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- Editor's note

The paper by Helen Johns and Paul Ormerod, "The unhappy thing about happiness economics", that appeared in the last issue of this journal has attracted an uncommonly large number of readers. In addition to downloads of the whole issue, Johns and Ormerod's paper has to date been downloaded over 12,000 times, more than twice the average rate. Given this strength of interest and the paper's strong and consequential thesis, a dozen leading practitioners of happiness economics have been approached, offering them a chance to reply. So far none have ventured forth. *If there is any economist out there who feels capable of rebutting all or part of Johns and Ormerod's arguments, then a space awaits them in this journal.*

<u>Opinion</u>

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What would a scientific economics look like?

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Abstract

Sciences are loosely characterized by an agenda to describe the mechanisms by which observable outcomes are brought about and the privileging of propositions that have been demonstrated to have negligible risk of Type I error. Economics, despite its pretensions, does neither of these and should not be regarded as scientific in its current form. Its subject matter, however, is no more recalcitrant to scientific procedures than that of many other fields, like geology and biology. The benefit of bringing economics into greater conformity with other sciences in its content and method would be twofold: we would be spared the embarrassment of unfounded dogma, and over time economics could assemble an ever larger body of knowledge capable of being accepted at a high level of confidence. A scientific economics would take Type I error far more seriously, would study mechanisms rather than a succession of states, would be more experimental and would attach greater value to primary data collection.

This is a trick question, of course. Loaded into it are many assumptions: that we know what "science" is, that the economics we see today is not scientific in this way, that it could be, and that it would be beneficial if it were (or at least interesting to speculate on). After you think you know all of this, the title question does not add so much.

But if it has captured your attention, it has done its job. So now I will briefly flesh out these assumptions and conclude with a vision of the type of economic practice that comports with my idea of science.

What is science?

This is not the occasion for a detailed exposition of a philosophy of science that situates itself within the enormous literature that has grown up around this topic. Let's take a step back and see what common features characterize most scientific work and distinguish it from other cultural and intellectual endeavors. I see two, an agenda based on providing at least potentially measurable causal mechanisms to explain why we observe the world we do, and a privileging of claims that have been shown to bear a negligible risk of Type I error (see below). In addition, of course, scientists do lots of things the rest of us do: compete for resources, bolster their guilds and professional perquisites, engage in the persuasion of their peers, and so on. What is interesting, however, are the two characteristics that make scientific pursuits distinctive.

Minimization of Type I error

Recall that this is the mistake of affirming a proposition when it is false, while Type II error is failing to affirm it when it is true. Nearly everything we associate with scientific protocols is intended to identify factors that might confound empirical tests and lead to Type I error. This includes the failure to fully document all the properties of the experimental apparatus, protocols of experimental method, setting a low threshold for acceptable p-values and the role of transparency and replication. From a practical point of view, in "real" sciences, to announce a result and then have it shown to be in error due to some mistake in procedure is to risk the end of one's career: minimizing Type I error is taken very seriously. By comparison, failing to recognize that the data support a different hypothesis is a sign of dullness or distraction, but the researcher who errs in this respect will experience it as a setback, not a career-breaker.

There is a cultural aspect to this obsession with one sort of error at the expense of the other. At some time in the past various thinkers and students of nature developed a powerful desire to separate those things we truly know from the many others we only suspect. This can be seen in the geometric proofs of the ancient Greeks and the development of formal experimental methods much later. Of course, at any point in time many propositions are in limbo, having gained some credence but not (yet) passing into the circle of those for which the risk of false acceptance is negligible. Scientists spend a lot of time debating these propositions, but when they do they are not acting very differently from people in other walks of life who also engage in disputes. What is special about science is that it is expected that these debates will eventually end when the risk of a false positive is either dispelled or confirmed.

But there is also a purely practical aspect to the practice of attaching a very high cost to Type I error and a much lower cost to Type II. Science has evolved into a vast enterprise based on an elaborate division of labor. Experimental protocols require that most potential confounders, of equipment, sampling, or other aspects of research design, be identified and their effects measured with near certainty. This entails dependence on the results of other researchers. If one widely accepted claim later proves to be false, it may call into question a whole chain of subsequent studies. Type II error slows the progress of science; Type I error forces science to backtrack to some earlier state.

The search for causal mechanisms

The question of whether antecedent condition x can be said to cause subsequent outcome y has proved vexing for philosophers, but I am interested in a much simpler matter. In nearly every science, attention is given primarily to the process by which changes take place, or more precisely the mechanisms that can be seen to operate during such a process. This is true even if this knowledge is not sufficient for much predictive success. What does a biologist, for example, study when she studies a fish? It could be the mechanisms by which different organs function, or it could be the life cycle attributes that explain why certain environmental factors influence population size, or it could be the genetic pathways that connect current taxa to their evolutionary antecedents. In any case, the result is an accumulation of factual knowledge about fish in their various contexts of time and place, resting on the mechanisms by which they function and evolve. There is no "general theory of fish", although there are general properties that biological mechanisms have to obey, given by thermodynamics, the chemical mechanisms (drawn from another science) that underlie cell growth, and the constraints of nutrient availability and transport.

Economists have been seduced by a different vision of science, with its roots in those same ancient geometric proofs: that the foundation of science rests on a deductive theory, where "explanation" means "producing a story that can itself be expressed as a deduction from top-level theory". This is a dream of mathematics and much of physics. It is not characteristic of scientific work in general, however, and its usefulness is limited in fields of research that are extremely complex and dependent on a vast array of contingent factors. Geology would be such a case, where certain general concepts (like plate tectonics) are broadly accepted, but what matters in practice is the knowledge of concrete mechanisms, such as what forces are at work in the subduction of plates or, on a more mundane level, the movement of subsurface water through various soil and rock strata. Geologists cannot give you a general theory of earthquakes, but they can describe rather accurately the process by which the force generated by plate collisions is stored and transmitted in specific formations, and the same can be said for the skills of the hydrologist you might consult before deciding whether you ought to build your house on a particular slope.

Causal mechanisms are the preferred subject matter of science for several reasons. They appease our curiosity. They are more likely to be testable in ways that minimize Type I error than process-independent claims about prior and subsequent states. Above all, they provide knowledge that is frequently useful even when it is incomplete—as knowledge invariably is in complex domains. If you know some mechanisms but not all of them, you still know something about how a system works.

Lip Service

Economics gives lip service to both of these distinguishing characteristics of science, but little more. In practice, the adjective "scientific" is given to work that rigorously adheres to deduction, not the rooting out of Type I error or the identification of mechanisms.

The false promise of econometrics

Don't get me wrong: I love econometrics. I practice it, enjoy it and learn from it. As it is presently constituted, however, it makes only the weakest attempt to avoid Type I error. Two weak gestures can be observed. First, practitioners reject all results whose p-value is not sufficiently low. Second, if they are conscientious, they search for estimation methods that are suited to the data they are analyzing. This shows up in discussions of whether multinomial regressions should be ordered or not, or what identification strategies are likely to be available, or whether fixed effects can be introduced. This is all well and good, but it is not the same as minimizing Type I error. Such a goal would require identifying every possible confounder, whether they take the form of missing variables, assumptions on functional form, or the use of theoretical priors that, while conventionally accepted, have not themselves survived testing designed to minimize Type I error. You will be hard-pressed to find a single econometric study that meets this criterion, but you will find many studies in "real" sciences that do. (The biggest problem in those sciences is not the elimination of Type I error in the individual study, but the extent of external validity which may have been sacrificed to achieve purity in research protocol.) What you will typically find are studies that essentially calibrate models whose general structure and content are not put into question. What counts as a test in such research is the ability of the model to achieve calibration: if you can do this, the model is said to "be consistent with" the evidence. Of course, the number of models capable of being empirically calibrated is much larger than the number that would survive rigorous testing based on minimization of Type I error.

What makes this failure so pernicious for economics is that the entire edifice is built on prior results that are themselves at great risk of being false positives. And it is interesting that noone much cares. This point is fundamental.

Half an equilibrium

Perhaps the best way to tell this story is in the order I became aware of it. It struck me that prominent economists were discussing identity relations, such as those that form the basis of macroeconomic accounting, as if they were functional. What motives, they asked, were causing some agents to lend enough to meet the (given) borrowing demands of others? The explanations they gave left open the possibility that, over protracted z periods of time, the financial identities could be violated. I discussed this elementary error in some detail in an article I wrote a year ago on global imbalances. (Dorman, 2007)

At first blush, this seemed to be a careless mathematical mistake, dropping the third bar from the identity sign, perhaps due to writer's cramp. (Even in the age of computers, much math is done longhand.) Indeed, if you look through many a journal article you will see only equations, no identities, even if the subject is macroeconomics and identities are very much in play. It may be that the habit is picked up in graduate school, and that many otherwise well-versed economists have never encountered the idea that three bars are not the same as two.

Eventually, it dawned on me that the difference between identity and functional relations vanishes if one considers only equilibrium states, in which functional relations, by definition, hold. And this is, in fact, the methodology of nearly all modern professional economics. One specifies an equilibrium, tweaks the parameters, and predicts what the new equilibrium will be. Or, if the exercise is econometric, it may simply be a matter of "testing" the model by estimating the parameters that would generate the observed pattern of outcomes in equilibrium. In any case, one is either in an equilibrium or undergoing change from one to another the way teleportation works in science fiction stories; in either case the distinction between identity and functional (or behavioral) relations can safely be ignored.

Yet, as all of us learned somewhere along the way, a stable equilibrium requires an out-of-equilibrium process that draws us in. It is interesting to note that stability becomes a necessary consideration when more than one equilibrium can arise from a model; typically there are unstable equilibria that separate their stable cousins. But most economists shun such models (although they may well be more descriptive of real-world phenomena, as I argued in Dorman, 1997), and in any case, the prevalent methodology considers primarily the equilibrium state and seldom the equilibrating process. Since identity relations constrain behavioral adjustments in the course of equilibration, but are indistinguishable at the equilibrium itself, their special character drops from sight.

Thus the ultimate cause of error is not random carelessness, but the limited attention economists give to mechanisms rather than end states. The irony, as we shall see shortly, is that mechanisms are usually much easier to observe and measure with confidence, and may well give us the sort of information that more usefully informs practical decision-making.

Scientific economics is possible.

Whenever the criticisms from philosophers and other professional methodologists become too severe, we hear the excuse that economists just can't do the sort of things other scientists do. We can't do experiments the way they can. Our subject matter is more complex. People are unpredictable in fundamental ways.

These appeals are unconvincing. Geologists can't do experiments on many of the questions that concern them, nor can ecologists, nor evolutionary biologists. Ecology is horribly complex, and so, we are learning, is climate science. Many units of observation and analysis, ranging from micro-organisms to tectonic plates, behave in ways that are unpredictable on the basis of present knowledge. Science is very difficult, and what is not known dwarfs what is.

But economists give themselves too hard a job. It is indeed extremely difficult to characterize equilibrium states in sufficient detail to generate true Type I error-minimizing tests, while it is much easier to identify and test for mechanisms.

Perhaps the simplest and most universal example will make this clear. Consider the standard supply-and-demand diagram. The professor draws this on the chalkboard, identifies the equilibrium point, and asks for questions. One student asks, are there really supply and demand curves? Where would you go to look for them? Ah, it's not so easy, comes the reply. Yes, in principle these curves exist, but they are not directly observed in nature. You can do market research in which you ask a sample of consumers how much they would buy at various prices, and this could give you an estimate of the demand curve, but of course there would be a certain amount of error in the process. And the supply curve is even more difficult. We will see in another week that this is derived from the marginal cost schedule, but in practice firms often find this difficult to calculate with accuracy. And even worse, in another week after this we will find out that, if competition is not perfect and firms behave strategically in the market, there is no supply curve at all.

If the answer stops here, the students will be left wondering why they are studying such a useless theory. But we know there is another way the answer might proceed. The professor could say, the supply and demand curves are only for the purpose of organizing our thoughts; they are not "real" in the way you are asking for. But we can use them to identify two other things that are real, excess supply and excess demand. We can measure them directly in the form of unsold goods or consumers who are frustrated in their attempts to make a purchase. And not only can we measure these things, we can observe the actions that buyers and sellers take under conditions of surplus or shortage.

In this easiest of cases, it is already clear that mechanisms are more susceptible to empirical methods than models of endpoint (equilibrium) states. This observation applies with greater force as we move toward ever more-complex forms of equilibrium modelling. Fortunately, the antidote is beginning to emerge in such areas as labor market search theory and behavioral finance, which have brought concrete mechanisms back into the picture. As these fields develop, the more general models of their infancy give way to diverse findings across particular market segments, cultures and contexts. And that's what we should expect: there is no general theory of fish either.

Scientific economics would be better than what we now have.

This is actually the most difficult case to make. In some ways the point is obvious. For instance, economists bend their research toward axiomatic theories that are almost embarrassing in their pre-scientific naiveté. Consider utility theory, for instance, which is now taking a drubbing at the hands of experimental psychology and neurophysiology. A scientific orientation would free us of such vestigial dogmas.

The more difficult issue concerns the relationship between science and policy. Economics is never more than a few centimetres away from significant matters of human well-being, and the criteria for policy are strikingly different than they are for science. For questions of policy both types of error are potentially costly, and those who offer advise must balance the risks of false positives and false negatives based on the relative consequences of each. This is how I interpret the parable given by McCloskey (2002), in which you are out in the world and, amid a confusion of noises, think you might be hearing someone crying out "Help! Help!" But you are not sure, it could be a discussion about seaweed and someone is making the point "Kelp! Kelp!" In this case you consider that the cost of not running over to be of assistance if it is needed far exceeds the cost of running over if it is not: the cost of Type II error trumps the cost of Type I. This is the logic of policy but not science.

The distinction between scientific and policy perspectives on error is exploited by those who benefit from inaction. Why act on climate change or similar threats if scientists cannot exclude the possibility that the whole matter stems from false positives? This confuses two different sets of criteria, and policy-aware scientists know that the standards for certainty in one domain are necessarily different from the standards for action in another. Thus the Intergovernmental Panel on Climate Change places percentage confidence estimates on its various predictions; 80%, for instance, earns a "high" even though a p-value of .20 would flunk every known test of statistical significance. (IPCC, 2007)

But if the main purpose of economics is to guide human actions in economic affairs, and if the criteria for this guidance differ from those of science, why should economists try to be more scientific? This is a fair question, but it should be remembered that practical considerations have always been important in the most scientifically respectable disciplines as well. In fact, one could say the field of technology, broadly understood, constitutes an entire universe, side-by-side with science, in which Type II error matters quite a lot. This has not escaped the notice of those who fund scientific research, and there are frequent spats over how valuable is the "ivory tower" work in which Type II error is given little if any weight.

This comparative perspective suggests that a scientific economics could justify itself along the same lines that other sciences have in the past. In my view, two arguments are strongest. First, there is the familiar appeal to serendipity: sometimes you have to separate yourself from practical concerns in order to free the imagination to develop new practical applications. The ruthless pursuit of what can be known with near certainty forces the scientist to take seriously many possibilities the technologist might overlook. (And the opposite is often true as well, of course.) Perhaps most will prove to be dead ends, but a few may open the doors to entirely new ways of thinking about problems and their solutions.

The second, and much the more powerful, concerns the long run. Over time, a scientific enterprise that minimizes Type I error will accumulate a body of knowledge and methods on which ever more productive research can take place. This foundation will be available equally to the policy researcher, who will then be able to generate more powerful tests that reduce the trade-off between the two types of error. This long term symbiosis can be seen, for instance, in the fruitful relationship between academic toxicology and epidemiology, which cautiously shun the risk of false positives, and hazard assessment as conducted by regulatory agencies, whose mandate places far greater emphasis on the risk of false negatives. Today's hazard assessment is more reliable because of generations of accumulated advances by researchers whose scientific criteria would not have been optimal for the assessment of exposure risks at any single moment in time.

One could contrast this with many branches of economic research that have hardly advanced at all, due to the lack of interest in the potential for error. Conspicuous in this respect is CGE (computable general equilibrium) modelling, which is never subjected to serious retrospective testing. There exists no evidence I am aware of that establishes the extent, if any, to which such models have improved our ability to make forecasts. The models become more elaborate and some of their components are calibrated more precisely, but there is no reason to believe that their effectiveness as analytical tools is greater now than 20 years ago. This illustrates by its absence the role that the systematic effort to minimize Type I error plays in establishing the progressive character of science. (CGE modelling also exemplifies the failure to consider mechanism, which is why the devastating Debreu-Mantel-Sonnenschein results have been completely ignored; for an intuitive explanation, see Dorman, 2001.)

So what would a scientific economics look like?

I have mostly answered this already: it would look like other sciences whose objects of study are complex, heterogeneous and context-dependent. It would study mechanisms primarily and end states only for heuristic purposes. It would be predominantly empirical, where this encompasses both statistical work and direct observations on economic behavior (which may also entail statistical analysis). It would ruthlessly identify potential sources of Type I error and strive to eliminate them in hypothesis testing. Experimentation, in the lab and in the field, would become more common, but even more important, primary data collection of all sorts would be accorded a very high value, as is the case in all true sciences. Its macro models would come to look like macro models in hydrology or biogeochemistry: simultaneous differential equations representing mechanisms rather than static end states embodying (a single) equilibrium. Economists would increasingly find it useful to collaborate with researchers from other fields, as their methodological eccentricities are abandoned. Finally, there would be a much clearer distinction between the criteria governing scientific and policy work, insulating the former from some of the influence exerted by powerful economic interests and freeing the latter to adopt an ecumenical and risk-taking approach to tackling the world's problems.

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Sen's economic philosophy:

Capabilities and human development in the revival of economics as a moral science

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Abstract
Sen joins a line of economists – including Cropsey, Schumacher, Myrdal, Ward, Higgins and Etzioni – who have objected to the implicit political philosophy within orthodox neo-classical economics. He argues that the good or just society requires policies to remove all forms of "unfreedoms", and policies to equalise the extent of capability deprivation. This capabilities approach calls for a rejection of utilitarianism, libertarianism and Rawlsianism in favour of the conception of justice provided by his putatively Smithian/Aristotelian approach. In taking the expansion of freedom to be both the principal end and the principal means of development, however, Sen ignores other philosophical positions which lead to quite different conclusions. Accordingly, his argument remains incomplete and unpersuasive, and the most fundamental questions remain to be resolved.

1. Introduction

Sen's project is not unique. His goal is to develop a superior ethical theory or framework from within which to distil appropriate social policies in the context of developing countries. He considers that all the properties underlying the general consensus on traditional welfare economics are eminently contestable, and dismisses Pareto optimality as "a very limited kind of success". He seeks to divert attention away from the metric of exchange value and the maximisation of income to the development of human capabilities and rights. He offers a view of development in which freedom is both the principal means and the primary end of the development process. Sen's message is that human "unfreedoms" are decreased as human capabilities are increased.

Sen explicitly considers and rejects the three ethical or philosophical perspectives provided by utilitarianism, libertarianism, and Rawlsianism. Implicitly, he also rejects Posner's wealth maximisation argument as a fourth alternative. Before him, others to have contested utilitarianism as the putatively superior theoretical or ethical framework include John Rawls, E. F. Schumacher, Richard Posner and – in the development economics context - Gunnar Myrdal and Benjamin Higgins. Thus, the appropriate context in which to apprehend Sen's attempt to develop a superior decision making framework is one which explicitly considers utilitarianism and available critiques of it.

2. Sen's putatively superior ethical theory in comparative context

Ultimately, however, Sen endorses his own position as a composite of utilitarianism and libertarianism. The argument in this paper is that his position is best seen as a re-writing of Rawls, however, with some modification of just what the "primary goods" are that need to be lifted for the worst off section of the population. *Sen's concept of fairness or justice requires an equalisation of "capability shortfalls"*, as distinct from Rawls's conception of justice as "maximin" "fairness". An adumbration of the historical context in which Sen's argument is offered is an essential backdrop to an appreciation of his case:

1. Utilitarianism: Utilitarianism has remained a mainstay of economic argument for most of the last two centuries, despite critiques from various sources.

1.1 Benthamite utilitarianism and its development: Bentham was emphatic that we are all subservient to the two sovereign masters of pleasure and pain, and that the utilitarian calculus provides the superior – and indeed only viable – principle to guide actions in both normative and positive spheres. J.S. Mill soon modified the Benthamite understanding of utilitarianism by insisting on the recognition of qualitative (as well as quantitative) differences between the pleasures. Hence Mill's famous quip that it is "better to be Socrates dissatisfied than a fool satisfied".

Sen's objection is more that destitute people make an accommodation to their poverty and distort their own apprehension of utility prospects. His concern is less with the qualitative difference between the pleasures than with the qualitative difference between the capability of fortunate and unfortunate people to enjoy those pleasures. Sen's concern is thus with something close to the opposite of the "utility monsters" who are of concern to Posner, i.e. his concern is with the deprived rather than the depraved.

As Sen sees it, Pareto optimality may come "hot from Hell", (1987:32) and Pareto optimality is entirely compatible with leaving some people in extreme misery while others roll in decadence and luxury. This leaves it "an extremely limited way of assessing social achievement" (1987:35), and "a very limited kind of success". What it captures is (merely) the efficiency implications of utility accounting. Accordingly, a utilitarian/Paretian approach can yield results at odds with our basic intuitions, and at least tacitly Sen offers as a criterion of the acceptability of an ethical theory the notion that a theory must be rejected if it is inconsistent with those basic intuitions. In this respect he replicates Posner. Sen carries his critique of utilitarianism further and objects that "to identify advantage with utility is far from obvious" (1987:38) – and that if some interpretation of advantage other than utility is accepted, then Pareto optimality (defined as it is in terms of individual utilities) would cease to be even a necessary condition, let alone a sufficient condition, for overall social optimality (1987:35-39; also 1979). He concludes that welfarism - in which social welfare is a function of personal utility levels alone - is therefore potentially disastrous, especially when the utility information is poor.

For Sen, orthodoxy thus has a lot to answer for, especially in the context of development economics.

1.2 Posner's "correction of utilitarianism" (1979): Posner is emphatic that although many may take economics to be identical with utilitarianism, it is not so, and progress in economics (and law) is to be made by recognising the limitations of utilitarianism and by adopting a superior maximand. Accordingly, Posner offers his wealth maximisation criterion as that putatively superior social goal or maximand.

For Posner there are several major objections to utilitarianism, chief amongst which are the indefiniteness of utilitarian measures, the uncertainty of the appropriate domain for utilitarian calculations (i.e. do foreigners, the unborn or animals count?), the difficulty of making interpersonal comparisons of utility when estimating changes in aggregate social utility, and - perhaps most of all - the perversity of having to accept in a utilitarian calculus the perverse utility accruing to "utility monsters" (who derive pleasure from watching the suffering of others, in contravention of our common basic intuitions).

Posner's putatively superior maximand is of course subject to criticism, and indeed stands in direct opposition to Sen's Aristotelian stricture that wealth is not what we are seeking to maximise, since wealth is merely useful for something else. A limitation allowed by Posner himself is that very poor people do not fare well under his criterion, and indeed people without money enter into a wealth maximising criterion only insofar as they enter into the utility function of someone who has money. Posner's criterion is therefore unlikely to commend itself for use in the developing country context, or indeed in any context where the goal is to establish a market economy, rather than to refine an established one, where other objections nonetheless may apply. Despite this admitted shortcoming, Posner argues that all major ethical theories - utilitarianism and Kantianism being the other two he recognises - are subject to shortcomings. His contention is not that his criterion is perfect for its intended purposes, just that it is less fallible than the available alternatives. Posner's critics would add a second shortcoming, namely that in his system people have rights, but only insofar as they can pay for them. Clearly there is no notion of Natural Right here, as there is in ancient philosophy. In effect, rights are apportioned in proportion to wealth – and thus for Posner, economy is polity. In effect, Posner has redefined jurisprudence as economic efficiency. Sen emphatically rejects any such notion that economy is polity or that economic efficiency is justice. He aspires instead to a notion that the essence of fairness or justice is represented by equality of shortfalls in the attainment of individual human capabilities. Sen's stance on rights is quite different from Posner's, but is nonetheless not one of ancient Natural Right. Sen does not explicitly discuss Posner's theory, but implicitly dismisses it in rejecting libertarianism and utilitarianism as alternatives to his own capabilities approach.

While Posner objects to utilitarianism on the ground that it cannot debar or minimise the actions of "utility monsters" which conflict with our widely held basic intuitions, he evidently does not accept that many will find a redefinition of jurisprudence as economic efficiency as itself being in conflict with such intuitions. It conflicts with Sen's intuitions however. A third objection to Posner's approach is that in his system – as in utilitarianism - all values are of equal value, even if the ability to pay for them is unequal. Again there are those – evidently including Sen, Myrdal and Higgins - who find this core point in conflict with basic intuitions. While sharing Posner's discomfort with utilitarianism Sen's specific objections are different. His concern is not with the depraved so much as with the functionings of the deprived, and he emphatically rejects the notion that income or wealth constitute superior maximands.

2. Libertarianism: Sen rejects libertarianism as too limited in its approach. Whereas libertarians tend to stress negative freedoms, Sen is more focussed on positive freedoms in his development work. Poverty is not a violation of negative freedom but rather of positive freedom because a "person in extreme poverty is not free to do many things".

