools, takes as its priority the mastery of the analytic skills and the discursive practices needed for the performance of high-level tasks in today's society. The other system, predominating in much of the public-school system, remains focused on shallow encyclopedic coverage of information and on the effort to impose a modicum of discipline on

bored and restless young people. The first of these two pedagogic paradigms must be made the universal one while becoming far more rigorous and ambitious in its application. The second must be repudiated.

In a country, like the United States, that is very large, very unequal and federal in its organization, a premise of such an advance is the development of practices that reconcile the local management of the public schools with national standards of investment and quality. Redistribution of funding and teachers from richer places to poorer places is not enough; it is also necessary to implement procedures for corrective intervention in failing schools and school systems.

Every aspect of this three-part program requires institutional innovations, not just commitment of resources. A premise of such innovations is that it is not enough to regulate the market economy or to compensate for its inequalities by means of retrospective redistribution through the familiar tools of redistributive taxation and social spending. It is necessary to change how we organize our societies and economies the better to achieve a decisive broadening of economic and educational opportunity.

Such an approach contradicts what has been the dominant model of ideological controversy over the last few centuries throughout much of the world. According to this hydraulic model, the central question is always market or government: more market and less government, or more government and less market. A thesis of our argument is: more market and more government. Democratize the market, do not just regulate it, and use the response to the financial and economic crisis and its aftermath as an occasion to undertake this democratizing work. Without such a project of socially inclusive economic growth, we cannot act effectively on the implicit link between redistribution and recovery.

An alternative like this one costs money. However, it need not cost anything like the countless billions that, throughout the world, have already been largely wasted on propping up financial institutions and financiers whose contribution to the real economy was modest or negative, or who had concentrated in their own hands a share of profit and talent that no account of the requirements and interests of production can justify.

More than money, however, such an alternative requires ideas. Economics as it is now practiced has largely failed to generate the ideas we need. The psychological and anti-institutional bent of its dominant tradition has rendered it poorly equipped for the work at hand. The method it embraced at the time of the marginalist revolution in the late nineteenth century, and then perfected through the general-equilibrium analysis of the twentieth century, has turned it into a sham counterpart to natural science, with the crucial empirical and normative assumptions that give life and direction to economic analysis relegated to the role of factitious stipulations. Its newfound empirical interests, for example in behavioral finance, so completely disconnect behavioral tendencies from their contingent, and revisable, institutional presuppositions, that they generate little insight and almost no usable guidance for those who address real-world problems, including recovery from the slump.

In this vacuum of no ideas, the ghosts of the intellectual alternatives of nearly a hundred years ago -- a shrunken Keynesianism and a fossilized market orthodoxy -- have been called up, if not out of conviction, then out of sheer desperation. They have been invoked, by men and women who claim to speak with the authority of an economic science, but who, for the most part, have never visited a factory or even mastered the history of their own discipline.

Use the crisis to remake the market economy. Remake the market economy by undertaking the institutional innovations that can give more

access to more markets for more people in more ways. Take the stimulus as the holding operation that is all it can be, and keep your eyes focused on the prize: the growth project, designed to include and to empower as well as to enrich.

Insist on doing what progressives, in the United States and elsewhere, have largely failed to accomplish: to come up with a proposal that responds to the interests and aspirations of the broad working-class majority of the country. In so doing, such a program would also provide a sequel to the Roosevelt's New Deal and to the social-democratic settlement in mid-twentieth century Europe. Now, however, the emphasis would no longer fall narrowly on safeguards against economic insecurity or on high-level of redistributive social entitlements. It would fall on what matters most: the tools and occasions to make something of one's life, in biographical time and in history.

NOTE: Keynes, vulgar Keynesianism, and the road to insight

The crisis of 2007-2009 was preceded, as we have remarked, by a partial hollowing out of many of the rules, regulations, and arrangements, especially for the discipline of finance, that in the United States were associated with Roosevelt's New Deal and in Europe with the social-democratic settlement of the mid-twentieth century.