Sen criticises those libertarian theories (e.g. Nozick's) that place a high priority on freedoms, insofar as they advocate that a person has the right to pursue anything he likes provided he does not violate the constraints that restrain him from interfering in the legitimate activities of another. Sen objects that such libertarian arguments place too much stress on processes and not enough stress on actual results or consequences. A "consequent-independent theory of political priority" is unacceptable to Sen, and in his view giving such a priority to liberty may still lead to "the violation of substantive freedoms of individuals to achieve those things to which they have reason to attach great importance" such as avoidable mortality, being well nourished, healthy and educated. No one´s rights may be violated in a famine, for example, but people still suffer severe deprivations.

Emphasising the *freedom to be able to do* stipulated things, as against *freedom from* external restraint, Sen objects that libertarian theory is indifferent to the "substantive freedoms" people may or may not be able to exercise. For Sen "To ignore consequences in general, including the freedoms that people get or do not get to exercise, can hardly be an adequate basis for an acceptable evaluative system". It ignores not only those things to which utilitarian and welfarist theories attach great importance, but it also neglects the most basic freedoms that we have reason to treasure and demand. Even liberty does not warrant as absolute a priority as libertarian theories insist it must have. Accordingly, for Sen, an understanding of justice needs a broader informational basis than that on matters of negative freedom. His concern therefore is with freedom in terms of both its positive and negative dimensions.

Sen´s approach to development therefore departs from the libertarian view and is encapsulated in the conception of freedom within his understanding of human development. For him (2000:3), positive and negative aspects of unfreedoms are involved in the fight against both economic tyranny (poverty) and political tyranny:

> Development can be seen, it is argued here, as a process of expanding the real freedoms that people enjoy… Development requires the removal of major sources of unfreedom: poverty as well as tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or overactivity of repressive states.

3. Rawls' "correction of utilitarianism" (1972): In Rawls' position there is no social progress unless the position of the worst-off segment of the population is being improved. Progress at the bottom end is a prerequisite for aggregate social progress, and what he therefore wants is a set of distributional weights favouring the poor. Rawls does not dispute the basic utilitarian position that each person's view of the good for him or her is the good for him or her. (Nor does Sen, once basic 'distorting' deprivation is deemed to have been overcome.) Using the notions of "the original position" and "a veil of ignorance" Rawls advocates a social contract featuring a maximin criterion as superior to uncorrected utilitarianism, in an avowedly Kantian approach.

Those who reject Rawls' "improvement" include Harsanyi (1975) and Allan Bloom (1975). Harsanyi's objection is that Rawls merely introduces a set of unjustifiable, arbitrary weights which effectively *distorts* calculation of changes in the level of aggregate social welfare. For Harsanyi, there is no legitimate reason for discriminating against some citizens merely because they happen to be rich (or at least not decidedly poor) or healthy (or at least not decidedly ill) or capable (or at least not decidedly incapable). In Harsanyi's view utilitarianism remains superior to Rawls' "improvement" and whenever the two approaches give different recommendations, it is the utilitarian view which remains more defensible. Accordingly, Harsanyi re-endorses utilitarianism. This of course conflicts with Sen's view insofar as Sen argues that there is indeed reason for discriminating in favour of those who are presently very poor, or ill-educated, or less capable of apprehending life's opportunities and availing themselves of them. Although Sen rejects Rawls, he does not do so for Harsanyi's reasons, and indeed it is the argument of this paper that Sen's rejection of Rawls is more nominal than real.

Bloom's critique of Rawls is more destructive. Bloom's argument is that Rawls' case is a misinterpretation of three philosophical traditions i.e. that it is a misinterpretation of the state of nature teachings of Hobbes, Locke and Rousseau, a misinterpretation of Kant's moral teaching, and a misinterpretation of Aristotle's teaching on happiness. In short, Bloom sees Rawls as nothing more than "utilitarianism made contemporary" by working backwards from what was popularly wanted in 1972 – in the form of a protective welfare state – to an underlying principle able to justify that result. In very blunt terms Bloom dismisses Rawls as having done no more than contribute to the loss of learning to which he was ostensibly providing a remedy.

The defect Sen sees in Rawls is that Rawls focuses on the distribution of resources rather than on the enhancement of a person´s capabilities. Insofar as Sen's Development As Freedom is effectively a re-write of Rawls – with some modification of Rawls not for wanting to lift the floor, but for mis-specifying the "primary goods" which need to be lifted – Bloom's critique of Rawls remains potentially applicable to Sen (and indirectly to Sen's philosopher collaborator Nussbaum (1993), whose review of Bloom's *Closing of the American Mind* (1987) is as misconstructed as it is dismissive). Sen knows what he wants in the here and now. He wants improved living and opportunities for the world's poorest. If utilitarianism, libertarianism and Rawlsianism don't themselves justify what Sen wants, what does? Given the humaneness of the goal, it might be expected that something must. Sen seeks – and purports to find - this desirable and necessary ethical underpinning in Smith and Aristotle, or at least in particular interpretations thereof.

4. Higgins on Economics and Ethics in the New Approach to Development (1978): Well before Sen's *Development As Freedom* Higgins emphatically argued that there is an urgent need for a return to a combination of moral philosophy and objective analysis, in an analytical return to something closer to Smith, Malthus, Marx and Mill. In line with Sen he dismisses as false the putative "scientific objectivity" of welfare economics and positivism. To insist that economists ought not make value judgements about what constitutes improvements in economic and social welfare is itself a value judgement of colossal proportions. Higgins accordingly anticipated a revolution in development economics in which moral philosophy is reinjected into the argument. Indeed, Sen's *Development as Freedom* might be seen as the start of, or part of, that revolution. Like Sen, Higgins objects to the narrowing of the scope of economics since the marginalist revolution, and he objects that the notion of "maximising welfare" is not sacrosanct because of the value judgements and assumptions implicitly in welfare economics (including the assumption that people know what is best for them, just as Sen objects that to identify advantage with utility is far from obvious). Both Higgins and Sen therefore argue that some conception of a "good society" is inevitably being pursued, and in their respective views this requires going well beyond a Paretian optimum.

Higgins' paper appears to have escaped critical attention and essentially has been ignored rather than rebutted. Much of his argument coincides with Sen, however, and he notes that the basic needs approach fashionable in the 1970s involved an almost complete rejection of the philosophical underpinnings of neoclassical economics, and that the so-called Unified Approach (involving dignity, social inclusiveness and other aspects of life) required recognition that standard neoclassical analysis could make only a limited contribution. In short, for Higgins it followed that economists who support the free market on supposedly scientific grounds are in fact being highly unscientific. For Sen, "the role of values cannot but be crucial", and there is reason to be dismissive of the metric of exchange value since it assigns zero value to everything except commodity holdings (e.g. rights, morbidity, education).

Sen may give a more detailed consideration of the development of human capabilities and freedom, but much in Higgins provides a direct parallel.

5. Sen and his capabilities approach (2000): Amartya Sen is the most recent entrant into this campaign to find an ethically superior maximand, or conception of justice, within which to apprehend human development. He has pushed his capabilities approach for some time now, most recently in *Development As Freedom* (2000). In the context of development economics he therefore now advocates an "improvement" on the usual utilitarian normative approach - per medium of a recognition of what constitutes human capabilities and what accordingly constitutes an appropriate re-definition of poverty (with less emphasis on financial poverty and more emphasis on unfulfilled human capability). For him (1987: 35), the orthodox "criterion of Pareto optimality is an extremely limited way of assessing social achievement". Thus (1987: 45)

> "a person who has had a life of misfortune, with very little opportunity, and rather little hope, may be more easily reconciled to deprivations than others reared in more fortunate and affluent circumstances. The metric of happiness may, therefore, distort the extent of deprivation, in a specific and biased way. The hopeless beggar, the precarious landless labourer, the dominated housewife may all take pleasures in small mercies, and manage to suppress intense suffering for the necessity of continuing survival, but it would be ethically deeply mistaken to attach a correspondingly small value to the loss of their well-being because of this survival strategy".

In short, the metric of utility is influenced by contingent circumstances, and it is in this context that Sen explores his 'capabilities approach' as an alternative conception of well-being in the form of the capability to achieve valuable functionings. This approach – which he notes derives from Smith, Marx and Aristotle – is a way of seeing well-being which has powerful implications for the assessment of living standards, poverty, inequality and social justice. The conception of justice he recognises is one in which the social maximand is neither aggregate utility (as in orthodox economics) nor wealth (as for Posner), but one in which holistic human development is maximised by equalising capability shortfalls. A view of well-being not primarily based on preference, but on some 'objective' circumstances may of course undermine the simplicity of the picture of self-interested choice implicit in the behavioural assumptions underlying the 'fundamental theorem' of welfare economics. Self-interested choice may well diverge from these other, non-preference-based notions of well-being. On this point Sen runs parallel to Cropsey's 1955 little known but potent Aristotelian critique of welfare economics, while yet subsequently diverging significantly from Cropsey's apprehension of human capability and development, because of significant differences in the interpretation of Aristotle (Duhs 1994; 1998). Sen's conception of an ethically superior maximand, or perspective on teleology, is certainly not Cropsey's.

At the most fundamental level what Sen does is give rise to the need to recognise the importance for economics of the way in which one political philosophy or another silently infiltrates its way into economic debate. This may well be without any real awareness on the part of many economists participating in that debate (as was noted by Schumacher when he observed that economics is taught today without any awareness of the view of the nature of man thereby being promulgated, and by Benjamin Ward when he objected that both neoclassical and Marxist theories reflect implausible theories of man). Sen, for his part, is implicitly saying that he does recognise that such an implicit teaching of the nature of man is present in economic teaching, and that there is reason to take economic philosophy more seriously. He nonetheless fails to be either as explicit or as complete as he needs to be if his argument is to be compelling.

3. An appreciation of Sen's case

What then is Sen's case? For Sen (*Development as Freedom*, 2000), development consists of the removal of various types of unfreedoms. Expansion of freedom is therefore viewed both as the primary end and as the principal means of development. He sees individual agency as central to addressing relevant deprivations, but nonetheless recognises that freedom of individual agency is inescapably qualified and constrained by extant social, political and economic circumstances. Accordingly, he seeks to combine extensive use of markets with creation of social opportunities.

Sen's focus consequently involves a shift in attention from low income to deprivation of basic capabilities. In turn he regards (2000: 116) the complementarity between different institutions - particularly between non-market organisations and the market – as a theme of his book. As far as Sen is concerned the State to date has been guilty of both over-activity (e.g. in running a licence Raj) and under-activity (e.g. in the continuing neglect of eliminating unequal education and social opportunities), and the present need is to recognize that even when there is more room for markets, complementary non-market facilities require careful and determined public action (2000: 143). Accordingly, developing countries generally need public policy initiatives to create social opportunities. For Sen, the overall achievements of the market are thus deeply contingent on political and social arrangements. [Stiglitz's position is somewhat similar, given that his practical policies and stress on complementarity of State and market are similar, albeit Stiglitz is less determined to enquire explicitly into underlying moral and political philosophy.]

Sen offers his 'capabilities approach' as a superior conception of social ethics or justice. He criticises utilitarianism for its indifference to freedoms or rights. He criticises libertarianism for having no direct interest in happiness or desire fulfilment. He criticizes Rawls' notion of primary goods as not being the appropriate space for evaluative purposes. His own approach effectively merges libertarianism and utilitarianism into a modified form of Rawlsian 'floor lifting' in 'capabilities space', and concentrates on individual freedoms (not utilities), while incorporating sensitivity to consequences (utility). His notion of 'capabilities' has its roots in feasible functionings and he notes that the concept of functionings has distinctly Aristotelian roots. In neo-Aristotelian manner, he notes that his capability perspective shifts primary attention away from means "to ends that people have reason to pursue, and, correspondingly, to the freedoms to be able to satisfy these ends". Whether Aristotelian endorsement of his final position could be expected, however, remains much in doubt.

Sen accepts that his book is strongly Smithian (as against Aristotelian), but he again disputes the common view that Smith was the single-minded prophet of self-interest (2000: 271). Sen stresses (2000: 288) that responsible adults must be in charge of their own well-being, and it is for them to decide how to use their capabilities. But the capabilities that a person actually has – and not merely theoretically enjoys – depend on the nature of social arrangements. There are two problems here. First, even if Sen is right to assert (2000: 294) that the development of human capability in leading a worthwhile life is central to Smith's analysis, the same may be said of Myrdal's analysis and of Aristotle's analysis – yet they are all different, and those differences remain to be confronted. Secondly, the circumstances in which extant social arrangements warrant confrontation and alteration, in the interests of developing individual capabilities, will inevitably remain contentious.

In respect of the expansion of social opportunities and requisite public policy initiatives (e.g. in providing basic education and health facilities and other public and semi-public goods), Sen's case is that efficiency arguments supplement equity arguments in supporting public assistance. Basic education tends to have a public good component, as well as a private good component, and to Sen it is remarkable that some market enthusiasts now recommend to developing countries that they should rely fully on the free market even for basic education. More to the point, he notes that the countries of South Asia have been relatively slow in the creation of social opportunities – relative to South East Asia - and this "has acted as a barrier to economic development" (2000: 45). Similarly, recognition of a woman's role is one crucial aspect of "development as freedom", and one which warrants noting that some variables relating directly to women's agency (e.g. female literacy) often play a more important role in promoting social well-being (including child survival) than variables relating to the general level of opulence. In short, "trickle up" is still a notion with some currency.

Providing support for instruments that were previously missing, however, remains different from confronting the existence of traditional social customs which might be regarded as actually obstructing development prospects (or arguably the expression of individual freedom and capability). It was in this context that Myrdal endorsed the need for "strong states" – for he too argued that the capabilities a person has depend on the nature of social arrangements. Born into Indian society, for example, does a person chance to be Hindu, or choose to be Hindu? [Duhs, 1982; note also Hacking, 1996 regarding the point that most of us have values which we just did not choose] Is the acceptance of Hinduism in those circumstances a free expression of individual agency (as Sen implies), or an accident of historical chance which constrains individual agency (as Myrdal implies)? Sen is content to limit his argument about the links between the freedom of individual agency and the social circumstances which constrain it to the easier cases of adding something that was previously missing (e.g. basic education), and he tends to ignore the more difficult and confrontationist questions which Myrdal highlighted (although they too impact upon social opportunities and individual freedom and capability). He does this because his approach is not Aristotelian at all, appealing only to historical or civil rights, not Natural Rights, and because – despite his strictures elsewhere (Sen, 1987) about the limited way the word "rationality" is used in economics – he does not believe that appraisal of alternative human ends or goals is within the reach of rational analysis. Adults must simply choose for themselves which cultural constraints to accept and preserve. Chance will evidently not dominate choice, and there is no transcendent yardstick by which evaluative comparison of two states of affairs may be made. Accordingly, he puts his faith in enhanced freedom and market processes rather than follow Myrdal in endorsing the need for "strong states". Ultimately there is no higher standard for Sen than the whimsical choice of ends of each individual. Within the broader philosophical literature, this might alternatively be either celebrated, with Nussbaum, as respect for individual diversity, or decried, by Straussians, as an unwillingness to address the question of humankind as a generic species. For Sen, if not for Aristotle, development is freedom and freedom is development. His approach remains in the modern sui generis individualism mode which does not recognise a generic rationality for the human species as such. Moreover, his approach remains in the German historical tradition, and remains apart from the Ancient Greek tradition of appealing to nature. Hence his acceptance that his own approach is ultimately a composite of utilitarianism and libertarianism. Accordingly, as Bloom also says of Rawls, Sen's position is effectively "utilitarianism made contemporary" by working backwards from a pre-determined political goal to a theory which will sustain that choice.

While Sen (2000: 289) calls Aristotle one of his sources of ideas, and approvingly quotes Aristotle's conclusion that "Wealth is evidently not the good we are seeking; for it is merely useful for the sake of something else", he nonetheless does not ask whether Aristotle held a species conception of man (as against the modern conception of sui generis individualism) which would have obliged him to ask the same question of freedom. Is freedom too merely useful for the sake of something else – that is, for the sake of an overarching teleology? What can we 'do' with more freedom is as good a question as what can we 'do' with more wealth (c.f. 2000: 14). Would Aristotle's concern with freedom have been with freedom as freedom to cultivate reason and the appraisal of human ends, for example, as against freedom to pursue whimsy (Jaffa, 1975)? Conflicting interpretations of such teleological issues are what will set Sen (and his philosopher collaborator Nussbaum) apart from their critics, even when some common ground is accepted that development requires consideration not only of incomes but also of the opportunities people have for good living. In short, explicit and implicit questions raised in Sen's book do much to recall the Myrdal/ Bauer debate of the development literature of the 1970s, in which the implicit meanings given to such words as "freedom" and "man" causally explain what the respective protagonists advocate by way of government intervention, foreign aid, policy towards "cultural constraints" and such like (Duhs 1982). Sen ignores Myrdal – despite the common interest in the extent to which social circumstance constrains both individual freedom and economic development - but, unsurprisingly (given his endorsement of freedom as both pre-eminent means and end), he offers an approving endorsement of Bauer's earlier emphasis on the importance of freedom of choice as a criterion of development. Bauer's position on teleology and ontology is emphatically inconsistent with Aristotle's, however, and Sen's twin appeals to Aristotle and Bauer remain problematic. Aristotle is more concerned with what is actually chosen, as a yardstick of human 'development'. It is also noteworthy that Streeten (1995) replicates or anticipates Sen in arguing that his approach too is entirely consistent with Adam Smith and in arguing the need for complementary State and market institutions. Far from approvingly citing Bauer as Sen does, however, Streeten is emphatic that it is Myrdal who was prescient and appropriately interdisciplinary.

Tacitly in keeping with Myrdal, however, Sen nonetheless notes that implicit values need to be made more explicit (2000: 80), that in analysing issues of efficiency and equity - or the removal of poverty and subjugation - "the role of values cannot but be crucial" (2000: 280), and that in 'the metric of exchange value' (of which Sen is dismissive from the viewpoint of facilitating evaluative judgments or making and aggregating interpersonal comparsions of utility) all variables other than commodity holdings (eg morbidity, education, rights) are implicitly valued at zero. He also shares with Myrdal the criticism and rejection of mechanistic development models (since meaningful development depends on more than just manipulation of capital-output ratios). He notes (2000: 27) that the discipline of economics has narrowed its focus in moving away from teleological and philosophical issues, yet he ultimately ends with the plainly tautological acknowledgement (2000: 288) that an approach to justice and development that concentrates on substantive freedoms inescapably focuses on the agency and judgment of individuals. The real issue therefore is whether Sen has justified an approach to justice and development that (validly?) focuses on freedoms as ends, and whether he has justified the derivative (non-Aristotelian) presumption that the whimsical judgment of individuals cannot be subjected to scrutiny (at least once 'distorting' deprivation is left behind).

Though left implicit, the key proposition (or assumption) in Sen's book is therefore the decidedly non-Aristotelian view that the nature of man, whose development we are seeking, is one of sui-generis individualism, rather than one which permits a reasoned view of the human species (and human development or teleology) as such. When Sen stresses that his basic concern is "with our capability to lead the kind of lives we have reason to value" (2000: 285), the correct interpretation here of "reason" for Sen (despite his strictures about the limited way in which "rational" is used in economics) is personal whim regarding our individual choices rather than deliberative, evaluative reason a la Aristotle or Cropsey (1955). Accordingly, what is deemed to be "development" in one society need bear no necessary relationship to what is deemed to be "development" elsewhere. Sen's comment (2000: 272) that "It is the power of reason that allows us to consider our ... ideals as well as our interests... To deny this freedom of thought would amount to a severe constraint on the reach of our rationality" is itself evidently very restricted in its reach. It is apparently not meant to run beyond *individual "choice", whim or inclination*, despite his comment that to deny the extensive role of values [c.f. Myrdal] in human behaviour would amount to "the limiting of our rationality" (2000: 272; Sen 1977, 1987), and despite his original emphasis on the way social circumstance constrains individual agency. Just at what point individual agency is sufficiently unconstrained to warrant wholesale acceptance of individual preference remains a moot question, as is the question of whether the failure to apply deliberative reason to the choice of human ends itself constitutes "a severe constraint on the reach of our rationality".

Sen's recognition of a deep complementarity between individual agency and social arrangements is reminiscent of Myrdal's sociology of development, albeit Sen's identification of freedom as the main object of development (2000: xii) lacks the crypto-teleological implication evident in Myrdal. [Myrdal's ten modernisation ideals include grassroots democracy, in keeping with Sen's aspirations. For Myrdal, too, "values cannot but be important", and an historically constrained middle ground is required in stipulating the goals of development, since both value relativism and timeless value absolutism are implausible and unacceptable to Myrdal.] For such reasons of complementarity, the use of formal economic models is a double-edged sword for Sen insofar as the structure of such models "can conceal some implicit assumptions" (2000: 262), inasmuch as capitalism works effectively through a system of ethics that provides the vision and the trust needed for successful use of the market mechanism and related institutions" (2000: 263). Myrdal could no doubt be seen to have preceded Sen in demanding "an adequately broad view of development… to focus the evaluative scrutiny on things that really matter" (2000: 34), and Sen notes (1997: 9) that there was a view of development, linked to Myrdal, that considers a "soft-hearted" government as being inimical to development, such that on this view development requires, in its early stages, the suppression of human rights, particularly those related to democracy and civil and political rights. In short, Sen and Myrdal diverge when they broach valuational and teleological issues (e.g. as to whether economic development may be inimical given that it may eliminate national traditions and cultural heritages), and accordingly they diverge too as to whether "more freedom" or "strong states" is what is required in the search for development.

As noted above, Sen stresses that "it is simply not adequate to take as our basic objective just the maximisation of income or wealth, which is, as Aristotle noted, 'merely useful for the sake of something else' " (2000: 14). He thereby implies the relevance of teleological questions, but nonetheless stops short of explicitly addressing them. He acknowledges (2000: 285) that a central challenge in the contemporary world is our idea of an acceptable society, but he does not seek to argue that human reason is capable of defining or rationally apprehending just what that is or what constitutes a developed state. He likewise accepts that a sense of justice is among the concerns that moves people, and considers the idea of justice to be innate in, or natural to, man. Contrary to his non-teleological approach, this in itself implies a generic goal for mankind as mankind [cf Pangle, 2003]. He seeks to defend individual differences, pluralism and consumer sovereignty, notwithstanding his insistence that wealth – if not freedom - is useful only for achieving something else (which itself putatively transcends individual differences or whims and implies a generic goal). He seeks to consider how freedoms of different types contribute to good living, without defining what is the Good Life – or at least by implying by default that the Good Life is what each individual takes it to be for himself or herself. He acknowledges that the Aristotelian account of the human good was explicitly linked to the need to "first ascertain the function of man", but, albeit crypto-teleological in such ways in places, his view essentially remains within the modern ambit of sui generis individualism - a realm in which individual human reason is deployed to select the means to be used to pursue an end, but not to question the relative worth of the ends chosen by different individuals or societies.

While Sen performs the service of focusing attention on just what human development should be conceived to be, and just what is the relationship between individual agency and social circumstance, it follows that the most fundamental issues remain to be resolved. The questions he raises are fundamental, albeit often neglected, but the answers he gives are incomplete and do not persuade. Critics, for example Benicourt (2002), likewise conclude that Amartya Sen's capability approach remains "undeniably neoclassical", and "just a variation of standard microeconomics", albeit – without addressing the above economic philosophy issues - Robeyns (2002) dismisses Benicourt's case as "fundamentally mistaken". Bowbrick (1986) goes further than Benicourt and emphatically denounces Sen's well known theory of famines as both "factually flawed" and theoretically unsound. Benicourt (2004) adds that Sen's approach is non-operational for policy makers, since it provides no basis for allocating priorities to relevant capabilities and fails to treat the issue of how to finance the generalities he does endorse about "freedom", education and health. Benicourt demands to know more about just what fiscal system leads to the "equality of capabilities". Cooper (2000) objects that Sen fails to address some hard practical questions e.g. what to do when stability – itself one of Sen's primary freedoms - is the result of a suppression of political freedoms. In a more general attack on Sen-style understanding of freedom, Pope John Paul II says in his 1993 Encyclical *Veritatis Splendor* (sections 31-33; 74)

> Once the idea of a universal truth about the good, knowable by human reason, is lost…there is a tendency to grant to the individual conscience the prerogative of independently determining the criteria of good and evil and then acting accordingly. Such an outlook is quite congenial to an individualist ethic, wherein each individual is faced with his own truth, different from the truth of others. Taken to its extreme consequences, this individualism leads to a denial of the very idea of human nature… Mention should also be made here of theories which misuse scientific research about the human person. Arguing from the great variety of customs, behaviour patterns and institutions present in humanity, these theories end up, if not with an outright denial of universal human values, at least with a relativistic conception of morality...These doctrines would grant to individuals or social groups the right to determine what is good or evil. Human freedom would thus be able to "create values" and would enjoy a primacy over truth, to the point that truth itself would be considered a creation of freedom. Freedom would thus lay claim to a moral autonomy which would actually amount to an absolute sovereignty.

Sen and John Paul II clearly part company in their understanding of teleology and of the generic nature of humankind. Accordingly, they have different understandings of what Sen calls "our capability to lead the kind of lives we have reason to value" (2000: 285). They differ as to their understanding of the limits of human reason, and as to whether Sen's goal of freedom should ever be regarded as the ultimate human maximand.

The range of economic philosophy territory Sen covers remains too limited to establish the acceptability of his own case, or – by way of corollary - the unacceptability of Aristotelian, Myrdalian and other alternatives to it.

4. Sen and Straussian philosophy: Alternative conceptions of Aristotle and of teleology

Much in Sen – with one major difference – can be found in Cropsey's little known, but incisive, 1955 critique of welfare economics (Cropsey 1955: Duhs 1994). Sen and Cropsey are in agreement that "all the properties on which 'something like a general consensus' seems to exist in traditional welfare economics…are eminently questionable" (Sen, 1979b; also see 1987:71). Neither is in any doubt that Pareto optimality is an extremely limited way to measure social achievement or human development. [Also see John Paul II, 1987]. Both accept that it can be disputed that personal well-being is best seen in terms of utility - as it has been by the Ancient Greeks; Schumacher; Myrdal and Higgins, for example - and that if some interpretation of advantage other than utility is accepted, then Pareto optimality would lose its status as either a necessary or sufficient condition for social optimality. Both accept that that the metric of exchange value is incomplete and inadequate as a guide to social policy, that the reach of human reason has been unduly restricted in orthodox economics, that a sense of justice is innate in, or natural to, man and that a central challenge is to develop our idea of an acceptable society.

Yet Cropsey's perspective on welfare economics and a superior social maximand remains quite different from Sen's. Both Cropsey and Sen consider that their arguments derive from Aristotle. In a nutshell, Cropsey's argument is that what welfare economics does is homogenise the universe of heterogeneous goods and differentiate the universe of the (homogeneous) human species. Loss of these relevant distinctions plainly recalls Sen's argument in "Rational Fools" (1977), in which he argues that the purely economic man is close to being a social moron, and that a person who has no use for distinctions between his/her positivist and normative choices and interests and welfare must be a bit of a fool. The one preference ordering of orthodox economics is a serious abstraction from the real world and from distinctions of fundamental importance. Sen notes that for Aristotle the judgement of social achievement relates to the goal of achieving "the good for man", and accepts that on the basis of this criterion evaluation cannot be stopped short at some arbitrary point like satisfying "efficiency". As he notes, when advantage is equated with utility, efficiency coincides with Pareto optimality, but insofar as the notion of advantage is altered, so is the content of efficiency (and for that matter the conception of equality). Cropsey would agree with this, but he nonetheless parts company from Sen as to just what constitutes "the good for man". How could it be otherwise when they disagree on the underlying philosophical question of what constitutes the nature of man? For Cropsey, the answer to what constitutes "the good for man", human functionings and a superior social maximand involves a reasoned investigation of a generic teleology for a species (versus sui generis individualist) conception of mankind. While "freedom" is the ultimate goal for Sen, for Cropsey there remains the question of what human reason can offer as the end to which that freedom should be put.

It is apparent that Cropsey and Sen take different paths at turning points which reflect differences in their understanding of teleology and of the way in which, or extent to which, the power of reason allows us to consider our ideals as well as our interests. Accordingly, their divergence also reflects differences in the way they distinguish between "chance" and "choice", and their perspectives on the limits of human reason and of what it means to be "truly free" to choose. In brief, they reflect different interpretations of Aristotle, including in relation to what is implied in Sen's deference to Aristotle's requirement to "first ascertain the functions of man". They differ as to whether the human propensity to value freedom is the only thing that has "a strong universalist presumption". Specifically, Cropsey apprehends a universalist presumption in his understanding of the "nature of man" whereas Sen stays within the modern project of apprehending the nature of man ultimately in terms of sui generis individualism. For Cropsey man is a species being (as also for John Paul II and Catholic social thought), and the differences between individual men are relatively minor, while for Sen man is essentially individualistic, and the differences between individuals need to be celebrated over and above any common elements which inhere in all men.

For the ancient Greeks, virtue was the chief desideratum. For Hobbes, peace. For Posner, wealth. For libertarians, individual freedom (to do whatsoever) is the chief desideratum, and for Sen, the ultimate goal is freedom understood somewhat differently. For Cropsey sui generis individualism has replaced a species conception of man both in orthodox welfare economics and in Sen, and value relativism and an element of historicism have been accepted in place of any absolutes derived from a natural teleology. As Cropsey puts it, every logic presupposes a metaphysic. The particular metaphysic which underscores Sen's writing is one in which freedom has been installed as the natural teleology of economics and social science, without recognition that it is but the conception of natural teleology from within one, liberal viewpoint. Sen elevates freedom to the position of chief desideratum yet rejects libertarianism because of his understanding of the place of both positive and negative freedom and because he sees it as too dangerous in terms of relativism. Yet he has no real basis whereby to limit that relativism or libertarian freedom or to assist it in any particular direction. Sen's deference to Aristotle - or to Nussbaum's interpretation of Aristotle - leads him to his capabilities approach, but not to Cropsey's generic conception of man, and its consequent implications for the consummation of (generic) human capability and thus for the conception of the Good Life and Good society. Although Sen himself accepts that the demands of a narrowly conceived understanding of rationality have made "many different types of relevant considerations inadmissible in economic evaluation or behavioural prediction" (1987: 71), Cropsey's implied critique of Sen is that he (Sen) is guilty of his own charge, in that he has too narrowly conceived the limits of rationality regarding the choice of human ends. While Sen seeks to endorse what persons would value on "serious and courageous reflection, freed from the limitations imposed by unfavourable circumstances", for Sen the seat of such valuations remains in individuals (and their culturally relative backgrounds) in reaching decisions about 'the lives people have reason to value', while for Cropsey human reason is capable of deliberative judgement about generic human ends. The phrase "freed from the limitations imposed by unfavourable circumstances" is capable of more than one interpretation.

In Sen's own terms, is undeveloped reason itself a major source of unfreedom in the quest to develop human capabilities? Given his own strictures about the limited way in which reason has been understood in economics, about the role of values, and about the need to apprehend human functionings and human ends, that is at least a good question. It is also one the answers to which define a point of departure for Cropsey and Sen.

It is in this context of the tension between natural right theory and human rights based theories that Sen's philosopher collaborator Martha Nussbaum departs so sharply from the Straussian philosopher Allan Bloom. Whereas Bloom teaches natural right theory, Nussbaum's perception is that Bloom is teaching an unacceptable elitism in rejection of genuinely democratic values. A rejection of democratic values as the definitive yardstick of human good, however, is clearly a different thing from rejecting democracy as a practical political regime. A view of Bloom and Straussian philosophy which is quite opposite to Nussbaum's is found in Father Ernest Fortin (Foley and Kries, 2002: pp295-297) "Strauss was one of the few nondogmatic teachers that I've ever had…it's hard to overestimate Bloom. He's the guy who made things come to life for me…. Strauss wasn't a dogmatist but one who freed us from the dogmas of our age…"

Given the common elements to be found in Sen and Cropsey, but the extent of the final philosophical and policy divergence between them – deriving from their divergent views of the limits of human reason and the apprehension of generic attributes in the functionings of man and the nature of man – these turning points are well worthy of an attention they are yet to receive.

5. Conclusions

First, while the rich connection between economics and moral philosophy is well hidden in most economics journals, *Sen for his part refuses to disregard moral philosophy as "soft", non-rigorous and irrelevant.* He examines three philosophical traditions that have laid claim to the proper basis of social justice:

(i) Utilitarianism
(ii) Liberalism
(iii) Rawls' "maximin"

and argues that while each of these three views holds merit, each can be pushed past its limit to the point where it defies commonsense (e.g. if a village's utility is maximised by tormenting its ugliest member). Sen says such tradeoffs should be publicly debated with each case resolved in some democratic way. There are thus no "right" answers for Sen, just historicist ones reflecting currently popular views. This, versus Natural Right, is his ultimate yardstick.

Development as Freedom provides a framework of thought. It urges attention to the question of what should be the ultimate aims of development, and on that score is worthy of support. The questions Sen raises are perennially important. His answers are more problematic however. Sen has highlighted various limitations in the orthodox neoclassical approach to development, and directed attention to the need to develop human capabilities. In short, he has sought to again widen the philosophical and teleological focus of economics and to direct attention to the conscious articulation of human ends and to consideration of factors which constrain the free exercise of individual agency. He makes plain that the importance of economic philosophy needs to be more generally recognised.

In terms of practical impact Sen's influence is apparent in the UNDP Human Development Index, and may also now be seen in World Bank sponsorship of discussion of the determinants of empowerment and the consequences of it for economic development. He has sought to shift the focus of attention from low income to deprivation of basic capabilities and to the goal of equalising capability deprivation. For Sen, the problems with the market mechanism are not really with the market mechanism as such, but with prerequisite supplementary non-market institutions. What is needed is not suppression of markets, but means of allowing them to function better and with greater fairness. Even when there is a need for more room for markets, developing countries generally need public initiatives to create social opportunities, and such non-market politics require careful public action. Supply of improved human capability, in the absence of growth-primed demand for such capabilities, is no panacea, however, as is indicated by the case of Sri Lanka which has been mired in civil war despite its HDI advances.

Secondly, while there is much to agree with in terms of the pragmatic policies Sen endorses - including support for broadly based public education and health policies, and other institutions which complement the market - *the fact is that it is possible to arrive at that policy position from more than one theoretical position*. Clearly enough, Sen's approach is pragmatic and well intentioned, and as such it derives support from those who want to intervene to help the worst off. Even those sympathetic to the pragmatic side of Sen's program, however, are able to remain critical of the incompleteness of the theory or philosophy which underlies it. It should require more than a declaration of support for the poor to convince others that they are listening to a commanding statement of a superior conception of economic justice, ethics and the nature of man. Myrdal, Higgins, Marx and Aristotle – like Sen - would also have rejected the normative frameworks of utilitarianism, libertarianism, and Rawls. *Whatever the similarities and differences, Sen doesn't distinguish his case from their related but evidently unacceptable cases.* Significant questions and nuances are thus glossed over. In fact, despite Sen's rejection of the three alternative ethical perspectives of utilitarianism, libertarianism and Rawlsianism, Sen's capabilities approach is best seen as an endorsement of Rawls' "correction of utilitarianism", and it ends up an endorsement of utilitarianism despite his own ringing condemnation of utilitarianism on the grounds that to identify advantage with utility is far from obvious, and Pareto optimality is a very limited kind of success. We are given no cause to believe that the three philosophical perspectives he rejects constitute an exhaustive list of available and significant conceptions of the questions at issue, and no cause to accept that such crypto-teleological implications as do arise should merely be silently bypassed.

Thirdly, *Sen claims to have arrived at his policy position via the elaboration of a superior ethical* framework. In fact, his putatively superior ethical framework is a melange of those three philosophical perspectives which he himself rejects. The Aristotelian element he adds, related to human 'functionings', derives from one, contentious or limited interpretation of Aristotle, to the neglect of radically different interpretations which characterise Straussian philosophy, for example. Moreover, it is arguable that he does not proceed forward from his supposedly superior perspective to his policy proposals, but that he works backwards from his preferred policy position to a theoretical perspective which appears to vindicate those policy preferences.

In the context of defining and considering "human functionings" Sen appeals to Aristotle in the context of his objections to the way in which the reach of human rationality has been restricted in the economics literature. But his approach is ultimately non-Aristotelian. He takes his bearings from history rather than nature, and is more derivative from the German historical school than from the Ancient Greeks. His position derives more from Kant and

Hegel than from Aristotle. Despite contending that economics has become too narrow, and that questions of teleology and philosophy have been neglected, Sen merely concludes tautologically that if individual freedoms are accepted as the end then individual agency must be endorsed. There is little or no reason to accept Sen's claim that he has provided a superior ethical theory, from within which to apprehend the issues of economics and development, and at the very least, his analysis of such issues is incomplete and less than fully persuasive. His putatively superior conception of economic justice is distilled from within a particular metaphysical view of the nature of man and teleology, and from a pragmatic point of view is a conception which may also be reached from other theoretical starting points.

Fourthly, interpretative issues abound. Sen trusts in Nussbaum's interpretations of Aristotle and political philosophy. Nussbaum's interpretations are poles apart from (say) Bloom's or other Straussian commentators, but no consideration is given to sifting through rival interpretations to attempt a vindication of one over others. On Straussian interpretations (which are increasingly influential in the Bush Whitehouse in 2003 - 2004; see Pangle 2003), Aristotle would be a nay-sayer. He would place himself on the other side of the Natural Right/ evolving civil rights divide. Moreover, Sen sees his perspective as Smithian, influenced by Aristotle. Streeten also claims a Smithian basis for his perspective, albeit neither his policy perspective nor his interpretation of Smith coincides with Sen's.

In arguing for development as freedom, or freedom as development, Sen is effectively, if tacitly, positing a view of the nature of man [as free, equal and compassionate; cf Rousseau] and of teleology. Albeit crypto-teleological in places, and albeit concerned not to limit the reach of "rationality", he leaves us without a reason to accept that wealth is merely useful in the service of something else while freedom is axiomatically the ultimate end, rather than merely another means to that end. There are at least some crypto-teleological passages in which Sen reflects some tension or inconsistency with his own acceptance of freedom not just as means, but as the ultimate end or constitutive element of development, and thus of the consummation of human nature. His implicit claim is that he has provided the correct interpretations of such concepts as the nature of humankind, freedom, teleology, and human capability and development. Such claims are never likely to be universally accepted. The Cropsey/Bloom/Straussian understanding is that historicism is self contradictory, that a generic conception of mankind is plausible and that it carries with it a teleological conception antithetical to that of the libertarians and quite distinct from the historicist Nussbaum/Sen view (as is also the case for Catholic social thought: John Paul II Encyclicals, 1987; 1993).

Fifthly, Sen's criticisms of utilitarianism, libertarianism and other ethical perspectives are in fact so pointed that it is remarkable that he can wind up endorsing only slightly modified versions of what he has condemned and rejected. Much in Sen's exposition is consistent with Cropsey's 1955 Aristotelian critique of welfare economics, but Sen resiles from the temptation to take his argument that far. He does so without explicit argument or reason. His reasons for government intervention run beyond Stiglitz's (2001) pragmatic reasons for accepting that there is market failure because of the presence of public goods, externalities and information asymmetries, and extend to a rejection of the framework of welfarism as potentially disastrous, essentially because a utilitarian/Paretian approach can yield results in conflict with our basic intuitions. And that intuition appears to be the final arbiter. *Sen's basic intuitions take him to a stinging critique of welfare economics and orthodox development policy, but then lead him not to the Aristotelian position to which he putatively defers but back again to utilitarianism and sui generis individualism (after the removal of offending 'unfreedoms').*

Intuition dictates the requisite theory or philosophy – as against allowing a coherent philosophy to dictate requisite policy.

By going so far, and then retreating to a composite of libertarianism and utilitarianism, Sen leaves basic questions unaddressed. His underlying philosophical position is incomplete and unpersuasive. While there may be grounds for joining him in criticising the orthodox neoclassical perspective on development in the name of human capabilities and "functionings", *there is no reason to conclude that Sen has said the last word on the development of human capabilities or in the search for a superior ethical framework within which to apprehend development policies.* His fame and status, however, are sufficient to ensure that serious consideration should be given to further critiques and extensions of his argument.

Given that Sen himself says that "a misconceived theory can kill" (2000: 209), a more exhaustive critique of Sen's economic philosophy, and of the philosophy implicit in development economics, is still required.

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New thinking on poverty:
Implications for globalisation and poverty reduction strategies

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Abstract
Three main changes in thinking about poverty have gained increasing currency over the past decade. First, the concept of poverty has been broadened. This is reflected in the move from a physiological model of deprivation to a social one, and subsequently, in the increasing attention afforded issues of vulnerability, inequality and human rights. Second, the causal structure has been *broadened* to include a range of causal variables which previously received little attention. These have been phrased as 'forms of capital' and include social, political, cultural, coercive and environmental capital. Third, the causal structure has been *deepened* to focus on flows of individuals into and out of poverty, rather than on changes in the stock of poverty, and on strategies of social protection vs. poverty reduction. The paper reviews these changes as well as their implications for globalisation and policy.

1. Introduction and caveats

> “. . . progress on poverty has been achieved by pursuing a strategy that has two equally important elements. The first element is to promote the productive use of the poor’s most abundant asset - labour. It calls for policies that harness market incentives, social and political institutions, infrastructure and technology to that end. The second is to provide basic social services to the poor. Primary health care, family planning, nutrition and primary education are especially important . . . a program of well-targeted transfers and safety nets [is] an essential complement to this basic strategy.”
> (*World Development Report 1990*: *The 2.5 point Strategy*; World Bank 1990, 3).

> “The new evidence and broader thinking do not negate earlier strategies – such as that of WDR 1990. But they do show the need to broaden the agenda. Attacking poverty requires actions that go beyond the economic domain . . . Acknowledging the need for a broader agenda, this report proposes a general framework for action in three areas:
>
> > Promoting Opportunity: expanding economic opportunity for poor people by stimulating overall growth and by building up their assets and increasing the returns on those assets.
> > Facilitating Empowerment: making state institutions more accountable and responsive to poor people, strengthening the participation of poor people in political processes and local decision-making and removing the social barriers the result from distinctions of gender, ethnicity, race and social status.
> > Enhancing Security: reducing poor people's vulnerability to ill health, economic shocks, policy-induced dislocations, natural disasters, and violence, as well as helping them cope with adverse shocks.”
>
> (*World Development Report 2000: Opportunity, Empowerment and Security*; World Bank 2000).

Something has changed in the discourse on poverty. The above two quotes are from the World Bank's flagship annual *World Development Reports*. The 1990 and 2000 versions of the *World Development Report* focused on poverty. The 1990 report presented the so-called 2.5 point strategy based on labour-intensive growth, social sector investments and transfers/safety-nets for those excluded. The 2000 report does not repudiate the 1990 vision but broadens it, using the language of opportunity, empowerment and security. The rhetoric has indeed changed.

Arguably this change in rhetoric reflects three main changes in thinking about poverty which have gained increasing currency over the past decade.

First, the concept of poverty has been broadened. This is reflected in the move from a physiological model of deprivation to a social one, and subsequently, in the increasing attention afforded issues of vulnerability, inequality and human rights. Section 2 reviews these changes.

Second, the causal structure has been *broadened* to include a range of causal variables which previously received little attention. These have been phrased as 'forms of capital' and include social, political, cultural, coercive and environmental capital. Section 3 reviews these changes and discusses their relevance in the context of globalisation.

Third, the causal structure has been *deepened* to focus on flows of individuals into and out of poverty, rather than on changes in the stock of poverty, and on strategies of social protection vs. poverty reduction. Section 4 reviews recent empirical findings associated with the focus on flows and discusses the implications for globalisation.

There are at least four caveats which should be kept in mind when reviewing the analysis.

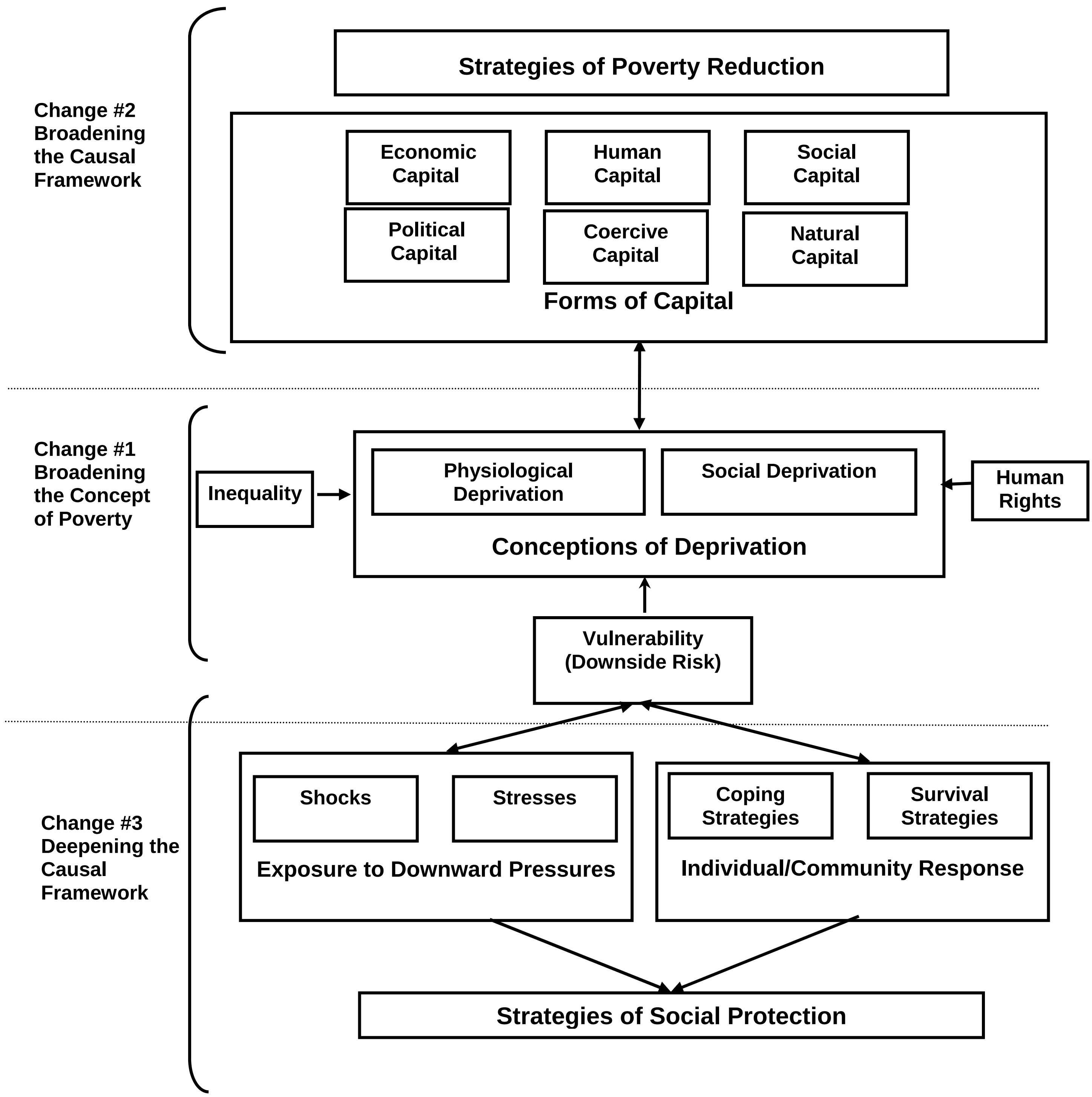
First, the above changes are 'new' only in the sense that they are now being increasingly incorporated within the 'mainstream' discourse on poverty. All of the underlying ideas, however, are quite old, and have appeared in different guises over the years.

Second, the opening quotations from the World Bank's *World Development Reports* were used because they provide good statements of the major changes in thinking about poverty. This does not imply that the World Bank spearheaded most of these changes, which it did not. Further, it doesn't imply that the World Bank has taken the lead in putting these changes into practice, which remains to be determined.

Third, diagrams are used throughout to visually present the major points in the paper. These can be skipped without loss for those who prefer the textual exposition.

Fourth, the paper is written with the developing world in mind. Some of the ideas may generalise more broadly but the examples and illustrations all relate to the experience of poverty reduction in this region.

Figure 1: New Thinking on Poverty: Three Changes



2. Broadening the concept of poverty

The concept of poverty has undergone at least four changes over the past decade:

First, there has been a shift form a *physiological model of deprivation*, focused on the non-fulfilment of basic material or biological needs to a *social model of deprivation model*, focused on such elements as lack of autonomy, powerlessness, lack of self-respect/dignity, etc.

Second, there has been renewed emphasis placed on the concept of vulnerability and its relationship to poverty (however defined).

Third, the concept of inequality, and its relationship to poverty, has re-emerged as a central concern.

Fourth, the idea that poverty should be conceptualised as the violation of basic human rights has been powerfully argued of late by UN system agencies, among others.

2.1. From physiological to social deprivation[1]

The physiological deprivation model has been the conception of poverty which underlies the most widely used approaches to poverty analysis in the developing world. The two main poverty approaches which rely on the physiological model are: the *Income/Consumption (I/C) Poverty approach* and *some versions* of the *Basic Human Needs (BHN) Approach*

The Income/Consumption (I/C) Approach[2]

> A person is poor in any period if, and only if, her or his access to economic resources is insufficient … [to] acquire enough commodities to meet basic material needs adequately (Lipton 1997, 127).

The I/C approach to poverty is used extensively in applied welfare economics. The approach combines two distinct elements: first, well-being is conceived as preference fulfilment and represented in terms of 'equivalent' income or consumption (money metric utility); second, an income/consumption poverty line is drawn which represents a need adequacy level. The 'poor' are those whose income or consumption falls below this poverty line. Poverty may be conceived of as non-fulfilment of 'basic' preferences.