The institutional compromise of the mid-twentieth century, in both its American and its European versions, was predicated on the abandonment by the forces that had mounted a challenge to the established institutional order of the North-Atlantic societies, of any more consequential attempt to reorganize, in the interest of the common man and woman, the worlds of power and production. In exchange for this renunciation, however, national governments were allowed to increase their power to counteract economic insecurity (through

unemployment insurance and pension schemes) and to diminish inequality through the retrospective redistribution of wealth and income by the mechanisms of tax and transfer.

The United States soon abandoned the attempts, characteristic of the early New Deal, to innovate in the institutional arrangements of the market economy and of the relations between government and firms. The focus of policy fell first on the containment of economic insecurity and then on the popularization of opportunities to consume and the consolidation of a market in mass-consumption goods. The European social democracies advanced, through different paths and in different variations, toward a political economy and a social policy devoted to the maintenance of a high level of universal (and therefore redistributive) social entitlements, paradoxically funded through the regressive taxation of consumption. Humanity sought to drown its sorrows in consumption, and called solace justice.

It was not by these means, however, that the world overcame the slump of the 1930s. It was -- we have already recalled -- the war that did it. The war economy combined massive mobilization of physical, capital, and human resources with innovations in the institutional arrangements governing the relations among firms as well as between firms and governments. Such innovations, rather than serving as points of departure for post-War developments, remained quarantined: they were dismissed as pertinent only to the peculiar war circumstances.

Teachings, like those of Keynes and of his Swedish contemporary Wicksell that advocated a governmentally induced rise of “aggregate demand” through public spending, had only a modest effect on the economic conditions. The war did much better on account of both the magnitude of the resource and human mobilization it produced and the breakthrough effects of the attending institutional innovations.

Vulgar Keynesianism is the doctrine summarized in the IS-LM graphs of the standard economic textbooks written in the last decades of the twentieth century by the American followers of Keynes. They rendered him intellectually and politically palatable by leaving out the more dangerous and enigmatic parts of his ideas. They recast his doctrine as a theory of some of the tools needed to mitigate business cycles and to reconcile monetary stability with full employment in the established regulated market economy.

The practical concern and the strategy for addressing it were foremost in the evolution of Vulgar Keynesianism: sustaining aggregate demand, especially a mix of fiscal and monetary policies, the better to wring the most employment from the economy without arousing (too much) the demons of inflation.

Insofar as Vulgar Keynesianism was a theory, it was, and is, the theory of the use of these specific tools in this distinctive historical context. It required no break with general-equilibrium analysis, only recognition of multiple possible equilibriums in an economy, some of them compatible with massive underutilization of resources, especially labor. It took the whole of institutional structure of the state and of the economy for granted. Its intention was to normalize, not to subvert, reconstruct, or re-imagine.

The association of the practical toolbox of macroeconomic theory with the recognition of multiple equilibriums, some more desirable than others, accounted for almost the entirety of Vulgar Keynesianism, whether or not dressed up in pseudo-mathematical representations.

Vulgar Keynesianism found its principal intellectual adversary in a range of connected theories that theorized what they took to be the futile and counterproductive character of the governmental initiatives in which the Vulgar Keynesians put their pride. Some of these theories

(e.g., the quantitative theory of money) emphasized the importance of money and of its management by government in determining the prospects for the combination of economic stability with economic growth. They prized constant and reliable rules about the money supply.

Other theories (e.g., real-business cycle theory) exposed the powerlessness of governmental initiative. It did so, in particular, by arguing for the powerlessness of fiscal policy to bring about economic recovery by raising aggregate demand above the level compatible with the economy's supposedly predetermined potential to grow.

Yet other views (e.g., rational expectations theory) suggested that the policy instruments favored by the Vulgar Keynesians would be robbed of much of their efficacy by the protective measures taken by economic agents. If they expect higher taxes to lie in the wait in the future, the agents would, for example, spend less and save more now.