The physiological deprivation model underlies the specification of the poverty level. While there are different ways to derive this poverty line, two techniques are in widespread use. The first, the food energy method, estimates a food energy minimum required to satisfy dietary energy (caloric) requirements and then determines the level of income/consumption at which this minimum is *typically* met. The second, the food-share method, estimates the minimum cost of a food basket which satisfies the food energy minimum and multiplies this by

[1] See Ruggeri Laderchi et. al (2003) for a comparative analysis of the approaches to poverty found in this section.

[2] See, *inter alia*, Lanjouw (1997) Lipton (1997), Ravaillon (1994), Ruggeri Laderchi (2000), Streeten (1998).

the non-food share in total consumption of a sub-group classified as poor (e.g. the bottom 20% of the distribution). While both of these approaches allow for more than simply dietary energy needs (food consumption), they are anchored on the physiological deprivation model.

The Basic Human Need (BHN) Approach[3]

> Basic needs may be interpreted in terms of minimum specified quantities of such things as food, clothing, shelter, water and sanitation that are necessary to prevent ill health, undernourishment and the like … (Streeten et. al. 1981, 25)

The BHN approach reached the height of its popularity in the 1970s though have made a come-back lately in the form of the Millennium Development Goals. While there are a number of different versions of the BHN approach, a prominent variant affords primacy to basic physiological deprivation. Deprivation is conceived of as inadequate fulfilment of a number of different basic needs relating to nutrition, health, education, shelter, water, sanitation, etc. The BHN approach differed from the I/C approach to poverty in three ways: first, it usually specifies a complete basket of basic need goods/services (food, health, education, water, sanitation, etc.) or related achievements (nutrition, life expectancy, mortality, etc.) rather than relying on the indirect methods of the FEM and FSM approaches to determine non-food needs; second, it represents relevant aspects of well-being in terms of the different need goods/services or achievements (or in some cases a composite indicator) but not in terms of equivalent income/consumption; third, it sets an adequacy level for each of the different need goods/services instead of specifying an income/consumption poverty line based on dietary energy adequacy.

The social deprivation model challenges the physiological deprivation model on two different levels: first, it rejects the representation of relevant aspects of well-being in terms of equivalent income/consumption (I/C approach) or basic need goods/services and achievements (BHN approach); second, it rejects the specification of a need adequacy levels in terms of basic physiological deprivation in both I/C and BHN approaches. In practice, these two critiques coalesce because reliance on non-physiological components of well-being often precludes exclusive reliance on a physiologically-based need adequacy level.

Of the many different formulations of the social deprivation model, three are particularly relevant to the developing world.

Human Poverty Approach[4]

> It is in the deprivation of the lives that people can lead that poverty manifests itself. Poverty can involve not only the lack of the necessities of material well-being, but the denial of opportunities for living a tolerable life. Life can be prematurely shortened. It can be made difficult, painful or hazardous … deprived of knowledge and communication … robbed of dignity, confidence

[3] See, *inter alia*, Gasper (1996a, 1996b) and Streeten (1981; 1984),
[4] See UNDP (1996, 1997).

> and self-respect… All are aspects of poverty that limit and blight the lives of many millions in the world today (UNDP 1997, 15)

The Human Poverty approach has been advanced recently by UNDP in its Human Development Reports. The approach draws heavily on the conceptual framework provided by Amartya Sen. Sen conceptualises poverty or deprivation in terms of the absence of certain basic capabilities to function.[5] Sen's underlying idea is that poverty should include both what we feasibly could or could not do (the capability set), the commodity requirements of these capabilities which differ interpersonally and over time, and what we are or are not doing (functionnings). UNDP draws on this conceptual framework and proceeds to specify some of the basic capabilities in question. It includes the capability to 'lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity self-respect and the respect of others' (UNDP 1997, 15).

Social Exclusion Approach[6]

The Social Exclusion approach has recently been propounded by the International Institute for Labour Studies at the ILO. As a conceptualisation of poverty or deprivation, it comes very close to the 'relative deprivation' conception of poverty expounded, *inter alia*, by British sociologist Peter Townsend.[7] The underlying idea is that poverty or deprivation is best regarded as lack of resources required to participate in activities and enjoy living standards which are customary or widely accepted in society. The Social Exclusion approach connects poverty closely with issues of citizenship and social integration and their associated resource requirements.

Participatory Approach[8]

> … deprivation and well-being as perceived by poor people … question the degree of primacy often attributed to income-poverty… Income matters, but so too do other aspects of well-being and the quality of life - health, security, self-respect, justice, access to goods and services, family and social life … (Chambers 1995, 29)

The Participatory approach is really not a way of conceptualising poverty/deprivation as it is a means of determining who should do the conceptualising. It argues that conceptualisations of poverty and deprivation must follow an interactive process involving Participatory Poverty Assessment (PPA) facilitator and local people engaged as participants in dialogue. It is an example of the social deprivation model, however, because local definitions of deprivation often go beyond physiological deprivation and sometimes afford greater weight to social than physiological elements of deprivation. Elements of deprivation which often figure prominently in the PA approach in lack of dignity, self-respect, security, justice, etc.

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[5] See, in particular, Sen (1984, 1987, 1993, 1999) as well as critical assessments by Gasper (2000 , 2002) and Alkire (2002).

[6] See the series of articles in Rodgers et. al. (1995) and de Haan (1997) as well as critical assessments by Sen (2000) and Saith (2001).

[7] Townsend (1979, 1985).

[8] See, *inter alia*, Chambers (1983, 1995, 2006), IIED (1992), Narayan et. al. (1999) and Ruggeri-Laderchi (2001).

1.2. Vulnerability

Vulnerability is not poverty, however defined.[9] It is the likelihood of falling into poverty or falling into greater poverty. This may be phrased as 'downside risk.' Vulnerability is a function of two main variables: ***exposure*** and ***response*** to downward pressures. Downward pressure are sometimes referred to as stresses and shocks, the former gradual and cumulative and latter sudden and unpredictable. The relatively recent attention given to the concept of vulnerability, *within the discourse on poverty*, is due to at least three considerations: 1) the fact that vulnerability is often cited as a major concern in participatory poverty assessments; 2) the recent availability of panel data which allows one to track individual households over time; 3) the Asian crisis which brought out starkly the dire social consequences of vulnerability in countries which had fared quite well in reducing long-term chronic poverty.

The emphasis on vulnerability is very closely linked with the third change in thinking about poverty discussed in Section 4, the 'deepening' of the causal framework. The policy consequences of a vulnerability-focused approach are discussed at length in this section.

1.3. Inequality[10]

Inequality is also different from poverty, however defined.[11] Inequality is usually concerned with the distribution of some well-being indicator (often, consumption or income) over an entire population. Inequality has been 'rediscovered' in recent years for a number of reasons including: 1) research results affirming that on average, the rate at which growth reduces poverty is higher, the lower the level of inequality (Ravallion, 1997); 2) a growing, though still inconclusive, body of evidence suggesting the higher inequality reduces the rate of growth (Aghion et. al. 1999); 3) the fact that some social ills, such as crime and conflict, appear to be a function of inequality and not 'absolute' poverty levels (Bourguignon, 1998); 4) the rapid rise in inequality in some OECD, transition and developing countries in recent years (Cornia 1999); 5) the apparent increase in global income inequality in recent years (though this is sensitive to the time frame and measurement assumptions (Milanovic 1999, 2005).

The policy implications of the dual focus on inequality and poverty relate to disentangling the relationship between inequality reduction, poverty reduction and growth. In practice, this entails examining the distributional and growth effects of *specific policy measures* and, in cases of trade-off, making a decision about the relative importance to be afforded growth or equity objectives. Certain potential areas of trade-off will be highlighted in the text.

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[9] This is a somewhat arbitrary distinction given that vulnerability often figures as a major dimension of deprivation in PPA findings. The distinction is useful however, as it does have operational significance.

[10] See in particular, Atkinson (1997), Kanbur and Lustig (1999) and Kanbur (2000).

[11] It is closely related to some measures of income/consumption poverty, such as those which base the poverty line on a percentage or mean or medium income, and also *causally* related to poverty. It is not the same thing however.

1.4. Violation of basic human rights[12]

> … a decent standard of living, adequate nutrition, health care and other social and economic achievements are not just development goals. They are human rights inherent in human freedom and dignity (UNDP 2000, 73)

The conceptualisation of poverty as the violation of basic human rights has received attention recently due largely to the efforts of UN System Agencies and human rights organisations. The case to conceive of poverty in human rights terms is largely due to the affirmation of the equal status of economic, social and cultural rights on one hand and civil and political rights on the other. Though economic, social and cultural rights appeared alongside civil and political rights in the 1948 Universal Declaration of Human Rights, they were subsequently separated in two Covenants adopted by the UN in 1966. The separation of the two sets of rights was driven largely by Cold War geo-political considerations with the Socialist bloc and allies favouring the former and the liberal democracies favouring the latter.

The language of human rights adds to the expanded *conceptualisation* of poverty the notion that poverty is the denial of an entitlement, a right which is unfulfilled. Many of the specific rights in question however, including the civil and political rights, already figure in some way in the expanded conception of social deprivation. For example, issues of discrimination and unequal treatment figure prominently in the social exclusion approach. For this reason, it is likely that the real value-added of the language of rights is to redirect attention to different types of tools, in particular legal and juridical, which may be used in the fight to reduce poverty. In addition, the language of rights may have an important motivational and empowering effect in the struggle to reduce poverty. This is due to the fact that rights, unlike preferences and (probably) needs, imply a claim and a duty for their fulfilment.

3. Broadening the causal framework

The second major change in thinking about poverty has been the *broadening* of the causal framework to include a range of causal variables which previously received little attention. This second change may be conceptualised in terms of broadening the 'forms of capital' which have figured in poverty analysis. Section 3.1 below explains what is meant by 'capital' and provides examples.

As discussion in the preceding section, the first major development in thinking about poverty dynamics has been the introduction of different forms of 'capital' into standard poverty analysis.

The present section outlines some of the policy implications, schematically depicted in Figure . It explores the evolution in thinking about poverty beginning with the poverty reduction strategy advanced by the World Bank in its 1990 World Development Report.

3.1. Causal variables: Forms of 'capital'

One way of thinking about causal variables, which has recently been applied in the poverty literature, is in terms of different forms of 'capital'.[13] The term 'capital' is being used in

[12] See Alston (1998), Maxwell (1999), Nickel (2005), Osmani (2005). Pogge (2002, 2007) and UN-OHCHR (2004), UNDP (2000).

the broadest sense as resources or assets which may be utilised to achieve social objectives, however defined.

A decade ago, standard analysis of poverty dynamics was based largely, if not exclusively, on economic and human capital. Over the past decade, five additional forms of capital have come to play an increasingly important role: social, political, cultural, coercive and natural capital. It is useful to briefly review the central characteristics of all seven of these forms of capital, schematically depicted in Figure 1.

1. **Economic Capital** corresponds broadly to those factors of production (land, labour, capital) which generate primary income[14] as well as economic assets (livestock, jewellery, etc.) and credit.
2. **Human Capital** refers to individual characteristics or attributes which are central for the achievement of human goals. A short list would include satisfactory levels of physical and cognitive development due to adequate health, nutrition and education.

3. **Social Capital**[15] refers to those social organisations, relationships and networks which facilitate co-ordination and management of extra-market and collective tasks and which provide critical support in times of crisis. Social capital relates closely to concepts of trust and reciprocity.

4. **Political Capital** comprises the network of informal and formal political alliances which provide access to resources and confer decision-making authority.

5. **Cultural Capital** includes those norms, beliefs and values which assign roles, confer status and determine entitlements and obligations of different social groups (based on gender, caste, age, ethnicity, etc.).

6. **Coercive Capital** which includes sources of violence, intimidation, force, etc., is a means of enforcing social norms and maintaining (at times, repressive) social relationships.

7. **Natural Capital** refers to the quality and quantity of the stock of available natural resources, including common property resources, and to the knowledge/skills required for natural resource management and conservation.

Changes in any one of the above forms of capital interact in complex ways with other forms of capital to constitute poverty-relevant social change. In many cases, changes in forms of capital are mutually supportive and promote the same social objective. For example, social mobilisation by scheduled caste members (social capital) to extricate themselves from repressive patron-client relationships may in turn have positive implications for cultural capital (status, roles) and coercive capital (fear, intimidation). Furthermore, there may be mutual

[13] The analysis of processes of social change in terms of forms of 'capital' is found in Bebbington (1999), Bevan and Ssewaya (1995), Bevan and Fullerton Joireman (1997) and Bourdieu (1986). Similar analyses are provided in Moser (1998), UNDP (1997) and the some of the 'entitlements' literature which uses the terminology of assets instead of capital (Gasper 1992; Swift, 1989).

[14] Primary income refers to income generated directly through the production and exchange of goods and services (Stewart 1985). It is transmitted through *markets,* in particular labour and product markets. It is distinguished from secondary income which refers to the distribution of income after taxation and benefits through public or private *transfers*. These include, *inter alia*, subsidised goods (food) and services (health, education), remittances, pension receipts, etc.

[15] Social capital has become a vogue concept and spawned a huge literature. See Woolcock (1998) for an overview and, *inter alia*, Narayan (1999), for its relevance to poverty.

reinforcing links between the different forms of capital and different underlying conceptions of well-being. For example, a positive change in economic capital (income) may effect a positive change in cultural capital (status) and political capital (decision-making authority). In cases such as these, analyses based on different forms of capital may very well lead to similar policy prescriptions (e.g. Grameen Bank-type social organisation for credit access).

There are cases, however, where the analyses either conflict or diverge, with implications for policy prescription. Three scenarios present themselves.

First, changes in forms of capital may have conflicting effects on each other and on different aspects of well-being. Thus, increases in economic capital (income) and corresponding declines in physiological deprivation may come at the expense of dignity, self-respect and social capital, if employment is particularly degrading or humiliating and if it undercuts existing social organisations or the capacity to organise (e.g. by reinforcing patron-client relationships.).[16]

Second, different emphasis may be placed on the relative importance of different forms of capital in promoting a given social objective even if they move in the same direction. Thus, the relative importance afforded say, economic (income) or human (nutrition) capital in promoting nutritional improvements may very well determine the types of intervention deemed appropriate.[17]

Third, different types of capital and different aspects of wellbeing may be unrelated. Thus, changes in cultural and social capital for the sake of ending practices such as slavery, rape, violence, etc. *may* bear little relation to changes in economic capital and economic aspects of well-being.

In all three of these cases, policy prescriptions derived from analyses of different forms of capital would differ. Section 3.2 provides other examples of different policy prescriptions generated by analyses of different forms of capital.

3.2. The 1990 approach: Economic and human capital

World Development Report 1990 heralded a major policy shift for the World Bank. Poverty reduction became the World Bank's overriding operational objective based on the dual strategy of labour-intensive growth and investment in human capital (health, education) with safety nets/transfers proposed for those excluded from growth. This position represented a widely held view of the main causal forces which would serve to reduce poverty in the years to come.

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[16] One example is provided by Jodha (1988) who analysed data on income and quality of life indicators in two villages in Rajastan, India in 1963-66 and 1982-84. He found that while villagers had become more 'income poor' over this time period, their overall quality of life had improved. Improvements were of five types: reduced reliance on traditional patrons and landlords; reduced dependence on low pay-off jobs; improved mobility and liquidity position; acquisition of consumer durables.

[17] This issue has come to the fore in the context of debates about calorie income elasticities. Some recent evidence has revised downwards conventional estimates of changes in caloric intake associated with an extra unit of income. One potential policy implication is that direct nutrition intervention may be preferable to income generation schemes as a means of improving nutritional outcomes (see, Alderman (1993) and Deaton (1997, Ch. 4) for reviews.).

This strategy is based on a physiological model of deprivation and on human and economic capital-based conceptions of social change. It is an amalgam of three different approaches to poverty reduction, the direct transfer, human capital and production function approaches, all of which will be discussed in turn.

3.2.1. Direct transfer approach/interventions

The Direct Transfer Approach to poverty reduction is the only one which doesn't rely on the above analyses of forms of capital. It is included, however, because of its importance as an anti-poverty strategy. This approach aims to transfer cash or in-kind income to the poor by providing subsidised goods and services or employment guarantees. As such, its primary benefit is realised directly by the transfer and not mediated by the above forms of capital (although second-order effects may work through these forms of capital if say, nutrition subsidies build human capital which increases productivity, etc.). This approach is situated within the purview of the physiological deprivation model. The objective of increasing (or smoothing) income levels of the poor and/or supplying basic goods and services (health, nutrition, etc.) is intended to facilitate basic preference fulfilment and/or basic need satisfaction.

The three main categories of direct transfer (safety net) interventions are: in-kind transfers; cash transfers and public employment schemes[18]. In-kind transfers are of four types: price subsidies, quantity rationing schemes, food stamps and nutrition interventions often targeted to the poor by food type (coarse grains, roots) or by characteristics of the recipient (geographic, gender, etc.). Cash transfer measures with a poverty focus include social assistance, such as old-age, widow or disability pension schemes, and family assistance programs. Public works schemes serve the function of creating or maintaining basic infrastructure (roads, irrigation, health, education, etc.) by providing employment for those facing chronic or seasonal underemployment or unemployment (see Box 2, below).

[18] See, *inter alia*, Gaiha (1994), Lipton (1996), Subbarao et. al. (1998) and the World Bank Web Page on safety nets www.worldbank.org/poverty/safety.

Box 1 - Public Works: Rules for Success in Poverty Alleviation[19]

Public works programmes have been widely used to reduce transient and chronic poverty and have significantly increased in scale over the past decade. Important programmes have been established in Bolivia, Chile, Honduras, Cape Verde, Botswana, Bangladesh and India. A number of the more important rules for success culled from the empirical record include:

1. Design Employment for Low Opportunity Cost: ensure availability during the slack season.
2. Use Self-Targeting: avoid administrative costs, leakages and political manoeuvrings.
3. Use Pro-Poor Rules: quick payment, nearness, crèches, timing of payments, etc.
4. Minimise Transaction Costs of Participation: including transport, bribes, registration, etc.
5. Ensure that Low Labour Demand Causes Poverty: surplus labour is a *sine qua non*.
6. Subsidise Coverage, not Wage Rates: to ensure sustainability and self-targeting.
7. Encourage Grassroots Pressure Groups: to monitor the scheme and prevent corruption.

3.2.2. Human capital approach/interventions[20]

The Human Capital approach to poverty reduction focuses on the links between investment in education, health and nutrition and the primary incomes of the poor. Emphasis is placed on the interrelationships between these variables as well as their relative importance in explaining changes in productivity. The human capital approach is the straightforward application of the analysis of human capital-based analysis of social change. This approach is closely related to the physiological deprivation model insofar as the primarily objective is to increase basic preference fulfilment by increasing primary incomes to increase basic needs satisfaction directly by social service provision.

Major expenditure items for human capital interventions are education and health with smaller allocations to nutrition and water/sanitation.[21] Poverty-focused education interventions have concentrated on rural-based primary education, basic literacy programmes, overcoming gender biases in education access, etc. Pro-poor health interventions have emphasised rural primary health care on a community-based rehabilitation (CBR) model, access to pre and post natal care, immunisation programmes, population and family planning programmes, etc. Pro-poor nutrition interventions have focused on oral rehydration therapy, de-worming, nutrition surveillance and growth monitoring. Poverty-focused water and sanitation interventions include urban slum improvements (water lines, drainage and waste disposal systems) and community-managed rural water supply provision (hand pumps). In most cases, poverty-focused social expenditure involves some sort of targeting mechanism (e.g. geographic) with a view to facilitate disproportionate benefits for the poor (see Box 3 below).

[19] This discussion is an adapted version of Lipton (1996).
[20] See Behrman (1990), Jimenez (1985) and Strauss and Thomas (1998) for reviews.
[21] See, *inter alia*, UNICEF (1991), WB (1990, 1992).

Box 2 - Political Economy of Poverty Targeting[22]

Are targeted poverty reduction interventions preferable to universal programs? The answer depends on a host of factors including disincentive effects as well as administrative, leakage and political costs associated with targeting. Of late, political-economy considerations have received increased attention. Analysts of very different political persuasion (e.g. public choice theorists and Marxists) have argued that targeted interventions are unlikely to work because they will not generate or maintain the requisite political support from powerful social groups who do not reap direct benefits from them. This argument, while plausible in many cases, is overstated. It does not hold in situations where: 1) powerful social groups view poverty targeting to be in their own interest; 2) the state is ideologically committed to poverty reduction. The relative costs and benefits of targeting, then, cannot be determined in the abstract and must rely on careful analysis on a case by case basis.

3.2.3. Production function approach/interventions[23]

The Production Function approach to poverty reduction focuses on those mechanisms which increase the primary income of the poor. Emphasis is placed on factors which increase the level or price of output and/or the returns received by poor producers. The analysis is based on the idea of a production function whereby output is a function of factors of production (land, labour and capital[24]) and technology. Increasing output entails increasing the volume, distribution, productivity, or changing the relative prices, of factor inputs. The Production Function approach is based *primarily* on the analysis of economic capital, and secondarily on human and (perhaps) social capital. It evinces a close affinity to the Income/Consumption variant of the physiological deprivation model, in so far as the primarily objective is to increase basic preference fulfilment by increasing primary incomes.

Production function interventions centre on changing factor inputs (land, labour, physical capital and financial capital) to increase the level or price of output of the poor. Table 1 lists six ways that these three inputs may contribute to raising output: 1) increasing input volume; 2) improving factor distribution holding volume constant; 3) increasing factor productivity; 4) pro-poor increases in factor productivity; 5) reducing price of inputs bought by the poor; 6) increasing the price of outputs produced intensively with inputs used by the poor. The resulting poverty interventions presented in Table 1 are summarily discussed below.

Land

Rural land-based poverty interventions include: settlement schemes, land reform, land tenure reform, technological change (high yielding varieties), subsidised input packages (fertiliser, seeds) and increased producer prices. The corresponding urban interventions include: land title reform (including squatters rights); urban boundary expansion; multi-story construction and site and service programmes.

[22] See, in particular, Besley and Kanbur (1993), Gelbach and Pritchett (1997), Moore (1999) and van de Walle (1998).
[23] Ray (1998, Chs. 11-14) provides a good overview.
[24] For the present purposes, capital is comprised of physical capital and financial capital (credit). Credit is not an input in production but it is often included as an operational part of the production function approach.

Labour

Labour-based poverty interventions include: increasing employment information; increasing participation rates (crèches, population policy); eliminating barriers to entry (anti-discrimination legislation); improving workplace health and safety; developing labour-using techniques of production; supporting small and medium enterprise (SME) development, esp. in rural non-farm and urban informal sectors. More direct labour market interventions include minimum wage legislation and child labour legislation.

Physical capital

Physical capital-based poverty interventions in rural areas include provision of: irrigation, all-weather roads, tubewells; small asset subsidies and marketing support for micro-enterprises. The urban variants place particular emphasis on support for SMEs either by reducing state corruption and red-tape or by active support (subsidised consulting).

Credit (Financial capital)

The principal credit-based poverty interventions support increased credit provision to the poor groups in any of the following ways: by promoting Grameen-bank type initiatives; by developing pro-poor banking within the existing banking system; by providing credit as part of SME support.

Box 3 - Credit: Rules for Success in Poverty Alleviation[25]

Provision of microcredit has recently received considerable attention as a means of reducing poverty. The renewed emphasis on credit has been spurred by exceptionally high repayment rates achieved by a number of development finance institutions, notably the Grameen Bank. Recently, some of the allegedly beneficial consequences of microfinance provision for women and the hard-core poor have been questioned (Hulme and Mosley, 1996), as have some claims of financial sustainability, targeting accuracy and income/consumption gains due to participation (Morduch, 1999). In addition, some maintain that micro-credit distorts financial markets and leads to unsustainable debt (Adams and Pischke, 1992). Nevertheless, micro-credit has undoubtedly realised some successes in poverty alleviation. A number of the more important rules for success in credit provision culled from the empirical record include:

1. Respect Fungibility: allow multiple uses of loans.
2. Use Indirect Targeting: avoid administrative costs, leakages and political manoeuvrings.
3. Seek Alternatives to Physical Collateral: e.g. group lending/peer monitoring
4. Minimise Transaction Costs of Participation: e.g. paperwork, bribes, repeated visits, etc.
5. Avoid Lending Monopolies: avoid regressive credit rationing and reduced credit supply.
6. Ensure that Extra Credit is Productive: i.e. opportunities for income generation exist.
7. Subsidise Administration, not Interest: avoid reduced credit supply (by alternative lenders), expropriation of credit by wealthy borrowers, negative real interest rates, etc.

[25] Most of this discussion is adapted from Lipton (1996).

Table 1 The Production-Function Approach

	Inputs			
	Land	**Labour**	**Capital**	**Credit**
↑ **Input Volume**	**Rural** Settlement Schemes	**Rural** Population policy; Crèches, employment info.	**Rural** Non-farm capital; Irrigation; Infrastructure	**Rural** ↑ public supply or incentives to lending
	Urban Land title reform; ↑ Urban boundary	**Urban** Same as Above	**Urban** Infrastructure; Water/Sanitation	**Urban** Same as above
Input Redistribution	**Rural** Land Reform	**Rural** Anti-discrimination laws (women, caste members etc)	**Rural** Capital for landless (e.g. tubewells)	**Rural** Pro-poor lending (via quotas or incentives)
	Urban Squatter's Rights	**Urban** Same as above	**Urban** Producer co-ops;	**Urban** Loan pools/co-ops among the poor
↑ **Input Productivity**	**Rural** Technology Tenure Reform	**Rural** Public Health and Safety Buses to Work	**Rural** Improved Irrigation delivery	**Rural** Tech. assistance/ training for lenders/ borrowers
	Urban multi-story construction	**Urban** Same as Above	**Urban** Public Goods; Information re. marketing etc.	**Urban** Same as above
↑ **Pro-Poor Input Productivity**	**Rural** Technology on poor peoples' crops (e.g cassava)	**Rural** Extension for labour tasks (time-saving)	**Rural** 'Barefoot management consultants'	**Rural** NGO-based credit user groups,
	Urban Site and Service Programmes	**Urban** Labour-using techniques of production	**Urban** Support for SMEs and informal sector Anti-corruption	**Urban** Tech. Assistance to poor borrowers/ development banks
↓ **Input Prices for Products of Poor**	**Rural** Micro-packaged fertilisers, seeds	**Rural** Labour-using technical change	**Rural** Subsidies for small asset purchases	**Rural** Poor-selective capital/interest subsidies
	Urban ↓ cost of land-	**Urban** ↓ gap btn. Cost	**Urban** n/a	**Urban** Public program

	intensive activities	of labour and wages		of loan guarantees
↑ Output Price for Products of Poor	**Rural** ↓ implicit/explicit agricult. Taxation	**Rural** Information for seasonal migrants	**Rural** Marketing co-ops for family micro-enterprises	**Rural** Credit linkage to coop production/ marketing
	Urban ↑ price of land-intensive products of the poor	**Urban** ↑ price of labour-intensive products of the poor	**Urban** Assistance to market co-ops and SMEs	**Urban** ↑ price of capital-intensive products of the poor
Source: Adapted from Herrick (1994) and Lipton and Ravaillon (1995).				

3.3. Broadening the framework: political, social, cultural and coercive capital

The past decade has seen the broadening of the World Bank's 2.5 point strategy of poverty reduction. The inclusion of social, political and cultural capital into the analysis of poverty is reflected in the increasing importance afforded issues which have come to fall under the heading of 'governance'.

Governance is a term that is used differently in different contexts.[26] It has been defined in technocrat terms to refer to public sector management issues (e.g. civil service rationalisation, public enterprise management, public financial management, results-base management), in public policy terms to refer to publicly-supplied prerequisites of market functioning (private property, enforceable contracts, transparent dispute adjudication mechanisms), etc. The present definition is concerned with different issues. In its present use, governance embodies three basic principles: *inclusiveness, lawfulness and accountability.*

3.3.1. Governance-I approach/interventions: Promoting inclusiveness[27]

Inclusiveness requires that governing structures, either formal or informal, be representative of, or give voice to, a wide range of diverse interests, including those of the poor. It presupposes that deprivation and impoverishment are due to exclusion from effective decision-making authority and seeks to redress this by *empowering* groups which have been historically disenfranchised. As such, inclusiveness relates closely to issues of empowerment (conscientisation and social mobilisation), participatory democracy, civil society organisation (including the role of NGOs and the media), and decentralisation. Inclusiveness bears a close relationship to social, political and cultural capital and to aspects of well-being/social deprivation related to agency, self-determination, dignity, self-respect and social integration.

Empowerment

Empowerment interventions subdivide into those which address *internal* and *external* sources of power.[28] The internal dimension of power consists of internalised beliefs, norms

[26] See Hyden et. al. 2004..
[27] See, *inter alia*, Goudie 1998, Moore and Putzel 1999, Schneider 1999, World Bank 1994.
[28] See, *inter alia*, Kabeer (1994), Rowlands (1997) and G. Sen (1997).

and values which serve to maintain subordination within a social hierarchy. *Internal empowerment* is a process of questioning the validity of existing norms and beliefs and of raising awareness of possibilities hitherto considered unthinkable. There are a range of potential interventions aimed at conscientisation which depend on the nature of the power relations in question. (see Box 5 below).

Box 4 - Internal Empowerment through Education[29]

The Mahila Samakhya programme launched in 1986 is India's National Policy on Education. The express intent of the programme is to raise awareness among women of their position in a gender-based social hierarchy. The aim is for women to demand literacy on their own as their social awareness increases. The process involves mobilising women in groups at the village level to collectively demand access to services and resources. Apparently, the program has been successful at raising the esteem and self-confidence of women with beneficial spin-offs. In the words of a programme worker: 'women are increasingly confident of tackling their issues independently … a woman whose husband was a chronic drinker, had sold virtually everything in the house to buy drink … She mobilised the entire village, and picketed the four liquor shops in the village. They said that they would not allow a single drop of liquor to be sold in that village.'

External empowerment is a process of gaining control over important aspects of ones life usually through collective processes of organisation and mobilisation.[30] External empowerment directs attention to the objective of building social and political capital through collective organisation and mobilisation. External empowerment may serve a range of ends including access to credit, land or health, protection of rights of women/caste members, liberation of slaves and indentured labour, etc. Complementary poverty interventions include support for those grassroots, local and non-governmental organisations, etc. which focus on improving living conditions of marginalised groups (see Box 6 below).

[29] This example is from G. Sen (1997).
[30] See *inter alia*, Esman and Uphoff (1985), Riddell and Robinson (1995), Uphoff (1988).

Box 5 - External Empowerment through Political Organisation[31]

Nijeri Kori is a Bangladeshi NGO which has had success in building the social and political capital of the poor. It argues that the exclusion of the poor from access to public entitlements (unclaimed land, public works schemes) is a function of their lack of political power. It emphasises development of organisational capacity through activities which include training in human and skill development, legal-assistance and collective mobilisation. Mobilisation efforts by Nijeri Kori Groups have been directed at raising the agricultural wage, resisting the expropriation of unclaimed lands by powerful landlords, joint occupation and cultivation of such lands, publicising government corruption, etc.

Decentralisation

Decentralisation has figured prominently in recent years as one means of promoting inclusiveness by bringing decision-making structures closer to local people.[32] Some proponents of decentralisation argue that the process may serve to reduce poverty insofar as local governing structures are more likely to be responsive to the needs of their poor constituents. There are at least three different variants of decentralisation which aim to achieve this objective:

- *deconcentration*, or the shifting of functions within the federal government hierarchy to field offices.
- *delegation,* or the transfer of state functions to non-state or quasi-state actors
- *devolution*, or the transfer of state functions to sub-national governments

Recent evidence, however, suggests that decentralisation does not necessarily benefit the poor. The alleged link between increased local governance and pro-poor outcomes is mediated by a number of variables, many of which are absent in unsuccessful experiences of decentralisation. (see Box 7 below).

[31] This example is from Kabeer (1994).
[32] See, *inter alia*, Crook and Sverrisson (1999), OECD/DAC (1997), Moore and Putzel (1999) and UNDP (1998).

Box 6 - Is Decentralisation Pro-Poor?[33]

A recent evaluation of twelve cases of decentralisation in Asian, Latin America and sub-Saharan Africa examined the effects of decentralisation on representation/ participation of the poor and on social and economic outcomes. It found only one unambiguous success (West Bengal, India), and six unambiguous failures (Ghana, Côte d'Ivoire, Bangladesh, Kenya, Nigeria, Mexico). On the basis of this analysis, the authors identified three main factors which accounted for the difference in performance:

Political Economy Issues: Successful decentralisation required the confluence of central and local level commitment to pro-poor reform, out of ideological commitment or for political gain, including the willingness to challenge local elites seeking to capture program benefits. Where decentralisation is a conduit for political patronage from central authorities and/or where local elites are insulated from the demands of the poor, outcomes are unlikely to be pro-poor.

Financial/Administrative Support: Necessary inputs for successful decentralisation included adequate financing from central authorities, targeted central poverty programs or social funds and administrative capacity to take on newly acquired responsibilities.

Time Commitment: Successful decentralisation requires long-term support as benefits take time to materialise. The successful West Bengal example has evolved over a twenty year period.

3.3.2. Governance-II approach/interventions: Promoting lawfulness

Lawfulness requires that governing structures abide by the rule of law and serve as guarantors of lawful civil conduct. It grounds deprivation and impoverishment in the perverse functioning of the legal system which either fails to protect, discriminates against or remains inaccessible to poor groups (see Box 1). Lawfulness relates closely to issues of justice, conflict resolution, criminality, peace and security, social violence (including domestic violence), human rights, etc. Lawfulness bears a close relationship to coercive, social and political capital and to aspects of well-being related to personal security.

A short-list of potential interventions to address problems of lawlessness may include[34]:

- Legal/Judicial Reform (e.g. eliminating anti-poor laws, reducing legal technicalities, etc.)
- Improving Access to Legal Information and Legal Literacy (e.g. support for legal advocacy NGOs)
- Police Reform (e.g. community policing and training)
- Conflict Mediation and Resolution
- Human Rights Legislation/Support
- Domestic Violence Education/Awareness Campaigns.

[33] This example is based on Crook and Sverrisson (1999).
[34] See, *inter alia,* Anderson (1999), Messick (1999), Narayan et. al. (1999), OECD/DAC (1997).

Box 7 - Lawlessness and Poverty

The relationship between lawlessness and poverty has been understated in the poverty literature. One recent exception is Anderson (1999) who outlines a number of mechanisms by which lawlessness and poverty reinforce one another:

1. Violence by police, prison officers and other public officials has it greatest impact upon the poor, leading to death, injury, permanent disability or mental illness.
2. Corruption disproportionately harms the poor who are less able to afford premiums demanded for service provision.
3. Human rights abuses, official harassment, police abuse, etc. may disproportionately affect the poor who are less likely to have recourse to legal remedies
4. The poor are more vulnerable to arbitrary treatment, intimidation and humiliation by public officials.
5. The poor are at greater risk of losing their property to public or private theft.

Significantly, personal insecurity due to lawlessness (violence, domestic violence, crime, official harassment) is consistently an element of deprivation which figures prominently in participatory poverty assessments (PPAs). Recent reviews of PPA results conducted by the World Bank (Narayan et. al. 1999) and by independent researchers (Brock, 1999) have affirmed the critical important of lawlessness both as constituent of deprivation and cause of impoverishment or inability to escape poverty.

3.3.3. Governance-III approach/interventions: Promoting accountability

Accountability requires that governing structures remain answerable for their actions and open to sanction (including dismissal) if they violate say, principles of inclusiveness and lawfulness. It grounds poverty and deprivation in the culture of impunity which effectively precludes poor groups from holding authority figures to account. Accountability relates closely to issues of corruption, transparency, access to information, etc. Accountability bears a close relationship to social and political capital and to aspects of well-being related to agency.

A short-list of potential interventions to promote accountability may include:

- Electoral Reform (support for free elections)
- Legal Reform (enforcement of anti-corruption laws)
- Access to Information Promotion (support for the press, media, NGOs, and other social organisations who investigate and publicise corruption)
- Participatory Monitoring and Evaluation (e.g. citizen's report cards, social audits (see Box 8 below)).

Box 8 - Promoting Accountability through Social Audits [35]

The Mazdoor Kisan Shakti Sangathan (MKSS), or Association for the Empowerment of Workers and Farmers, in the Indian state of Rajasthan has pioneered a process to call local officials to accounts for their actions. The MKSS has convened a number of *jan sunwais*, or public meetings, during which official expenditure records from local authorities are read aloud to assembled villagers and local officials. Villagers are urged to highlight discrepancies between the official record and their own experiences as labourers in public works schemes, as consumers at local ration shops, or applicants for means tested poverty benefits. This form of 'social audit' has been effective in exposing significant sums earmarked for the poor which have been misappropriated by corrupt officials. The MKSS is an example of the potential for access to information *coupled with* social mobilisation as a tool for ensuring public accountability.

3.4. Globalisation and the broadened causal framework

What is the relevance of the broadening of the causal framework to globalisation? Globalisation is a term which is defined in different ways. Here, it will be used in its broadest sense to refer to the increasing interdependence and integration of the world's peoples and nations. It is a process with economic, social, political and cultural dimensions. It is reflected in increasing trade, labour and financial flows, growing technological exchange, as well as the increasing spread of norms and beliefs relating to political systems, cultural practice, legal and juridical forms, etc. There are at least three ways in which these forces of globalisation relate closely to the broadened causal framework of poverty.

First, one aspect of globalisation is the spread of democrat structures and the increasing attention given to civil and political rights. Many of the issues addressed in Section 3.3 on governance, including empowerment, legal and police reform, the right-to-information, etc. have been given impetus by this aspect of globalisation. They have also been explicitly linked to the poverty agenda by important donor agencies. The UK's Department of International Development writes in their white paper entitled 'Making Globalisation Work for the Poor' (pp. 26-27) that:

> Globalisation has been associated with a growth in democracy … and human rights … Making political institutions work for the poor means helping to strengthen the voices of the poor and helping them to realise their human rights. It means empowering them to make their own decisions … and it means removing forms of discrimination - in legislation and government policies - the prevent poor people from having control over their own lives. Governments must be willing to let people speak, and to develop mechanisms to ensure they are heard.

[35] This example is based on Jenkins and Goetz (1999a, 1999b).

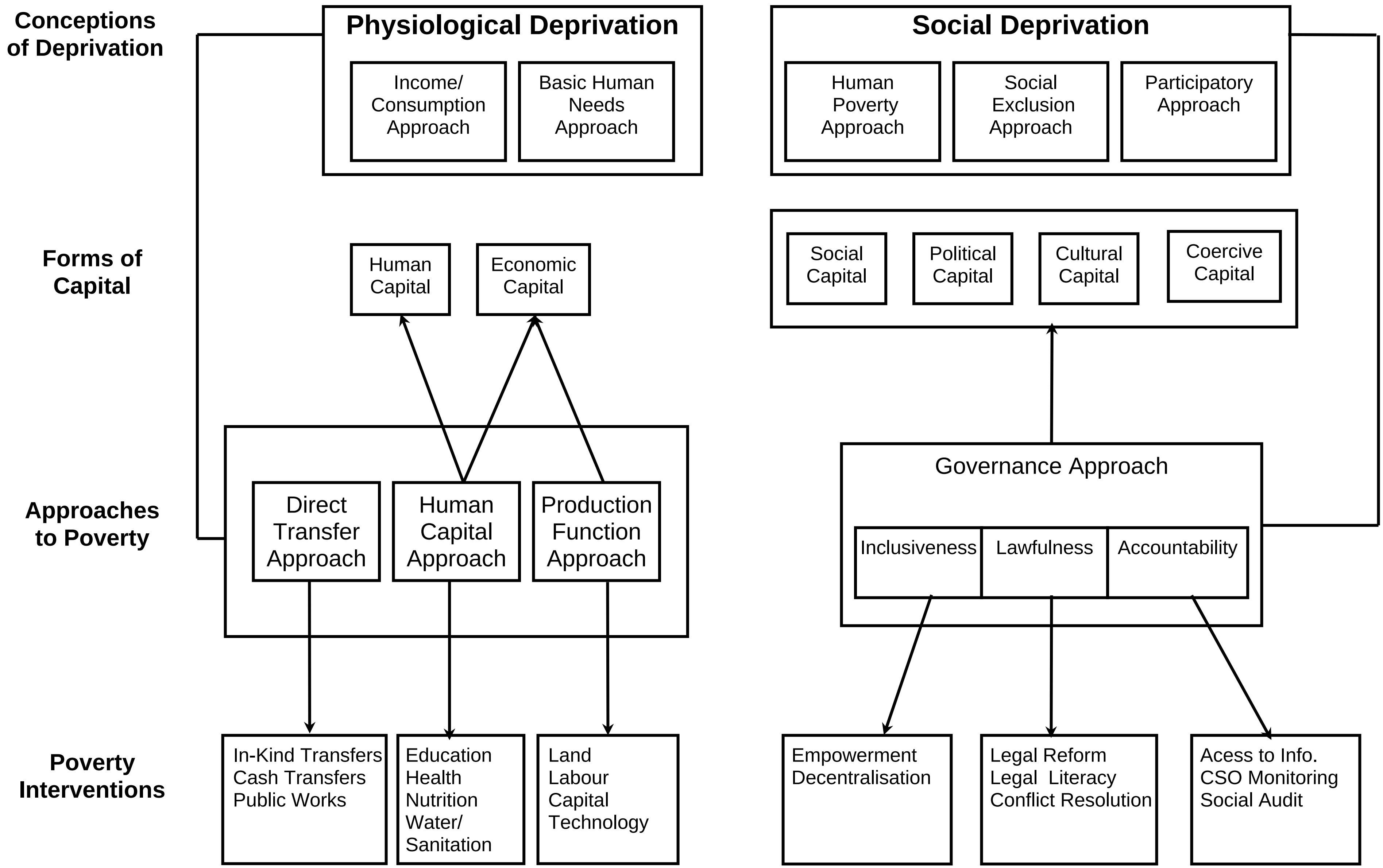
In this case, forces of globalisation accentuate the importance of political and social capital to poverty reduction. They also bring out the intrinsic importance of certain aspects of social deprivation, such as disempowerment, lack of agency, etc.

Second, the cultural critique of globalisation rests on the view that it is leading to the global dominance of 'western', and mainly American, consumption patterns, tastes and culture (Barber 1995, Escobar 1995). There is a fear that this process, which may very well increase material prosperity, is coming at the expense of the global diversity of cultural norms and practice. In this case, cultural capital is being degraded with negative consequences for certain dimensions of social deprivation.

Third, renewed attention has been placed on the relationships between globalisation, conflict and poverty. There are powerful forces of globalisation which have served to fuel or aggravate conflicts including: the global arms trade, the trade in precious metals which finance conflict, the global implications of the so-called 'war of terrorism', etc. Further the mutually reinforcing links between conflict and poverty has received considerable attention recent at the level of research[36] and operational practice (World Bank 1998, DFID 2000). In this case, issues of globalisation accentuate the centrality of coercive and political capital to poverty as well as the absence of peace and security as constituents of social deprivation.

[36] Both the World Bank and the World Institute for Development Economics Research (WIDER) have recently undertaken major research projects on this subject (Nafziger et. al. 2000; Collier 2000).

Figure 2 Poverty Reduction Strategies: An Overview



4. Deepening the causal structure

The third major change in thinking about poverty has been the deepening of the causal structure. This represents a shift in analytical focus from stocks of poverty to flows of individuals or households into and out of poverty. Section 4.1explains this distinction between stocks and flows of poverty. Section 4.2 discusses conceptual issues raised by 'deepening' the causal framework and explains the links between vulnerability and strategies of risk reduction or mitigation. Section 4.4 presents recent empirical findings on the relative magnitude and correlates of chronic and transitory poverty with a view to determine whether the distinction between stocks and flows matters for policy.

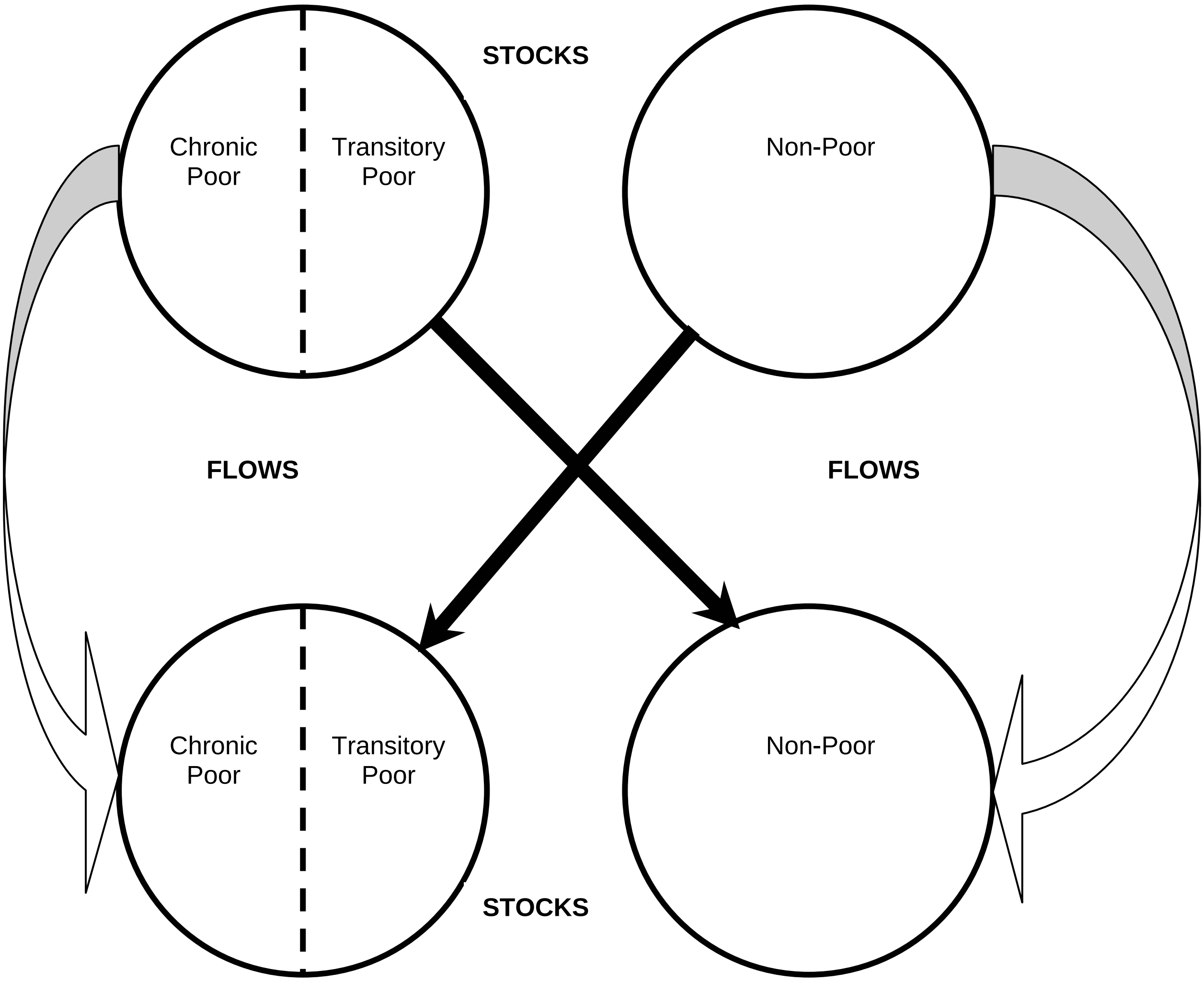
4.1. Stocks vs. flows of poverty

Figure 4 schematically depicts analytical differences between analyses of stocks and flows of poverty as well as the related distinction between chronic and transitory poverty. Two points are particularly important.

First, until very recently with the increasing availability of panel data, almost all analyses of poverty dynamics didn't explicitly distinguish between chronic and transitory poverty. In terms of analysis, the approach was to analyse correlates or determinants of the entire 'poor' circle depicted in Figure 4 (which including transitory and chronic poverty) at one or more points in time. This is the standard 'comparative static' analysis of stocks of poverty. Implicitly, this approach entailed a focus on causes and remedies for chronic poverty.

Second, analysis of flows tracks the same households over time. It allows one to determine if households: 1) stay poor; 2) escape from poverty; 3) enter into poverty or 4) stay non-poor. For policy purposes, it is crucial to determine whether the poverty problem stems from households who stay poor over time (chronic poverty) or whether it is due to large inflows of households into poverty (transitory poverty) who later escape. As discussed below, policies to deal with these two scenarios may be very different.