These allied and convergent theories had as their central idea the beliefs that the market order has a determinate logic and determinate implications, that attempts to tamper with it are likely to prove either ineffective or costly, and that impersonality, universality, and constancy in the applications of the same rules of that order are to be preferred to the fine-tuning of would-be know-it-alls.

These doctrines were able to claim the intellectual authority of the mainstream of economic theorizing as well as to profit from the indifferent and unconvincing record of Vulgar Keynesianism in power. If the original Keynesianism had (contrary to legend) never been a significant influence on the social-democratic compromise of the mid-twentieth century, the intellectual attack on Vulgar Keynesianism and the reaffirmation of views that had not been regarded as orthodox since the 1920s contributed, from the right, to the many forces working to circumscribe or to undermine that compromise.

It is impossible to understand the structure of practical economic debate in much of the world today without appreciating that it has been very largely shaped by a contest between the believers in a determinate logic of the market economy and the Vulgar Keynesians, against the background of widespread consensus between the Vulgar Keynesians and their adversaries about both the fundamentals of economic theory and the established institutional arrangements of a market economy. At no moment, for example, was the part of those arrangements governing the relation of finance to production brought into question.

When the crisis of 2007-2009 broke out and later produced the sequel of a “jobless recovery,” the chief intellectual response by progressives and social democrats, especially in the United States and Europe, was to resort, once again, to the Vulgar Keynesian toolbox. They allowed for only such adaptations of the toolbox as seemed required by the distinctive conditions of a balance-sheet recession, in which firms and households alike were concerned to rebuild their balance sheets and deflation often seemed a more immediate peril than inflation. Chief among these adaptations was the aggressive use of monetary policy (as in the form of “quantitative easing”) to combat the deflationary danger and reinforce the uncertain effects of a fiscal stimulus that never seemed large enough. In the ensuing debate, the progressives were reputed, or reputed themselves, to be those who demanded more stimulus, and called for a postponement of the inevitable fiscal reckoning. Such was the putatively progressive message propagated in the newspapers and recognized in the public conversation as the touchstone of opposition to the moneyed interests.

What is the salvageable theoretical core of Keynes’s theory, beyond the limits of Vulgar Keynesianism as well as beyond the boundaries of the kind of slump that aroused his imagination and directed his will? It may seem strange to ask such a question, so late in

the day, given the immense influence of Keynes's ideas. It is nevertheless useful to ask it, and to attempt to answer it: the answer suggests both the value and the inadequacy of the approach we find in Keynes's work. Something vital to insight into a crisis and a slump such as those the world has recently faced are missing there. The missing element must be produced, and then combined with the indispensable insights that we can find in Keynes and in some of his intellectual allies.

The whole of Keynes's theoretical system, as expounded in *The General Theory* and in the writings of his that preceded and prepared it, can be reduced in a few propositions, stated in a language in many respects alien to Keynes's own.

In stating these propositions, it is useful to represent the view laid out in Keynes's *General Theory* as the account of a special case of depressed economic activity. It is not a special case merely in the sense that it takes as its inspiration a crisis and a slump in which, differently from what happens in balance-sheet recessions, a dynamic of exorbitant indebtedness plays no major part in the unfolding of events. It is also a special case in the sense that it offers the theoretical elaboration of grounds for a particular response to the slump: one in which a governmentally induced raising of aggregate demand performs a central role. The primacy accorded to this special case gives the Vulgar Keynesians reason to claim for their views and proposals the authority of the master.

Keynes's own occasional and popular writings of the 1920s and 1930s explore a much broader range of possible responses to the depression, including responses that would use governmental power to shape the course of the investment (as the large emerging economies have done today). Keynes, however, feared that such proposals would place him in the company of the socialists and compromise his influence. He wanted to shine and to influence in his own time, not just

to bet on posterity. He was unwilling to embrace truth at the cost of marginality, truth for which the world, his world, was unprepared. For this reason, his occasional and popular writings are often more philosophical than the theoretical proto-system worked out in the General Theory. Insofar as Keynes has something more than a theory of the special case to offer, it is to be found in them more than in it.