Figure 3 Stocks and Flows of Poverty

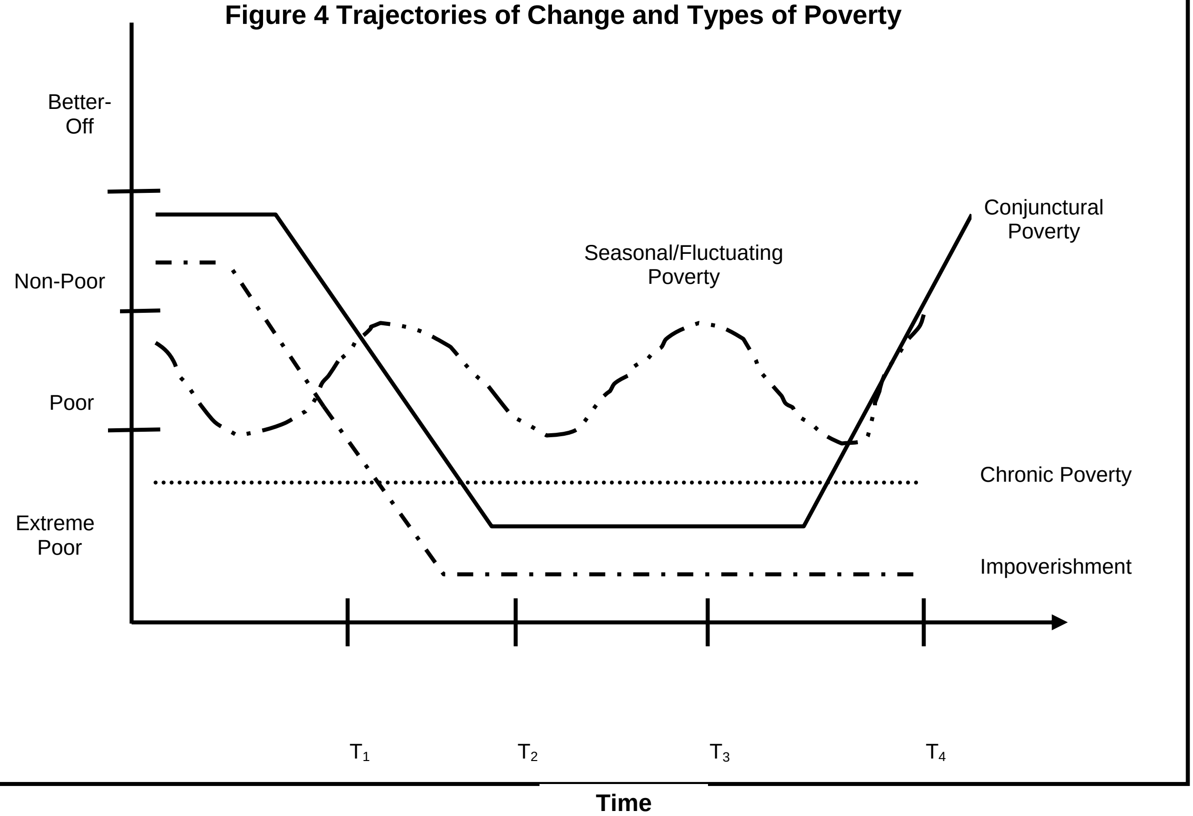


4.3. Unpacking flows[1]

It is useful to unpack the term 'flows of poverty' as a number of distinct processes are involved. This 'unpacking' exercise is also relevant for policy as appropriate instruments of social protection will differ according to the 'flows' in question. Figure 4 below provides a schematic depiction of a number of these processes

[1] This section is based on Shaffer (2003) which draws on Hulme et. al. (2001), Jalan and Ravallion (1998) and Yaqub (2000).

Figure 4 Trajectories of Change and Types of Poverty



Chronic poverty refers to the persistence of poverty over time. Social protection is often expressly designed to address one type of chronic poverty. This is the case of the long-term dependent poor who are unable to secure a minimal standard of living in the absence of some sort of social assistance. Often this applies to an economically inactive population, unable to work. Chronic poverty represents a long-term or permanent condition, which differs from other more transitory forms of poverty.

Impoverishment is a change in the permanent component of income or consumption. It reflects a dramatic fall in living conditions to a new long-term level. Some of the instruments to prevent impoverishment may be similar to measures designed to address transitory forms of poverty. When the *process* of impoverishment culminates in the *state* of chronic poverty different sorts of remedies will be relevant. Some are likely to be similar to those for the chronic, dependent poor.

Conjunctural poverty refers to increases in poverty due to circumstances which are likely to persist over the medium term. Examples include macroeconomic shocks, such as the Asian crisis, the situation facing transition countries as well as major lifecycle changes such as widowhood. The key issue here is that the duration and scale of social protection required is different than in the other situations discussed.

Fluctuating or seasonal poverty, ('Churning'), refers to income variability in 'normal' times, such as over the course of a season, or following frequent and repeated natural shocks. Once again, the nature, scale and duration of appropriate measures of social protection are likely to be different for this transitory form of poverty.

The distinction on the left hand side of the diagram between the non-poor, the poor and extreme poor is relevant for at least two reasons. First, extreme poverty is a condition which is likely to be qualitatively different from poverty, one for which the imperative to act is extremely strong (Lipton 1988). Second, affordability for poor people is an issue for certain types of social protection instruments with important differences between the poor and non-poor. Specifically, the poor are often excluded from contributory social insurance schemes, such as health, unemployment or disability insurance, because they are unable to afford the premiums or because they are unable to meet a regular payment schedule due to the irregular flow of income.

There are two important points about this discussion which should be noted. First, Figure 4 is a highly simplified account of the many processes of change relevant to social protection. In fact there are many variants of the above four processes. All can begin at different places on the graph and combine different trajectories. These four basic processes have been highlighted because there are important implications for social protection and because there are good empirical examples of each.

Second, to simplify, the focus has been on processes of change affecting income or consumption poverty. Much of the literature of social protection involves just such issues. The same analysis of different processes of change could apply, however, to nutrition, health or other aspects of deprivation.

4.3. Vulnerability and strategies of social protection[2]

As discussed above, the broadening of the causal structure over the past decade has led to the incorporation of different forms of capital within the context of a 'stock-centered' analysis of the dynamics of chronic poverty. Analysis focuses on those forces which increase, reduce or perpetuate the stock of poverty over the long term. Specifically, the underinvestment in, or perverse functioning of, different forms of capital is considered the root cause of poverty and the primary barrier to its reduction. The main operational objective is to devise long-term poverty reduction strategies which address these 'root' causes of chronic poverty.

The deepening of the causal structure shifts focus to transitory poverty and flows of individuals into and out of poverty. Unlike chronic poverty, the focal point is vulnerability or the likelihood of falling into poverty (however defined[3]). Alternatively, this may be phrased as 'downside risk.'
It is due to two main factors: exposure and response to downward pressures (Sinha and Lipton 1999). Downward pressures are sometimes referred to as stresses and shocks, the former gradual and cumulative and latter sudden and unpredictable (Chambers and Conway 1992). Six types of downward pressure are particularly important for the present discussion:

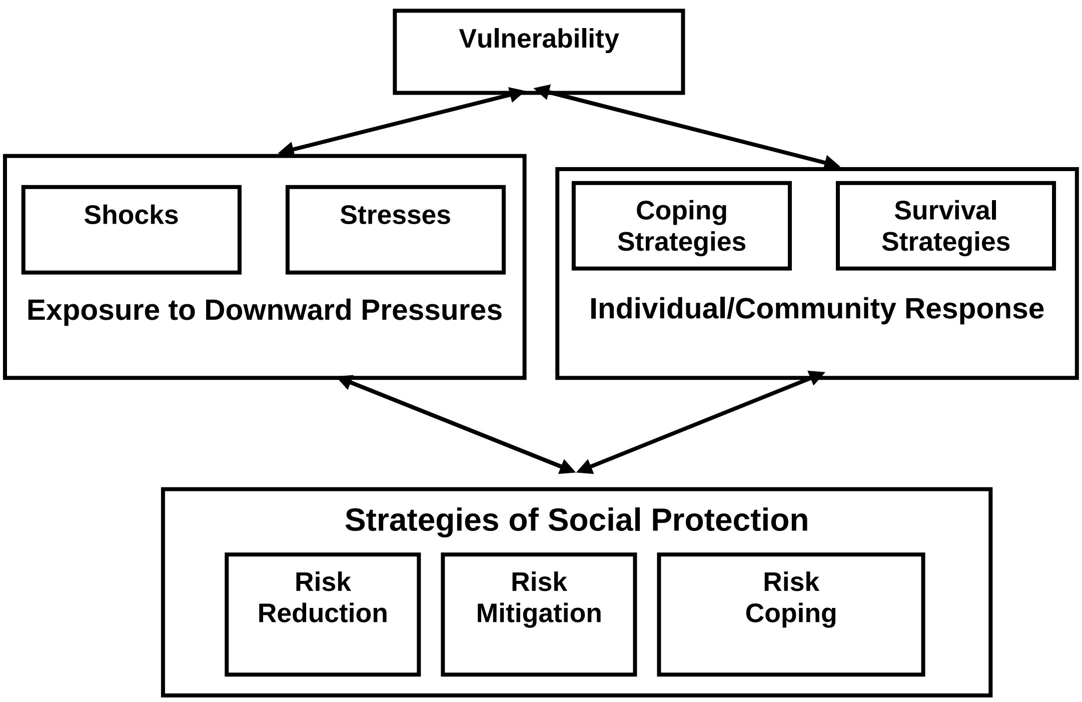
- illness;
- violence/conflict;

[2] This Section draws on Holzmann and Jorgensen (1999) and World Bank (2001).
[3] See Section 2.

- natural disaster;
- harvest failure;
- terms of trade deterioration;
- loss of employment.[4]

Exposure to downward pressure varies with the size, frequency, timing and bunching of the particular pressures in question, as well as one's spatial proximity to them. At the individual or community level, responses to downward pressures are often referred to as coping or adaptive strategies. They may include such mechanisms as borrowing from friends or neighbours, migration, selling assets, drawing on savings, etc. At a policy level, responses fall under the heading of social protection. As discussed below, an important distinction between social protection measures is where they are situated within this cycle of vulnerability.

Figure 5 The Cycle of Vulnerability



Risk reduction mechanisms are those which are taken in advance of a shock or stress. They aim to reduce the likelihood that it will occur. Examples include macroeconomic policy measures to reduce the risk of currency crises (e.g. not having a seriously overvalued exchange rate) and labour standards which reduce the risk of injury due to unsafe working conditions or unemployment due to arbitrary dismissal.

Risk mitigation measures are taken in anticipation of a shock with a view to minimise its deleterious consequences. At the individual or community level, they are many informal mechanism of risk mitigation including diversification of sources of income, choosing large

[4] Sinha and Lipton (1999) maintain that these six account for approximately ninety percent of downward fluctuations in poor people's income and consumption in the developing world.

families for farm labour or for income generation; adopting contractual arrangements, such as sharecropping, which trade off profits for insurance, etc.[5] Examples from a public policy perspective include extension of micro-finance and provision of insurance.

Risk coping measures are those taken after the occurrence of a shock. As above, there are many informal mechanisms of risk coping including: selling assets; drawing on savings or stocks of grain; drawing on remittances from migrants; accessing credit for consumption purposes, etc. [6] In terms of public policy, risk coping is facilitated by transfers such as social assistance schemes, commodity subsidies, etc. Many of these schemes are identical to those aimed at the chronic, dependent poor (see Section 2.3).

4.4. Instruments of social protection[7]

Specific instruments of social protection, which fall under one or more of the three above-listed strategies of social protection, include:

Labour market and employment programs

Labour market policies aim to increase the use, productivity or safety of labour. Examples include the adoption of labour standards; job search assistance; labour exchanges; training and retraining programs and anti-discrimination legislation. Employment programs provide direct employment opportunities to those in need, usually through public works type programs. Labour market interventions are investments in labour which may occur at different stages of the vulnerability cycle (or occur independently of it) whereas employment programs are usually risk mitigation or coping mechanisms.

Micro-finance

In the context of social protection, micro-finance can play an important role in both risk mitigation and risk coping. Its provision prior to a shock/stress may mitigate the subsequent effects by say, facilitating diversification of sources of income or the accumulation of savings. Following a shock, credit may play an important role in smoothing consumption.

Insurance

Insurance schemes are usually risk mitigation measures which aim to limit the consequences of shocks or stresses. Examples include social insurance (unemployment, disability and old age insurance), crop, livestock and health insurance. The modalities of different insurance schemes (e.g. contributory vs. non-contributory) raise important issues with regard to affordability as well as the underlying social objective (i.e. redistribution, social inclusion, etc.). Specifically, contributory insurance schemes transfer the financial burden from public to private sources but at the potential cost of access for those unable to afford premiums. In addition, they do not generally place a redistribute role which may be an aim of social protection policy.

[5] Fafchamps (1992), Morduch (1995) and Zeller (1999).
[6] Dasgupta (1993), Morduch (1999) and Platteau (1991).
[7] This Section draws on Coudouel et. al (2001) and Norton et. al. (2001).

Commodity subsidies

Commodity subsidies are a risk coping measure and a means of assisting the chronic, dependent poor. Commodity subsidies may be broad based, apply to goods consumed predominately by the poor or provided in 'fair price' shops frequented by poor groups. As above, the choice of the subsidy coverage raises questions concerning affordability and the underlying social objective.

Social assistance (cash and in-kind)

As with commodity subsidies, social assistance is a means of coping with risk and assisting the dependent poor. Measures of social assistance include cash payments (e.g. child benefits, pensions for widows), fee waivers (health, education, etc.) or in-kind transfers (supplemental feeding programs, school feeding programs, food stamps, etc.). As above, choice of nature, scope and scale of social assistance programs will depend heavily on the underlying social objective as well as the trajectory of social change in question.

4.5. An example: The 'sustainable livelihoods' approach to poverty

The Sustainable Livelihoods Approach is one operational approach to poverty reduction[8] which makes explicit use of a flows-based analysis of poverty using language very similar to that which appears in the preceding Sections. The approach situates poverty reduction within the framework of security of livelihoods, or sustainable livelihoods.[9] Chambers and Conway (1992) provide a widely accepted definition of what is meant by 'sustainable livelihoods':

> A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resources base.

The 'livelihood' aspect draws on an analysis of assets which parallels the above analysis of capital, with emphasis placed on natural capital. Livelihoods depend on four categories of assets:

- **Stores**: tangible assets including food stocks, gold, jewellery, savings (economic capital);
- **Resources**: tangible assets including land, water, trees, livestock (environmental capital);
- **Claims:** intangible assets consisting of legitimate social demands or appeals for material, moral or other support (cultural and social capital);
- **Access**: intangible asset referring to the capability to use a resource, store or service for one's benefit (political and coercive capital).

The 'sustainability' aspect adds a temporal dimension by examining the exposure of livelihoods to particular shocks and stresses as well as their ability to cope and adapt. As

[8] It has been explicitly adopted by the UK's Dept of International Development as their analytical framework of choice to guide their poverty work (DFID, 2000).
[9] See, *inter alia*, Chambers and Conway (1992); Chambers 1995; Scoones (1998); Swift (1989).

such, it explicitly incorporates the concept of vulnerability and bases its analysis on flows into and out of poverty rather than changes in the stock of poverty.

4.6. Does deepening matter?

There are at least three reasons why the shift in emphasis from stocks to flows matters.

First, recent empirical evidence suggests that there is considerable mobility among the poor. Table 2 from Baulch and Hoddinott (2000) presents data on the relative magnitude of chronic and transitory poverty for 12 recent panel studies. Chronic poverty is defined as those who are poor in all years in the panel, while transitory poverty consists of the 'sometimes' poor. Two points are worth noting. First, transitory poverty is quite large and often much larger than chronic poverty. Second, the longer the panel, typically, the greater the relative size of transitory poverty vis a vis chronic poverty.

Table 2 Chronic and Transitory Poverty (%) in Recent Panel Studies

Country	Dates	Observations	Chronic Poverty	Transitory Poverty	Never Poor
South Africa	1993-1998	2	22.7	31.5	45.8
Ethiopia	1994-95	2	24.8	30.1	45.1
India	1968-1971	3	33.3	36.7	30.0
India	1975-1984	9	21.8	65.8	12.4
Cote d'Ivoire	1985-86	2	14.5	20.2	65.3
Cote d'Ivoire	1986-87	2	13.0	22.9	64.1
Cote d'Ivoire	1987-88	2	25.0	22.0	53.0
China	1985-90	6	6.2	47.8	46.0
Pakistan	1986-91	5	3.0	55.3	41.7
Russia	1992-93	2	12.6	30.2	57.2
Chile	1967, 1985	2	54.1	31.5	14.4
Zimbabwe	1992-1995	4	10.6	59.6	29.8

Source: Baulch and Hoddinott (2000).

Second, some of the characteristics of transitory and chronic poverty may differ which implies that differ groups are transitorily and chronically poor (and suggests that different interventions are appropriate to each). Two recent studies have specifically addressed this issue[10]. McCulloch and Baulch (2000) found characteristics of transitory and chronic poverty in Pakistan to be broadly similar excepting dependency ratios which were higher in chronic but not transitorily poor households. On the other hand, Jalan and Ravallion (1998) found differences in characteristics of transitory and chronic poverty in China. Variables which are often associated with chronic poverty, including household size, health and education have no apparent bearing on transitory poverty.

Third, in light of the above, it is likely that some interventions to address chronic and transitory poverty will differ. Instead of the intervention types discussed in section 3 which rely

[10] Though it should be noted that both studies use a different definition of chronic and transitory poverty than the one used in this paper.

on investing in various forms of capital, schemes of risk reduction or mitigation which smooth income or consumption may be more appropriate. A short list of such publicly provided mechanisms may include, insurance schemes, buffer stocks, credit (for smoothing purposes), seasonal public works, etc.

There two main caveats to be borne in mind, however, with respect to the above points. First, some of the observed results are driven by measurement error, which poses large problems for panel data estimation (Deaton, 1997). One estimate found measurement error to be responsible for around three quarters of the total variation in income, yet still found transitory poverty to be quantitatively important and larger than chronic poverty for some poverty indices (McCulloch and Baulch 2000). Second, some of the movement into and out of poverty may not represent large shifts in income but simply small movements around the poverty line.

4.7. Globalisation and the deepened causal framework

There are at least four ways in which forces of globalisation relate closely to the deepened causal framework of poverty.

First, increasing flows of financial capital[11], and in particular portfolio investment, increases the risk of financial instability occasioned by massive capital flight and currency crises. At least part of the reason for the severity of the East Asian financial crisis was the rapid flight of portfolio flows, or 'hot' money, from this region.[12]

Second, the increasing mobility of people generally, and labour specifically, increases the risk of spread of infectious disease such as HIV/AIDs and tuberculosis.

Third, the increasing reliance on trade increases one's vulnerability to terms of trade shocks. Rising global production of goods and/or reduced consumption may severely squeeze world prices to the detriment of local producers.

Fourth, increasing transfers of technology increase risk (both downside and upside) if the long-term effects of technological change are unknown. Genetically modified crops provide one example. The may prove to be boon or bust though either way, they increase risk.

5. Conclusion

There have been at least three main changes in thinking about poverty which have gained increasing currency over the past decade, with decided policy implications.

First, the concept of poverty has been broadened. This is reflected in the move from a physiological model of deprivation to a social one, and subsequently, in the increasing attention afforded issues of vulnerability, inequality and human rights.

[11] It should be noted that these tend to be highly concentrated in a relatively small number of developing countries.
[12] See, *inter alia*, Blustein (2001) and Stiglitz (2002).

Second, the causal structure has been *broadened* to include a range of causal variables which previously received little attention. This has lead to the increasing importance afforded political, social, cultural and coercive capital which figure centrally in the governance approach to poverty. The operational consequence is to shift attention from interventions in human and economic capital to interventions focusing on empowerment, social organisation, legal reform, human rights, etc. Three dimensions of globalisation serve to accentuate the importance of the expanded causal framework to poverty reduction: 1) the spread of democracy and human rights; 2) the spread of 'Western' culture and the resultant 'cultural' critique; 3) the globalisation of conflict and implications for poverty.

Third, the causal structure has been *deepened* to focus on flows of individuals into and out of poverty, rather than on changes in the stock of poverty. This has led to a focus on transitory rather than chronic poverty and on shocks, stresses and individual/community response. The operational consequence is to shift attention from long-term strategies to reduce chronic poverty, to strategies of risk reduction/mitigation which 'smooth' income or consumption. Examples include, insurance schemes, buffer stocks, credit (for smoothing purposes), seasonal public works, etc. Four dimensions of globalisation serve to accentuate the importance of the deepened causal framework to risk reduction/mitigation: 1) the increase in financial flows and the Asian crisis; 2) increasing labour mobility and infectious disease; 3) increasing trade and terms of trade shocks; 4) growing technological transfer with unknown consequences.

Appendix A - Cross-cutting themes

Section 3 examined how the broadening of the causal framework entailed the introduction of a wider range of 'forms of capital'. Examples included social, political, cultural capital, etc. It may be relevant to consider how other important themes which have received renewed attention over the past decade have figured in the analysis of poverty. The following sections situates the dual themes of gender and participation within the context of the schema presented in Figure 3.

A.1. Gender

Gender is a theme which crosscuts the analyses presented in Section 3. There are at least four ways in which gender bears on issues discussed:

1. Conceptions of deprivation may be gendered in so far as men and women are differentially afflicted by different forms of deprivation. Females may not face greater consumption poverty than males but they may be 'worse-off' if other aspects of deprivation are taken into account. The discussion in Box 9 below provides an example.

2. Men and women may stand in different relationships to different forms of capital. Thus, women may be restricted from ownership or inheritance of land (economic capital), they may be assigned inferior status which is internalised (cultural capital) or, in a more positive light, they may be better organised (social capital).

3. In light of point #2, changes in forms of capital may have differential effects on men and women. Thus, the effects of increased credit provision, higher producer prices will depend on the nature of gendered social relationships including the gender division of labour, the gender allocation of goods within household, the gendered distribution of decision-making authority, etc.

4. In light of the first three points, policy interventions are likely to differ across gender lines. If conceptions of poverty and processes of social change are gendered so too will be poverty interventions.

Box 9 - Gendered Conceptions of Deprivation in the Republic of Guinea

Are women worse-off than men if deprivation extends beyond consumption poverty? Shaffer (1998b) addressed this question drawing on household survey and participatory poverty assessment data from the Republic of Guinea. National household survey data reveal that women are not more likely than men to be consumption poor or to suffer greater consumption poverty. This result holds after analysing poverty incidence, intensity and severity of female-headed households, the representation of women and females in poor households and the intrahousehold distribution of food and health care (proxied by data on nutritional outcomes, mortality and the aggregate female-male ratio). Sensitivity analysis using different adult equivalence scales and different poverty lines (stochastic dominance tests) affirms the result. Participatory Poverty Assessment data in the village of Kamatiguia reveal that women are 'worse off' than men when deprivation includes, *inter alia*, excessive work load and reduced decision-making authority. In the well-being ranking exercises, groups of both men and women separately ranked *all but two* married village women below *all* married village men in terms of their own criteria of well-being and deprivation.

A.2. Participation

'Participation' is another cross-cutting theme which appears in at least four ways in the preceding analysis.

1. Determination of the relevant conception of deprivation may be participatory if it involves substantive and active input from those who stand to be affected by the definition. Of the approaches discussed in Section 2, only Participatory Poverty Assessments are participatory *in this sense*.[13]

2. Different types of social capital may have intrinsically participatory elements. Thus, a constituent element of social capital is the participation of individuals in groups or associations to pursue collective ends.

[13] There is a tradition within the income/consumption approach of asking respondents what constitutes adequate consumption, which is subsequently used in the specification of the poverty line (Hagenaars 1986, Pradhan and Ravallion 1998). This is only participatory in a very limited sense, in that the underlying conception of deprivation, non-fulfilment of basic preferences, is predetermined. The participatory import only relates to the basket of basic preference goods in question. Further, it only involves responses to questionnaires and not active engagement in dialogue.

3. Participation may figure intrinsically in different approaches to poverty reduction. For example, empowerment *is* a process of effecting social participation.

Participation may figure in differing degrees in all poverty interventions depending on the extent that they involve popular input in their conceptualisation, design, implementation, monitoring and follow-up.

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The Financial Crisis

How far could the US dollar fall?

Jacques Sapir [EHESS-Paris and MSE-MGU Moscow]

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Paulson's bailout plan, and others that may now be proposed, raise significant questions for the weeks and months to come. The most important of these for the global economy is how far will the US dollar (USD) fall and to what extent will its decline alter the world's economic and financial structure.

Numbers

Already between summer 2007 and spring 2008 the value of the US dollar declined. Then in the wake of the collapse of Bear Stearns it sank to 1 Euro = 1.60 USD. Since then the dollar recovered partially, up to 1.39 for the Euro on the eve of the "crazy week" (September 15-19), and now, the morning after Congress's rejection of Paulson's plan, it stands at 1.46. The reasons explaining the limited dollar surge are easily traced.

1. Embattled US financial institutions were selling assets in other currencies to repatriate funds they desperately needed, thereby pushing up the value of the dollar.
2. 2nd quarter figures for the US economy were less bad than expected (and to some extent surprisingly good) making the US economy look a better place for profits than the Euro zone, where bad news was becoming more common.
3. Also the earlier major dollar devaluation temporarily boosted US exports (+13%), giving the US economy a small breathing space as the repatriation of sales revenues induced capital flows into the US dollar zone.

But none of these three reasons for the dollar's modest surge look likely to continue. The asset selling process has already gone quite far. The US economy's results for the 3rd and 4th quarters of this year are likely to be worse than those for Europe. The export surge has nearly exhausted its potential, and even if the US dollar were to go down sharply again, export elasticity looks like being much smaller than during the 2nd quarter.

Meanwhile new pressures on the USD have developed. The "crazy week" ended with an unprecedented US dollar injection through central banks and various bailouts commitments, which will push the US budget deficit to previously unseen levels. Even before the recent crisis, the budget for the fiscal year 2009 anticipated a deficit of 439 billion. Now significant amounts must be added to that figure.

1. The cost of the Fannie Mae and Freddie Mac bailout has probably been underestimated by 100 billion dollars[1].
2. Even if the FED has funded the largest part of the AIG bailout, the Treasury had to lend money to the FED and from that we can expect another drain of probably 50 billion dollars.

[1] J. Shenn, "Fannie, Freddie Subprime Spree May Add $100 Billion to Bailout", on *Bloomberg.com*, September 22nd , 2008.

3. The cost of Paulson's plan, estimated at 700 billion dollars, or a similar one will have a tremendous effect on the US public debt[2]. There are good reasons to think that nobody knows or could know how far it will go. One can probably estimate the amount of bad assets held by banks and insurance companies today, but if the economic situation degrades in coming months, household and enterprise solvency will decline. Debts assessed as "good" today could become "bad" by December or early 2009. For example, consider the consequences of a possible General Motors bankruptcy next spring. This huge and deeply embattled company has issued large amounts of debt and Credit-default Swaps (CDS). If General Motors or a similarly sized industrial company were to go under Chapter 11 protection, it would have a tremendous overall effect on debt quality. The point is that debt quality assessment can't be done without some forecasts of US economic activity in the months to come. The 700 billion dollar price tag on Paulson's plan was no more than a political rabbit he pulled out of his hat to get his plan moving[3]. Some people, like former IMF chief economist K. Rogoff, have estimated that the plan would turn out to cost between 1,000 and 2,000 billion dollars[4]. The truth is nobody really knows.
4. So far no one has raised the issue of diminishing US budget incomes. But if economic activity slows seriously in this year's 4th quarter and remains at a lower level in the first quarter of next year, one can expect federal and local tax income to be significantly lower than planned. Assuming a GDP depression of around -1.5% to 2.0% during the forthcoming winter, the total loss of budget incomes could be in the 80 to 100 billion dollar range.

If we add up these probable budget deficit sources, we obtain a figure of 930-950 billion dollars that needs to be added to the 439 billion planned deficit. The total US deficit for the fiscal year 2009 could easily be pushed up to 1,370-1,400 billion dollars or close to 11% of GDP.

Such estimates, of course, are highly dependent on the impact that the US economy's performance has on debt (and CDS) quality. If the government introduced a new economic activity-boosting package, the bailout cost could be reduced. However such a package would come at a cost, so I don't expect the deficit to go much under 1,250 billion dollars in the best-case scenario. But if economic activity decreases faster than expected and with a higher bankruptcy level than planned, then in the worst-case scenario the budget deficit could well reach 1,700 billion US dollars.

In any country but USA, such a budget deficit would push down the value of the national currency considerably. However, because of the US economy's central role in international flows of trade and finance, numbers do not tell the whole story.

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[2] M. Benjamin, "Paulson Plan May Push National Debt to Post-World War II Levels" on *Bloomberg.com*, September 23rd, 2008, http://www.bloomberg.com/apps/news?pid=20601087&sid=anJ4Egj1nXS8&refer=home

[3] G. Robb, "Echoes of Iraq in Bush handling of mortgage crisis - News analysis: Another 'trust me' remedy is getting rushed before lawmakers" on *MarketWatch* , September 23rd, 2008, http://www.marketwatch.com/news/story/echoes-iraq-bushs-handling-mortgage/story.aspx?guid=%7bEB54967E-258D-4650-BE95-2203FCA64AAA%7d&dist=morenews_ts&print=true&dist=printMidSection

[4] K. Rogoff, "America will need a $1,000bn bail-out", *Financial Times*, September 18th, 2008.

Strategic factors

Reasons for a downward movement of the US dollar in forthcoming weeks and months are obvious. Already it began to decline in value at the end of the “crazy week”. However the strategic dimension of US dollar foreign balances needs to be brought into the picture in order to assess not just how far the US dollar could fall, but, even more importantly, whether or not this movement can be kept under control.

The US dollar is a major capital asset for various sovereign and private funds in Asia, the Middle-East and Russia. These funds currently hold large quantities of US Treasuries and Agencies (the GSE issued bonds also known as A-bonds). Some of these countries are also important exporters to US internal markets. The financial and real economic relations are interlinked in a complex way that makes it impossible to estimate the outcome the current crisis on the basis of numbers alone.

There are several strategic factors weighing in favour of a not too low USD. The first obvious one is Asian countries’ trade interest. If the USD moved down significantly compared to the Yen and other Asian currencies, the competitive edge of these countries would be significantly reduced. True, some of them, mostly notably India and China, could substitute internal demand for exports on the US market. But such a move can not take place in weeks or months. Until a comprehensive strategic switch toward an internally-driven growth path has been implemented, these countries have a strategic interest to prevent the US dollar from falling too far and too fast. However to keep it from doing so, countries with large trade surpluses must buy large quantities of US T-bonds and A-bonds.

This raises the issue of the dollar’s role as a capital asset. Private and sovereign funds holding large quantities of US Treasuries and Agencies would suffer a significant capital loss if the USD fell significantly. But the situation is mixed. One could argue that to prevent further losses fund managers will increase their portfolio diversification and reduce their exposure to the USD risk. This raises however another issue. What could serve as substitutes for USD Treasuries and Agencies? Of course Euro-denominated bonds could be used, but the Euro zone has not issued bonds (and specifically T-bonds) in the quantities comparable to US T-bonds and A-bonds. Yen denominated T-bonds could be used to some extent but they clearly are no substitute for the USD. Russia so far has a very slim T-bond market and one can’t expect T-bond issuing from a country where the budget is displaying a 6% to 8% of GDP primary surplus. Of course, the Russian government could sponsor the local equivalent of GSEs and A-bonds. But even if such a decision could be taken quickly it would be some time before a significant quantity of such bonds would be available for fund managers.
Some more risky substitutes could be found, ranging from Euro or Yen denominated equities up to commodities. They could be substitutes at the tactical level, but not at the strategic one. Hence, the capital asset argument is certainly leading us toward a more clouded conclusion. Sovereign funds will certainly be very cautious when implementing a portfolio diversification strategy, if only because reliable mid to long-term substitutes to US T-bonds and A-bonds are relatively scarce. Some private funds might act more aggressively. The addition of local strategies, each of limited significance, could then create a context that would lead large sovereign funds to increase the rate of their diversification

A third strategic factor to consider is a political one. People are confident in US bonds because of the USA’s political leverage. To some extent the leadership factor is probably more relevant than interest rates in determining the value of US bonds. So far no country could directly challenge US power. But US power has been globally eroded from the 1998 crisis up to the present one to such an extent that US leadership looks weak and very unstable. The way the current US administration has managed the current crisis has definitely not improved the situation.

Two strategic factors are now pushing toward a lack of confidence in the US debt. The spread on CDS for Treasuries in the wake of the "crazy week" suggest that this lack is on the increase among financial actors.

The first and most obvious factor is the feeling that the former "hyper-power" is now dramatically over-extended. Even if it is true that the military situation has been stabilised in Iraq, it is degrading rapidly in Afghanistan and is now spilling over into Pakistan, where the stakes are even higher. The US administration has been unable to decisively support Georgia during the stand-off with Russia on South Ossetia and has clearly "lost face" in the region (Turkey and Azerbaijan). This loss of face is also pretty obvious in Ukraine where Mrs. Iulia Timoshenko has switched sides and broken with the "Orange Coalition".

The second factor is the crisis in internal leadership: the very bad crisis management so far, the high uncertainty level about the bank bailout cost, and now when, how and if a bailout will take place. As explained in a previous article, vacillation in the US administration, and now in its legislature, about a bank bailout has eroded confidence in the nation's ability to manage a major crisis. Nor did the way the FED chairman presented the case about Lehman Brothers at the September 23rd US Senate Hearings foster confidence.[5] The forthcoming Presidential election is also adding to the uncertainties, be they real or not.

A closely related fact is that, as explained above, the 700 billion dollar price tag for the bailout presented by Henry Paulson is at best a mere guess. The same guess-mate approach is likely to be behind any plan B that is offered. Financial actors would love to believe that the cost will be limited to 700 billion, but the question is how they will react when they learn that the actual cost is far above the promotional figure. And of course delays in implementing Paulson's plan or something similar add to the current feeling of uncertainty. Although any Paulson-type plan is far from perfect, it would nonetheless offer a quick answer to an immediate problem. If instead of an immediate response, US authorities delay action in trying to design and implement a better plan, this will create an uncertainty much worse than the one induced by the budget deficit figures implied by a Paulson-type plan.. In an emergency what matters is not an "optimal" fix but a quick and effective one.

The level of strategic uncertainties pervading the current situation is opening the door for significant "surprises" to take place[6]. Financial community expectations could be so severely shaken that we could see a massive process of expectation divergence. If so, the possibility of a run against the USD can't be dismissed. The USD could then fall very low indeed and even a huge interest rate rise by the FED would be hard pressed to stop the process without completely destroying what is left of the US financial system.

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[5] Scott Lanman and Craig Torres, "Bernanke, Paulson Urge Skeptical Senators to Pass Rescue Soon" in *Bloomberg.com*, September 23rd, 2008,
http://www.bloomberg.com/apps/news?pid=20601087&sid=ajwx.ppT3pQI&refer=home

Ben Bernanke stated that "the troubles at *Lehman* had been well known for some time" and FED officials had judged "that counterparties had time to take precautionary measures". On such a decisive decision of supporting or not supporting a bank with assets disseminated in other financial institutions, checking what "precautionary measures" have been implemented should have been mandatory before taking the fateful decision to let Lehman go down the drain.

[6] The word "surprise" is used here in G.L.S. Shackle's sense, that it is the occurring of an "unexpected" event. See G.L.S. Shackle, *Expectations in Economics*, Cambridge University Press, Cambridge, 1949.

Conclusion

Trying to answer the question raised in this paper's title is not easy to do. There is no doubt that the USD will go down relative to the Euro and the Yen. It is highly probable we will see a 5% to 10% fall in the value of the USD in forthcoming weeks (somewhere like US 1.55 to 1.62 for 1 Euro), coupled to an inversely correlated rise in the price of oil. The USD fall could be greater against the Yen and Asian currencies than against the Euro (maybe 1 JPY = 0.0115/0.0120 USD).

What is now open to question is whether the USD will stabilise at this new level for some months before beginning to slowly move up probably by spring or early summer 2009, or will a catastrophic chain of events take place creating the psychological context for an uncontrolled decline in the value to the US dollar. The best case scenario is supported by the fact that most of the uncertainties regarding the US economy will be resolved by next spring and when the Euro Zone economy is expected to be at its worst. The USD value could then begin to increase slightly. However, as interest rates will still be low, and the budget deficit a major issue, the USD will not in 2009 regain its average 2007 value, let us say stabilization at USD 1.40 for 1 Euro by the end of 2009. But even this would be pretty dramatic for a large share of the European industry.

Whether or not the "worst case" scenario unfolds depends on the way private fund managers in Asia and the Middle-East decide to revamp their portfolio strategy If for these managers the feeling of uncertainty about US leadership and its ability to manage the current crisis comes to out-weigh its feeling of confidence (even of "troubled confidence"), leading them to dispose of their USD assets, then sovereign funds would have to follow quickly to prevent huge capital losses. A fall of 25% to 35% of the USD value against other currencies, coupled with dramatic changes in capital flow movements and commodity prices then becomes a distinctly possible event. This would create huge uncertainty all over the world and push toward a greater and greater fragmentation of the financial space, with the possible emergence as a consequence of regional reserve currencies.

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What's in a number? The importance of LIBOR[1]

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Judged by the amount of money directly dependent on it, the British Bankers' Association's London Interbank Offered Rate matters more than any other set of numbers in the world. LIBOR anchors contracts totalling around $300 trillion, the equivalent of $45,000 for every human being on the planet. It's a critical part of the infrastructure of financial markets, but like plumbing doesn't usually get noticed. Only a handful of economists, and no other academics, have ever looked in any detail at LIBOR, and even the financial press has taken an interest in how LIBOR is calculated only this past spring, when there was sharp controversy over whether these most crucial of numbers could be trusted.

The process of calculating LIBOR yields no immediate clues as to how vital it is. Its central co-ordination requires only two people, who work in an unremarkable open plan office in London's Docklands, and seemed utterly routine when I watched them at work a couple of years ago. Just after 11.00 am every weekday that's not a bank holiday, traders at leading banks send in electronically their estimates of the interest rates at which their banks could borrow money. Sometimes the co-ordinators make a reminder phone call to a bank that has not sent in its estimates, and if the latter seem implausible – typos, for example, are fairly common – they're checked, also with a quick call: 'Hi there, is the Kiwi chap [provider of the estimates for borrowing New Zealand dollars] about? ... Bit of a spread on the two month. Everyone else is coming in a good bit under that.'

A simple computer program discards the lowest quarter and highest quarter of the estimates, and calculates the average of the remainder. The result is that day's LIBOR. The calculation is repeated for each of ten currencies and fifteen loan durations (from overnight to twelve months), so 150 LIBORs are published daily: overnight sterling LIBOR, one-week euro LIBOR, one-month yen LIBOR, three-month US dollar LIBOR, and so on.

It's the back-up arrangements that provide the first hints of how much the calculation matters. Those who superintend the process have dedicated phone lines laid into their homes so they can still work if a terrorist attack or other incident stops them reaching the office. A nearby similarly-equipped building is kept in constant readiness, and there's a permanently-staffed back-up site, which I shall describe only as being in a small town some 150 miles from London. Its employees periodically work in the London office, so that they're fully ready to take over if needs be.

The precautions are needed because inability to calculate LIBOR would quickly paralyse large parts of the global financial system. The 150 numbers are the dominant global benchmark for interest rates. The rates on borrowing totalling around $10 trillion – corporate loans, adjustable-rate mortgages, private student loans, and so on – are pegged to LIBOR. For instance, the level of LIBOR determines the monthly payments on around half of the adjustable-rate mortgages in the US: rates are set as LIBOR plus a fixed margin and reset

[1] This article was completed before the bankruptcy of Lehman Brothers and the most recent bout of turmoil. It originally appeared in the *London Review of Books* (http://www.lrb.co.uk) and appears here with the *Review*'s permission.

periodically as LIBOR changes. Even in the UK (where explicit pegging of this kind is rarer) LIBOR is a big influence on mortgage rates.

LIBOR is even more central to the huge market for interest-rate swaps. These are contracts in which one bank or other organisation pays a fixed rate of interest on a given amount of money, while another bank pays a floating (that is, variable) rate – such as three-month US dollar LIBOR – on the same amount. The total amounts involved, added up across the globe, are around $310 trillion. Measured that way, the swaps market is the biggest financial market of them all, and most of it depends on LIBOR.

Invented only at the start of the 1980s, swaps enable lenders and borrowers to eliminate the risk of interest-rate changes. Take fixed-rate mortgages, for example. Without swaps, a bank might be reluctant to offer them, because it generally pays its depositors floating rates, and also borrows from other banks at floating rates. If interest rates go up, the bank will therefore have to pay out more, while its revenue from its fixed-rate mortgages stays the same. (As rates rose sharply in the 1980s, almost all the savings and loan associations in the US – the equivalents of the UK's building societies – were caught out in this way. The resultant crisis, a precursor of today's credit crunch, pushed over seven hundred savings and loans into insolvency, and the rescue operation ended up costing US taxpayers around $130 billion.) Entering into a swap in which the bank pays a fixed rate and receives a floating rate enables it to cancel out the effect of interest rates changing, and conditions in the swaps market are thus a major influence on the terms on which fixed-rate mortgages are available. The very possibility of a large-scale swaps market depends upon having a measure of interest rates that is unequivocal and credible enough to form the bases of contracts denominated in billions of dollars, and LIBOR has provided that measure.

In a financial world dominated since 1945 by the US, it's striking that the global benchmark is a set of London rates. Paradoxically, the ultimate cause is Britain's failure – crystallised by the 1957 sterling crisis – to re-establish the pound as a major international currency. That prompted the leading British banks increasingly to accept deposits, lend and borrow in US dollars ('eurodollars', as they came to be called). The Bank of England overcame its initial anxieties and came tacitly to support the eurodollar market, and the Johnson Administration inadvertently encouraged it by trying to stem the flow of dollars overseas. Eurodollar operations conducted in London allowed US banks to circumvent the resultant controls.

The result was that London became – and in many ways remains – the centre of the international money markets. 'Money' here does not mean cash, but short-term loans between banks and other major institutions, and over a fifth of international lending of this kind still takes place in London. Crucial to facilitating this market – and to enabling LIBOR to be calculated – were, and are, London's money brokers. They initially emerged in the 1960s as a challenge to the traditionally staid, gentlemanly, top-hatted sterling money markets, in which lending took place via designated 'discount houses' backed by the Bank of England. Money brokers put lenders and borrowers directly in touch with each other, charging a fee for doing so. The business is fast-moving, and competition is fierce and sometimes not at all gentlemanly. If you listen to brokers' voices, you hear the tones of the East End and Essex more often than those of Eton or Harrow. Open-necked shirts are more common than suits and ties. While banks' dealing rooms are now often disappointingly quiet and orderly places – in reality there's far less shouting and swearing than in film portrayals – brokers' offices are more tightly packed (there's less space between desks) and more raucous.

Suppose a bank wants to borrow or lend in the interbank market. (The desire to lend arises because no bank likes to leave cash idle, even for the shortest period. Indeed, overnight lending is the busiest sector of the interbank market, with banks that have excess cash at the end of the working day lending to those that need it.) A bank's money-market traders could directly contact their counterparts in other banks, but it's usually quicker and easier to work through the money brokers. This can now be done on-screen, but – especially if large sums are involved or market conditions are tricky and rapidly changing – it's often better to use the 'voicebox'. This is a combination of microphone, speaker and switches that can instantly connect each broker by a dedicated telephone line to each of his clients on banks' dealing rooms.

If a bank wants to borrow money, a broker needs quickly to find someone prepared to lend at an attractive rate; if a bank wants to lend, he – it's a predominantly male profession – needs to find a borrower ready to pay a good rate. So a broker needs continuously to know who wants to borrow, who is prepared to lend, and on what terms. As one of them said to me, a broker might 'speak to his big clients ... have conversations with them maybe twenty-five times a day, which is twenty-five times as often as they speak to their wives'.

A broker needs to pass information to his clients as well as to receive it: that's a major part of what they want from him, and a good reason to use the voicebox rather than the screen. The brokers' code of conduct prohibits passing on private knowledge of what a named bank is trying to do (unless a client is about to borrow from it or lend to it), but that restriction leaves plenty room for brokers to tell traders what has just happened and to convey the 'feel' of the market. There's a grey area in which euphemisms can be used: in context, a broker and a trader might both know which bank is meant when the broker says that 'the usual German' has just done something.

Brokers in major money-market currencies don't work as individuals, but in teams of up to a dozen or more, sitting close together in subsections of large, open-plan offices. Good eyesight is useful – trainees still sometimes called 'board boys' write unfilled bids to borrow and offers to lend on whiteboards surrounding clusters of brokers' desks, and you can occasionally see a broker using binoculars to read a distant whiteboard or screen – but a more crucial skill is what's called 'broker's ear': the capacity aurally to monitor what is being said by all the other brokers at a cluster of desks, despite the noise and while oneself holding a voicebox conversation with a client. As one broker put it to me 'When you're on the desk you're expected to hear everyone else's conversations as well, because they're all relevant to you, and if you're on the phone speaking to someone about what's going on in the market there could be a hot piece of information coming in with one of your colleagues that you would want to tell your clients, so you've got to be able to hear it coming in as you're speaking to the person.'

When you first encounter it, broker's ear is disconcerting. You'll be sitting beside a broker at his desk, thinking he's fully engaged in his conversation with you, when he'll suddenly respond to a question or comment from several desks away, which you simply hadn't registered. It's an embodied skill that matters to how LIBOR is calculated. The inputs to the calculation are provided daily by the money-market traders employed by banks on panels established by the British Bankers' Association. There are sixteen banks on each of the panels for the main currencies. What each bank has to provide is as the rate at which it 'could borrow funds ["unsecured" – that is, backed only by the bank's creditworthiness, not more specific collateral – and "governed by the laws of England and Wales"], were it to do so by asking for and then accepting inter-bank offers in reasonable market size just prior to 11.00', in the currency and for the time period in question.

Note the conditional: a LIBOR input is what a bank could do, not what it has done. So judgement is involved. A bank may not have borrowed anything in the minutes before 11.00 am. Deals for longer than overnight are intermittent, and there is little borrowing at some of the time periods involved, such as eleven months. 'Reasonable market size' is deliberately not defined exactly: it will vary from currency to currency and according to time period and market conditions.

The need for judgement is why the information provided by brokers is important to LIBOR. It helps a bank's traders to estimate the rate at which they *could* borrow money, even if they're not trying to do so. They can glance at the screens provided by their various brokers: all serious traders employ several. Those screens indicate the lowest rate at which banks are currently offering to lend and the highest rate at which they are prepared to borrow. Only the naïve, however, would provide the former rate as their LIBOR input. The screens don't reveal the amount actually available for borrowing at the lowest quoted rate, and it may fall short of 'reasonable market size'. It could range from a mere $50 million or so to a yard or more. ('Yard' – originally an abbreviation of 'milliard' – is the money-market term for billion, a word that in a noisy environment is all to easy to confuse with 'million'.)

The screens can't be expected to tell you at all exactly how much you would have to pay to borrow a few hundred million dollars (reasonable market size for short-term borrowing in a major currency), and are even less reliable when it comes to borrowing several yards. It can take an experienced trader talking to a number of brokers with good ears to form a realistic estimate. There's also an element of judgement in the rates that brokers put on the screens: they can, for example, consider it as misleading their clients to quote a bid to borrow at an unusually high rate, if it comes from a bank with poor credit standing to which many of their clients would be reluctant to lend.

Originally, LIBOR was an informal notion, and when different sets of banks were polled the resultant LIBORs could differ by as much as 25 basis points (a basis point is a hundredth of a percentage point). The current British Bankers' Association system for calculating LIBOR, involving a fixed procedure and predetermined panels of banks that change only infrequently, was set up in 1985, and has worked remarkably well; hence the preparedness of financial-market participants to have $300 trillion indexed to LIBOR.

The obvious risk to the calculation's integrity is that a bank on a LIBOR panel might make a manipulative input, trying to move LIBOR up or down so as to influence interest rates or the value of its swaps portfolio. That risk is the main reason for the exclusion from the calculation of the highest quarter and lowest quarter of inputs. Furthermore, once a day's LIBOR rates are set, each input – and the name of the bank that has made it – is also disseminated electronically, and so attempts at manipulation would have to take place in what is in effect the public gaze. The inputs to LIBOR can be viewed around 45 minutes after they are made on over 300,000 computer terminals worldwide, and they're certainly scrutinised. Well before the recent problems, one banker showed me that day's inputs into three-month sterling LIBOR, pointing with suspicion to a bank that had reduced its input – by a single basis point – from the previous day's, while all others had either increased theirs or left them unchanged. And brokers' screens and broker's ear shouldn't be forgotten. An input wildly at odds with what the screens show would be obvious, and word of persistent attempts at manipulation would quickly spread as brokers and their clients chat. The ultimate sanction – used in the past I was told, but not recently – is removal of a bank from a LIBOR panel. In the current climate, that would deeply damage the reputation of the bank in question.

The strength of these long-standing fortifications of LIBOR's status as fact has, however, been questioned as over the past year LIBOR has been cast into the spotlight. Ever since the rescue of Northern Rock, whether or not banks are sound, whether they are prepared to lend to each other, and sometimes even the levels of LIBOR have been topics for TV news, not just the *Financial Times*. Much of the most vocal criticism of LIBOR has come from the US, and has focused on dollar LIBOR – especially three-month dollar LIBOR, the main rate used in the swaps market. Some seem unhappy that the benchmark dollar interest rates are set in London just after 6 a.m. New York time, when traders are only starting to arrive at their desks, and that the US dollar LIBOR panel contains only three recognisably 'American' banks. The British Bankers' Association – membership of which is open to any bank operating in the UK, wherever it is domiciled – counters by pointing out that all the banks on the panel are global institutions, some with a major presence on the ground in the US, and collectively they are responsible for most London interbank dollar lending and borrowing.

The most prominent critic has been the *Wall Street Journal*. Underlying its suspicions was a concern that the public dissemination of banks' inputs – which is intended to make the process more transparent – had the effect of biasing inputs downwards, because banks may have feared that reporting publicly that they can borrow only at high rates would spark rumours about their creditworthiness. On April 16, under the headline 'Finance markets on edge as trust in Libor wanes', the *WSJ* reported a claim by analyst Scott Peng of Citigroup that although because of the credit crunch LIBOR was already high relative to the rates set by central banks, it should be even higher. Three-month US dollar LIBOR, suggested Peng, should actually be 30 basis points higher than it was – representing huge amounts of money, given the trillions of dollars indexed to it.

The British Bankers' Association responded by telling the *WSJ* that it was monitoring inputs closely and 'If it is deemed necessary, we will take action to preserve the reputation and standing in the market of our rates' – a warning that the *WSJ* read as a threat to remove any bank making dubious inputs. Over the next two days, three-month dollar LIBOR rose by 16 basis points, but in a context in which rates have been highly volatile it's impossible to be certain that this was because of the *WSJ*'s criticism, the British Bankers' Association's statement, or quite other factors. Central bankers began watching the controversy over LIBOR closely, reported the *Financial Times*, 'because some officials fear that the debate could be contributing to a broader sense of investor unease in the money markets'.

Given the criticism of LIBOR, why not abandon the conditional (rates at which banks *could* borrow) and shift, as some critics have suggested, to an index based on actual transactions? At least two such indices already exist. EONIA (Euro Overnight Index Average), calculated by the European Central Bank, is a weighted average of the rates of overnight interbank loans denominated in euros. SONIA, its sterling equivalent, is a similar average of overnight loans transacted via London's main money brokers.