The view that emerges from a comparison of his General Theory with these richer and shadowier antecedents can be summarized by the following nine propositions.

1. A money economy is different from a barter economy. Money matters. It is not a transparent veil. The relative and changing desire to hold liquid balances, rather than to invest or to spend, may be a powerful influence on the level of economic activity.
2. Quantifiable risk differs from unquantifiable uncertainty. Both are at issue in economic life. The unknowability of the future and its power to defy our attempts to predict and to contain it are fundamental features of our circumstance. One of the special and important forms of this unknowability has to do with how other people will respond to the unexpected. At any given time, our attitude to money carries the imprint of our apprehensions or hopes about the uncertain future. More specifically, finance, although indispensable to the economy, is by its very nature a hotbed of trouble and of illusion, embroidered by greed and shadowed by fear.
3. Economic life cannot be adequately understood on the model of instrumental rationality: the selective and comparative marshalling of limited means toward the fulfillment of predetermined ends. It is a field of aspirations -- fear, hope, and greed -- and of illusions, especially illusions about what the future holds in store for us.

4. Say's law is false. Supply does not ensure its own demand. It is true that the price for the unwanted good or service may fall until it is wanted, but only until an advantage has turned into a disaster for someone who took a risk.

5. More generally, supply and demand may adjust in any given economy at different levels of economic activity and employment. Among the multiple possible equilibriums, some may support high or full employment of resources; others may be compatible with large-scale idling of labor.

6. Not only are there multiple equilibriums, consistent with different levels of employment but there is also a persistent tendency to disequilibrium. Equilibrium, in the sense described by the marginalist economics of the late nineteenth century and developed by the general equilibrium theories of the twentieth century, is the limiting case rather than the normal state of affairs. Disequilibrium typically takes the form of descending to a lower-level equilibrium or ascending to a higher-level one, when lower and higher are defined with respect to the level of employment. A localized event in an economy, whether it is the result of decisions taken by firms or households or of exogenous shocks, can produce, through a chain of cumulative effects, results that seem disproportionately greater than their triggers.

7. The danger of falling into lower-level equilibriums increases because of the rigidity of many prices in a modern economy. The most important instance of such rigidity is rigidity in the price of labor: it can rise more easily than it can fall. (The significance of this thesis in Keynes's proto-system is often exaggerated. It is, in any event, an insight to be found in Marshall and in Marshall's disciple, Pigou.)

8. The state can and should act to wrench an economy out of a lower-level equilibrium. It can do so by making up for the dearth of private

spending and investment.

9. The beneficial effect of such a governmental intervention may be greatly enhanced by the reverse and positive side of the vicious downward cycle of economic depression: one inducement to invest and to spend leads to another, in a virtuous circle of confidence and enterprise.

A great virtue of the way of thinking summarized in these nine propositions is to be relatively free of the analytic emptiness into which, on the pretext of rigor, the “Marginalist Revolution” tempted economics. Ever since then, the purest forms of economic analysis, the ones that set the most exacting standards for the discipline have been the ones that make no causal-empirical or normative claims. They provide a pure apparatus of analysis, which operates to explain the world or to guide policy on the basis of empirical or normative stipulations provided to it from the outside. It is a strategy of invulnerability through immunity to controversy. It imposes, as such a strategy always does, the denial of the opportunity for self-subversion and progression in thought. It turns the mathematical representation of economic ideas into an expression of hypothetical reasoning rather than an instrument of contestable causal inquiry.

It is a merit of Keynes’s proto-system that it is relatively free of this defect. It makes a host of causal claims about how economies work. Moreover, it shows no embarrassment in avowing its devotions and repulsions.

It nevertheless suffers from two connected defects, characteristic of the dominant tradition of economics throughout its history, before and after the marginalism of the late nineteenth century. These defects compromise the value of Keynes’s insights for the understanding and the overcoming of the slump. The ideas and methods capable of remedying

them do not simply fill a gap in our knowledge; they modify the significance of what we have already discovered.

The first such defect is the psychological and anti-institutional bias that runs through the entire history of English political economy after Adam Smith. (Smith was himself as free of this defect as his sole intellectual counterpart in the history of economics, Karl Marx.) This tradition is the chief source of the economic ideas now dominant in the world. The theoretical center piece of this bias is the assumption that, despite minor national variations, a market economy has a single natural and necessary institutional form.

In speaking of a market economy, we make, according to this view, implicit reference to a detailed system of private-law rules, beginning with the regimes of property and contract. The diversity of legal traditions in the world, such as the distinct doctrinal taxonomies of the civil-law and common-law worlds, does not diminish, and cannot disguise, the functional convergence. This convergence, rather than being the outcome of a history whose constraints it should be our purpose to overcome, is, according to this view, the progressive revelation of a truth.

It is remarkable that this idea of the inner legal logic of a market economy has maintained its ascendancy in the face of its deconstruction by a hundred and fifty years of legal analysis. No theme is more constant in the legal thought of this historical period than the step-by-step and often involuntary discovery of the multiplicity of alternative institutional forms, defined in legal detail, that a market economy can take, each form with different consequences for the distribution of advantage as well as for the organization of production and exchange.

Keynes's view presents a striking example of the theoretical and practical assumptions of this approach. The entire discourse concerns the

transmutations of large-scale economic aggregates within an institutional order that is itself left not only unchallenged but also (save for particular organizations, like the stock market) unnoticed. A corollary of this view is the failure to consider the implications for the level and course of economic activity of alternative sets of institutional arrangements to govern the relation of finance to the real economy. It is failure of vision all the more striking in an economic theory that takes as its point of departure the observation that a money economy and a barter economy work in radically different ways. For what is finance but the enactment of the power of money to go its own way, and, in going its own way, to serve the real economy better or worse?

The central categories in Keynes's General Theory -- the propensity to consume, the preference for liquidity, and the state of long-term expectations -- are all psychological. In the spirit of the tradition that formed him and against which he staged his incomplete insurrection, Keynes represents them as psychological forces unqualified by particular contingent and revisable institutional settings.

A central idea of this essay has been that the crisis, the slump, and the recovery cannot be adequately understood and confronted without taking into account the institutional indeterminacy of the market economy, and therefore also the relation of finance to the real economy. The same principle applies to the arrangements governing the relations between governments and firms. Ultimately, it must apply as well to the basic rules of property and contract. It is the point of Marx's criticism of English political economy all over again, only expunged of the taint of functionalist necessitarianism that runs through all of his social theory: the economists have represented as laws of the economy what are only the laws of a particular type of economy, that is to say, of a certain way of organizing production and exchange.

The second major flaw that Keynes's mature theory shares with the

tradition against which he rebelled is its lack of an account of the diversity of the stuff on which the mechanisms of competitive selection established by a market economy operate. The results of competitive selection of products, of forms of production and exchange, and of alternative dispositions of resources and of time, must depend on the range of the alternatives from which the comparative exercise may choose.

The more we come to think of innovation and experimentation, in the forms as well as in the objects of production and exchange, as central to economic growth, the more significant does this problem become. A theory that takes the supply of the diverse stuff to which competition applies for granted can supply no proper account of innovation or experimentation, and therefore no adequate view of growth. It must accept as given what it should explain and show how to change.

It is true that much of the economic theorizing of recent decades has focused on innovation and that, among these theories, some have sought to provide an account of technological innovation consistent with the established body of economic theory (e.g., endogenous growth theory). However, these developments have remained largely confined to technological innovation as distinguished from institutional innovation.

They have nothing to say, for example, about the significance of the existence of different sovereign states in the world, as an opportunity to radicalize experimental divergence in the forms of economic life, or about the ways in which the effect of technological innovation is always shaped by the institutional setting in which it takes place, or about the prospects for giving the genius of the market -- as a system for the experimental discovery of new possibilities of production -- a more general and a more radical expression. When technological innovation is separated from these other forms of experimentalism, it appears to be

innovation about things when all economic innovation, even when it appears to be about things, is, at bottom, innovation in the ways we cooperate. Its true object is society rather than nature.

Think of it this way. The established economic theory is like half of the contemporary Darwinian synthesis in the life sciences: the half that is about competitive selection, bereft of the half that is about the diversification of the genetic material on which natural selection works. The result is a truncated theory, powerless to grasp what innovation is and can become and therefore unreliable as a guide to recovery and prosperity.

Nothing in Keynes's doctrines or in the ideas of the Vulgar Keynesians, and little in the teachings of their adversaries, suggests a way to redress this truncation of insight. Any vigorous response to the slump, must see the recovery as an occasion not to get back to business as usual, once the shadow has passed, but to create an economic order in which many-sided innovation assumes a more central role.

This theoretical deficiency gains practical significance today in the light of circumstances to which the argument of this essay has drawn attention. A new form of practical organization has emerged in the world. It cannot adequately be described as simply high-technology, knowledge intensive production. Its methods and practices translate practical experimentation into a way of working together. It does more than destandardize products and services and replace many forms of centralized production with decentralized contractual networks. It also attenuates the contrast between jobs of supervision and execution. It attenuates rigid contrasts among specialized jobs. It gives a practical and collective form to the process of analytical decomposition and synthetic recombination. It breaks down the contrasts between cooperation and competition, traditionally associated with distinct realms of activity. It increases our chances of creating an economic system in which people

will use machines to do whatever they have learned how to repeat, and reserve their time for that which does not yet lend itself to formula and mechanical repetition. There is better reason to hope that in the future no man will need to work as if he were a machine, in denial of his nature and in forgetfulness of his power. Such a form of production is practical reason on horseback.

In the world today, however, it remains largely confined to limited sectors of the economic order. The vast majority of the economically active population remains locked out of these parts of the economy, and the revolutionary methods in which they pioneer continue to be largely denied to the rest of the production system.

The response to the crisis and the slump would provide an opportunity to extend the reach of this experimental form of production. It is, however, an outcome than can be achieved only by that combination of heightened resource mobilization and institutional innovation that characterized the war economy. Moreover, because its ambitions are more general and far-reaching than those of any war effort, it would require as well a vast advance in the intellectual equipment of the ordinary working population.

The institutional arrangements would, at the outset, be those that innovate in the relations between governments and firms beyond the limits of the American model of arm's length regulation of business by government and the northeast Asian model of centralized, bureaucratic formulation of trade and industrial policy. They would also be those that favor practices of cooperative competition among firms and among teams united in contractual networks, The educational empowerment would be designed to afford ever larger numbers of workers and citizens mastery of generic and flexible practical and conceptual capabilities.

We must solve these problems in ways that also reshape the

relation of production to nature. We must so approach the development of a less predatory approach to the natural base and setting of production that it becomes less a pretext to abandon large conflicts and controversies over alternative forms of social and economic organization (as if nature were a great garden in which we seek refuge from the disappointments of history) than an occasion to reinvent such contests in more telling form.

Vulgar Keynesianism has nothing to contribute to the pursuit of these concerns. Neither, however, does the economics of Keynes himself. It is a theory of the inducements and inhibitions to spend and to invest within an institutional setting of production and exchange, and on the basis of a level of diversity in the material to which the competitive selection of the market applies, that it takes for granted. It is, for all its heterodoxy, a view from the inside. But a view from the inside is no longer enough to make sense of our circumstance and of our options. It is powerless to guide us in making use of the opportunity for insight and for transformation with which crisis and its aftermath provide us.

This essay does not offer a theory, even in outline, correcting the defects that the economics of Keynes shares with the economics of his adversaries. It nevertheless provides an example of practical thinking informed by other ideas and intentions. It offers a down payment on intellectual obligations that have yet to be fulfilled. It proposes an agenda of economic and legal analysis as well as a program of institutional reconstruction