There are attractions to EONIA and SONIA. In June, LIFFE, the London International Financial Futures Exchange, whose interest-rate contracts have traditionally been based on LIBOR, launched additional contracts based on EONIA, and it would like to do so for SONIA, although it hasn't yet got permission from the latter's owners, the leading brokers, to use it. Yet the very names of the two indices indicate their limitations. They're averages of overnight lending, and the market for longer-duration interbank loans is probably too patchy to sustain credible indices based directly on the transactions that have actually taken place. Right now, much more than a week can seem far too long a time to lend a bank's carefully husbanded cash to one of its peers. It's also the case, brokers and traders told me, that until the Bank of England put on sustained pressure (and eventually, in May 2006, instigated reforms) the sterling overnight market could be unruly, with surprisingly volatile rates strongly influenced by position-taking by individual big banks.

It's also an illusion to think that indices based on transactions can't ever be manipulated. 'Closing prices' – the average of the day's final deals on an exchange – are widely used as indices, but there's then sometimes an incentive to 'bang the close', in other words to trade aggressively in the final minutes or seconds so as to influence the closing price. In July, the US Commodity Futures Trading Commission charged three oil traders with allegedly doing just that.

A potential alternative to LIBOR as a benchmark, at least as far as the US dollar is concerned, is New York Funding Rate, launched by brokers Wrightson ICAP in June. Its poll of banks is conducted in the US at 9.15 am New York time, inputs are anonymous, and each bank is asked to report the rates at which a typical bank with a high credit rating could borrow, not those at which it itself could. Despite these differences, however, the resultant numbers have tended not to differ much from US dollar LIBOR. That what could have become a rival has in actuality provided a confirmatory second opinion has thus helped restore confidence in LIBOR. The membership of the panels of banks that make LIBOR inputs may be broadened, and a new British Bankers' Association subcommittee will draw upon independent third-party analysis of inputs and have the power to demand that banks justify any that seem anomalous. So the controversy seems to be passing. Nevertheless, its sharpness, and how unsettling some market participants seem to have found it, indicate just how important LIBOR is to the world's financial system.

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Progressive conditions for a bailout[1]

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The events of the last month showed the urgency of dealing with the financial crisis. There is a real risk that the banking system will freeze up, preventing ordinary business transactions, like meeting payrolls. This would quickly lead to an economic disaster with mass layoffs and plunging output.

The Fed and Treasury are right to take steps to avert this disaster. While there is an urgency to put a bailout program in place, there are several important issues that Congress should address in the context of bailout.

While there is not time to prepare all the details of the financial restructuring that will follow after the bailout, there can be an agreement on the outlines that this restructuring should take. This list of suggestions is presented in that context:

Principles to guide the bailout

1. Financial institutions should be forced to endure the bulk of the losses with taxpayer funds only used where absolutely necessary to sustain the orderly operation of the financial system.

2. The bailout must be designed to minimize the opportunity for gaming.

3. The bailout should be designed to minimize moral hazard.

4. In the case of delinquent mortgages that come into the government's possession, there should be an effort to work out an arrangement that allows the homeowner to remain in her house as owner. If this proves impossible, then former homeowners should be allowed to remain in their homes as renters paying the market rent. This should be done even if it leads to losses to the government.

5. There should be serious efforts to severely restrict executive compensation at any companies that directly benefit from the bailout.

Principles for restructuring the financial system

1. Combating asset bubbles must be one of the Fed's key responsibilities.

2. The government should impose a modest financial transactions tax, comparable to the one in the United Kingdom. This can both restrain excessive trading and raise more than $100 billion a year in revenue.

3. Regulatory agencies should require that potentially tradable assets (e.g. credit default swaps) actually be traded on exchanges.

[1] This paper was written on 20 September 2008.

4. There should be strict limits on leverage for all regulated financial institutions.

5. Fannie and Freddie should remain fully public institutions, returning them to a status comparable to Fannie's prior to its privatization in 1968.

6. The Fed should be restructured so that all the key decision makers (e.g. the open market committee) are appointed by democratically elected officials. Its responsibility is to manage the economy in the interest of the general public, not the financial sector.

Given the urgency for passing a bill, Congress should look to enshrine principles in a bailout bill that will allow subsequent legislation to circumvent ordinary procedural issues (e.g. the filibuster in the Senate).

Principles to guide the bailout

1. Every effort should be made to ensure that the financial institutions bear absolutely as much of the cost of these bailouts as possible, thereby minimizing the cost to the taxpayer. This is important not just to protect taxpayers. The managers who got their institutions and the country into this housing and financial crisis exercised extremely bad judgment. They should be forced to face the consequences of their actions. Similarly, the shareholders who benefited on the upside of the housing bubble should be forced to experience the downside that resulted from risky investment strategies.

Without details of the plan, it is difficult to say how best to accomplish this task, but one obvious way is to have an equity stake be the price of admission to the auction system. For example, any company could be forced to sell itself to the government in proportion to the assets it puts up at auction. For example, if the government buys $10 billion of its junk-rated mortgage backed securities, then it gets an equity stake in the company of $2 billion. This would also get around the issue of having foreign financial institutions get into the mix. If UBS or other foreign banks want to sell themselves to the U.S. government, they can be given that option.

2. A big part of our financial problems stems from the corruption of the appraisal/rating processes. This occurred both at the level of home appraisals in the mortgage industry and at the level of the bond rating agencies who gave investment grade ratings to mortgage backed securities and derivative instruments that did not deserve this status.

This creates an obvious problem for any reverse auction system of the sort being described by the Treasury. One way that a bank can offload much of its assets at these auctions is to misrepresent the quality of the asset. In other words, if there is a reverse auction for near-investment grade MBS, and a bank offers to sell a large amount of complete junk, that it claims to be near investment grade, then it is likely to be a big winner at the auction.

A way to limit such gaming would be to structure the contracts so that both the companies and their managing executives are personally liable for the subsequent performance of any assets they unload. If the assets perform substantially worse than other assets in the same grade, then they can be sued to make up the difference.

For example, if Citigroup sells $10 billion worth of assets in a particular investment grade, and the loans in this sale end up having a default rate that is 20 percent higher than other loans in the same investment grade, then the government can sue Citigroup and the executives who signed off on the sale to collect the difference, plus some penalty.

This provision can be written so that normal variance would not trigger any action (e.g. if the default rates are 5 percent higher). This will provide a substantial disincentive for the most obvious form of gaming.

3. The bailouts so far have allowed the institutions that took irresponsible risks to fail (e.g. Bear Stearns and Lehman Brothers), while protecting their creditors. This has the effect of punishing the executives and shareholders of these institutions, but allowing those who foolishly lent money (often for high returns) to escape unscathed.

Any future bailouts should also ensure that those who took excessive risks suffer the consequences, but they should also attempt to ensure that creditors exercise better judgment in their loans in the future. One way to do this would be to initially allow the creditors of failed institutions to recoup their funds immediately, but to reserve the right to reclaim some of this money for loans that carried especially high rates of return.

For example, if a creditor had lent Bear Stearns money at a 15 percent interest rate the month before its collapse, there is no reason that the government should fully honor this debt. The lender obviously understood that this was a high-risk loan at the time it was made. Any loan to a failed institution should be subject to such a review, which could result in a demand for a partial repayment to the government. This would only apply to large loans, since there would be little point in scrutinizing a loan for $20,000.

4. The government will inevitably come into the possession of a vast amount of mortgages in various stages of delinquency. The priority in these cases should be to allow people to remain in their homes, not maximizing the return on the mortgages.

This should mean first a good faith effort to negotiate a write-down that makes it possible for homeowners to remain in their house as owners. If this proves impossible, then the next recourse should be to give homeowners the option to remain as renters paying the market rent for the house. Only if the homeowner can neither arrange a new mortgage nor pay the market should the government move ahead with foreclosure procedures. This is a subsidy to homeowners, but it is a relatively small subsidy to people who were often the victims not only of abusive marketing practices by the mortgage industry, but an explicit government policy to push moderate income families into homeownership.

It is also important that renters in foreclosed properties have their rights protected. This should mean, at the least, that any existing leases be honored and also that a reasonable time period be given before a new owner is allowed to carry through with the eviction of tenants.

5. The government can set whatever conditions it wants on participating in the reverse auctions. One of the conditions it should set is that executive compensation be severely constrained at any financial firm that participates. For example, it can set an absolute limit of $2 million in total compensation for any executive at any firm that takes parts in the reverse auction.

Since participation in the auction is completely voluntary, this would make the cap voluntary. Furthermore, there need be little fear about losing good talent, because well-managed firms would not have to participate in the reverse auction.

Restraining compensation on Wall Street will be incredibly important in reversing the pattern of inequality that has developed over the last three decades. The exorbitant compensation packages on Wall Street distorted pay structures throughout the economy.

Executives at non-financial companies looked at the pay on Wall Street and used this as a basis for demanding outrageous pay packages for themselves as well. Presidents of universities often get over $1 million a year, and even top executives at private charities can often earn near $1 million a year. These salaries seem low when compared to their counterparts in the corporate world, but they are outrageous when compared to the pay checks of typical workers. If we can bring about voluntary pay restrain on Wall Street with this bailout, it will be a very big step toward reversing the pattern of inequality that has developed over the last three decades.

Principles for restructuring the financial system

1. The Fed must see the combating of asset bubbles as one of its main responsibilities, along with maintaining high employment and low inflation. We are in this crisis because Alan Greenspan chose to ignore first the growth of a $10 trillion dollar stock bubble and then an $8 trillion dollar housing bubble.

The Fed has a wide variety of tools that it can use to rein in bubbles, starting with talk. The Federal Reserve Chair regularly testifies before Congress and frequently speaks in other public forums. The chair can use these occasions to lay out evidence that a bubble exists in a financial asset and to explicitly describe the potential risks to the actors involved.

or example, in 1998 and 1999 Alan Greenspan could have carefully explained that price to earning ratios in the stock market were inconsistent with any plausible projection of corporate profit growth. He could have explained the risks that pension funds and other investors faced from being heavily invested in an over-valued asset.

Similarly, if Greenspan had pointed out in 2002-2006 that house prices had hugely diverged from a 100-year long trend, rising by more than 70 percent in real terms after staying flat for 100 years, then it is likely that many people would have paid attention. He could have also pointed out that many of the holders of mortgage backed securities and derivative instruments were taking very serious risks, since these assets would suffer large losses with a reversal in the housing market.

It is difficult to believe that if Greenspan had made these sorts of explicit warnings, it would not have an impact on the bubbles in the stock and housing markets. Economists and financial analysts can certainly have differing views on the state of the economy, but it would be incredibly irresponsible to simply ignore clearly stated warnings from the Fed.

In addition to the impact of explicit warnings, the Fed also has substantial regulatory authority that it can use to rein in bubbles. The main tool in the case of the stock market is the margin requirement for borrowing to buy stock. Raising the margin requirement by itself would have little impact (relatively little stock is bought with margin borrowing), however raising the margin requirement would be a clear warning that the Fed views the stock market to be over-valued.

The Fed has more extensive regulatory powers with regard to the housing market. Its failure to use these powers allowed for the proliferation of questionable mortgage practices.

The Fed can raise interest rates to rein in financial bubbles. This is an extremely blunt instrument that also has the effect of slowing the economy and throwing people out of work. For this reason, the Fed should be very hesitant to use higher interest rates as a weapon against asset bubbles. However, in the case of the housing bubble, if the Fed's other tools were insufficient for containing the bubble, it would have been appropriate to raise interest rates to prick the bubble, even at the cost of slowing the economy.

2. Congress should impose a modest financial transactions tax with the explicit purpose of reducing excessive trading and downsizing the financial sector. The financial sector has exploded in size over the last three decades. It accounted for more than 30 percent of corporate profits in 2004. Back in the 1950s and 1960s, the country's period of most rapid growth, the financial sector accounted for less than 10 percent of corporate profit.

The financial sector performs an incredibly important function in allocating savings to those who want to invest in businesses, buy homes, or borrow money for other purposes. But shuffling money is not an end in itself. The explosion of the financial sector over the last three decades has led to a proliferation of complex financial instruments, many of which are not even understood by the companies who sell them, as we have painfully discovered.

The best way to bring the sector into line is with a modest financial transactions tax. Such taxes have long existed in other countries. For example, the United Kingdom charges a tax of 0.25 percent on the purchase or sale of share of stock. This is not a big deal to someone who holds their shares for ten years, but it could be a considerable cost for the folks who buy stocks in the morning that they sell in the afternoon.

Scaled taxes on the transfer of other financial instruments (e.g. a 0.02 percent tax on a trade of an options, future, or credit default swaps.) could go a long way in reducing speculation and the volume of trading in financial markets. Such a tax could also raise an enormous amount of money--easily more than $100 billion a year. This would go a long way toward funding new programs or reducing the budget deficit.

And, this tax would be hugely progressive. Middle-income shareholders might take a small hit; but it would be comparable to raising the capital gains tax rate back to 20 percent, where it was before it was cut to 15 percent in 2003. The real hit would be on the big speculators.

3. Tradable instruments, like credit default swaps, should be standardized and traded on regular exchanges. One of the factors that made the financial system so vulnerable was the proliferation of credit default swaps and other instruments that were not publicly traded. This makes regulation very difficult, since regulators don't have good current information on the volume of these assets. In addition it leaves companies with a large amount of discretion in their accounting for these assets, since they don't have an exchange determined price.

4. There need to be much tighter restrictions on the extent to which financial institutions can leverage themselves. Profit maximization will encourage firms to become as leveraged as possible. In principle, the market should provide discipline, charging high interest to heavily leveraged firms. However, if lenders either exercise poor judgment or assume a government bailout will protect them (as has been the case in this instance), then the market will not by itself prevent excessive leverage.

Any institution subject to regulation should face tight restrictions on leverage. There should be absolute commitment that lenders to any institution not subject to financial regulation will not be bailed out.

5. Fannie Mae and Freddie Mac should remain as public corporations, operating in a manner similar to the way Fannie Mae operated prior to its privatization in 1968. These institutions play an important role in making low-cost mortgage money available nationwide by sustaining a secondary mortgage market. While they operated poorly in the housing boom, making risky loans and becoming overly leveraged, they still acted more responsibly than private issuers of mortgage backed securities, just about all of whom are now out of business.

There will continue to be a role for Fannie and Freddie to provide the anchor of the secondary market, ensuring the operation of a smooth functioning market. Now that they have been taken over by the government, there is no obvious reason to return them to their mixed public/private status.

We usually want the private sector to take the lead in most areas because we expect private entrepreneurs to be more innovative and willing to take risks. However, we really don't want these institutions to be innovative and risk-taking; we want them to carry through the mundane task of buying up and bundling mortgages and selling them in the secondary market. Private financial firms will still have the opportunity to experiment with new instruments insofar as opportunities develop.

Privatization would also lead to much higher pay for the top executives at these firms. The annual compensation for top executives at both Fannie and Freddie ran into the tens of millions, effectively imposing a tax on mortgages.

In short, privatization of Fannie and Freddie simply adds risk and costs. It provides no obvious additional value.

6. The structure of the Fed should be changed so that all the officials with a direct say in monetary policy are appointed by the president and approved by Congress. The Fed is supposed to act in the public interest, not in the service of the financial industry. It is disturbing that the public is being represented in this debate over the restructuring of the financial industry almost entirely by top figures from the financial industry. This would be comparable to having national policy on the auto industry determined by former top officials with the United Auto Workers. It is difficult to believe that the views of Treasury Secretary Paulson and other government officials from the financial industry are not influenced by their long association with the industry.

This problem should not be worsened by giving the banking industry a direct voice in the conduct of monetary policy, by allowing it to appoint Federal Reserve district bank presidents who take part in open market committee discussions. There should be a strict separation between the conduct of open market policy, which should be done exclusively by people appointed by the president and approved by Congress and the responsibilities of the district bank presidents. The banking industry deserves no special voice in the conduct of monetary policy.

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Six comments and rejoinder on:

Grazia Ietto-Gillies, "A XXI-century alternative to XX-century peer review",
issue no. 45, 15 March 2008, pp. 10-22, http://www.paecon.net/PAEReview/issue45/IettoGillies45.pdf

Comment by Donald W Braben (University College London)

If ever there was an elephant in the academic room it is peer review. This ubiquitous process now dominates every facet and phase of everyday academic life. It was not always so. Until about 1970, tenured academics usually had access to modest resources which they could use as they pleased without reference to anyone. For most people, therefore, peer review only became an important issue when they had results to publish.

Grazia Ietto-Gillies focuses her attention on that latter process. She outlines the well-known weaknesses of peer review[1], and proposes a new system - "ex-post bottom-up peer comments" – that takes advantage of the new communication technologies. In her system, papers for publication are submitted to an appropriate open-access site where they would be screened to weed out "crankish" papers, for example, and then published by being posted on the site. Those who wish to comment on them are free to do so, subject to similar screening. Thus, papers would be published quickly, and those who have comments can also gain credit as they would be posted on a linked site.

Taken in isolation, her proposals have the merit of formalizing peer review at its informal best. Thus, in the time-honoured way, one may meet a colleague over coffee say to discuss new results or an idea, the colleague may make comments, and one's position is modified or not as a result. But Ietto Gillies' proposals cannot be taken in isolation. The post ~ 1970 world is now too complicated. Indeed, the very process of peer review is no longer uniquely defined.

Since about 1970, the practice of giving modest funds to tenured academics as of right has virtually disappeared. Now, for the first time in science's long history, researchers have little alternative but to submit their proposals in writing to an appropriate agency. The agency then subjects them to third-party assessments of quality, relevance, and potential deliverables from which it selects the best. This process is also called peer review. It should, of course, have been given another name. I have suggested *peer preview*[2 3] but whatever its name, it is arguably more important than the processes applied to completed work. Without peer-review - peer-preview - approval, there are no new projects, and the issue of peer review – the old sort – does not arise.

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[1] My favourite description of peer review was given by Richard Horton, the editor of *The Lancet,* in an editorial for the *Medical Journal of Australia* (MJA 2000:172: 148-9). "The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability -- not the validity -- of a new finding. Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed, often insulting, usually ignorant, occasionally foolish, and frequently wrong."

[2] Donald W Braben, Pioneering Research: A Risk worth Taking, Wiley, 2004.

[3] Donald W Braben, *Scientific Freedom: The Elixir of Civilization*, Wiley 2008.

In addition, there is the question of who might read Ietto-Gillies style publications. Articles published in peer-reviewed journals are on the agenda, so to speak. Researchers preparing submissions to funding organisations must demonstrate, among other things, that they are aware of progress in their fields. They *must* keep up to date, therefore. But Ietto-Gillies' publications might initially lack the status of "progress", especially if they are controversial. Their reading might not yet be mandatory, therefore. In more sensible times, that would not be such a problem but academics today do not have as much time for reflection as they once had. Tenured academics are almost constantly preoccupied with the task of seeking new funds. Failure can lead to loss of team members or even to a group's disbandment. For similar reasons, those such as post-docs on soft money are almost constantly preoccupied with their future employment, and whether they will be able to pay for such mundane things as rent at the end of the year. In addition, teaching loads are increasing as student numbers rise. In these circumstances, "fire-fighting", and doing what must be done to survive take precedence. There is little time for anything else.

Ietto-Gillies mentions the growth of the audit and control culture, and asks, rhetorically, whether this type of culture encourages academic endeavours. Peer review and its alter ego peer preview are among the most important pillars of that culture. Before about 1970, academics with an individualistic turn of mind could choose to ignore their peers' opinions. They might have been confident, for example, that they would eventually prove that their unique view of the world was correct. Unfortunately, however, we now ignore peers' opinions at our peril, and the short-term becomes virtually all that matters. "Eventually" does not get its chance.

The post-1970 developments are strangling research enterprise. Spontaneity has been lost and bureaucracy rules. It is tragic that, like children given something whose value they do not appreciate, the leadership in many countries today seems to believe that there is nothing special about academic endeavours. The university should therefore be subject to the same indiscriminate processes of optimization and performance assessment other institutions must endure. But the university has long been a valuable source of independent advice and new insight. Exposing its virtually every action to peer preview scrutiny undermines those vital functions. New insight, for example, usually challenges consensus.

I have discussed these problem in more depth elsewhere[2,3]. However, the urgent need is for every researcher to find the time to stimulate a wider discussion of these issues, and to press for actions that will prevent academic life from drowning in the seas of mundanity.

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Comment by Stevan Harnad (Universite du Quebec and University of Southampton)

Flight-test before you fly

(1) There is nothing wrong with classical Peer Review (PR) that a supplementary Open Access (OA) system will not fix -- but OA is **an "ex post"** *supplement* to PR publication, not **an "ex ante"** *substitute* for it.

(2) OA means immediate free webwide access to post-PR journal articles ("postprints") immediately upon acceptance for publication, plus, in cases where the authors desire it, free access also to their pre-PR "preprints" **even earlier, for pre-PR commentary.**

(3) This solves most of the problems cited by Grazia Ietto-Gillies in "A XXI-century alternative to XX-century peer review": access, speed, scope, corrective feedback.

(4a) **Classical** PR is also (a) an *answerable* mechanism, with the referees, optionally anonymous, privately answerable to the editor, as is the author, for producing a paper that, once accepted, has been revised to meet the known and trusted quality standards of the journal in question; the editor is in turn publicly answerable to the journal's usership with its reputation **for quality.**

(4b) PR is also a (necessarily "ex ante") filter for users, so that they need not waste their **limited** reading time trying to peer review raw drafts for themselves, **nor** risk their **scarce and precious** research time trying to build on unsound results that have not met a known and trusted quality standard.

(5) "Ex-post" open commentary is neither answerable to an editor who answers for maintaining the journal's quality standards, nor is the author of an unrefereed draft answerable, having the option of revising or not revising to meet arbitrary self-appointed commentators' recommendations.

(6) Most serious referees and users do not have the time or the desire to work their way through raw unrefereed drafts, **neither** to referee them, **nor**, worse, to risk using them, **unrefereed**.

Systems like the one proposed by Ietto-Gillies have been proposed many times. What is needed is to test them, to demonstrate that they are capable of generating at least the same standards of quality and useability that we have now in each field **-- and also that** they are sustainable and scalable. **(Everything new works at first, for a while.)**

Until they are thus tested and proven, these are just evidence-free conjectures -- and conjectures that go against the actual experience of editors, which is: (i) that qualified referees (who often want and need the option of anonymity) are a ***scarce, overused resource*** that is already hard to mobilize when **referees** know that authors are answerable to editors **to ensure that they take** their referee reports seriously, hence even **less likely** to donate their time and attention to unfiltered and unanswerable raw drafts; (ii) that authors, (who often want and need the option of not making their unrefereed drafts public) seek qualified feedback from referees anwerable to a qualified editor of a journal with known quality standards, so that their own article too can be certified as having met those known quality standards; (iii) that users need research that is filtered and certified to have met known and trustworthy quality standards in advance **(i.e., "ex ante").**

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Comment by Roland Fox (Salford Business School, UK)

Criticism of the peer review system can all too easily sound like sour grapes. Yet, remembering that the whole Impressionist Movement sprang out of the "Gallerie des Refusées", the review system has had notable failures in all fields. Surely Marxist literature should have realized that the system was failing before the collapse of Communism? Maybe there were such articles that were being regularly rejected but I doubt it. Self-censorship by authors and a belief that the process is biased leaves little room for true disagreement. Adding a twig to a branch is more the style, creating an ever increasing network - a little criticism to ease along the debate, seems to be the most that one finds. In my own area, I recall an eminent professor saying that a particular innovation in accounting had "come to its conclusions too early": surely this is good? When a highly critical paper is published, and it does happen, it can all too easily be stillborn and left to gather bytes in some remote file that is forever forgotten. I can think of a notable author who demonstrated the inadequacy of traditional investment appraisal even for a simple replacement decision – it was ignored. Indeed, the relationship between research and reality is, to say the least, suspect. An investment appraisal technique much favoured by economists and written about endlessly in finance for which there are, according to my search engines, no case studies showing the technique actually aiding decisions. As for educational research and the UK government's naïve belief that the results demonstrated breakthroughs, the less said the better. What is happening here? Ietto-Gillies refers to a socialization process but in my opinion she rather understates the problem; it is wider than just social interaction between the editor, reviewer and author (as suggested by Bedeian (2004)). Controlling the "gate" by using rarefied techniques, theories and terminology, a self referencing, self-sustaining coterie of academics can carry each other into ever greener fields.

As Ietto-Gillies points out, the whole of the academic career structure rests on research publications. Where the criteria are relatively clear one may argue along with Ietto-Gillies that an open access system might be helpful in allowing ground-breaking articles to come through. But in the social sciences and, I suspect, the arts and indeed many areas of the sciences, the notion of ground-breaking is unclear. It is arguable in the Popperian sense that knowledge is not being developed as there is no real falsification process. Review has more in common with initiation rites – is the article *well* referenced, is the methodology *sound*, are the results *interesting* – shall we admit this member to our order? Some academics like the "eminent" professor quoted earlier (and obviously myself) are cynical about this process, but the outcome would be the same even for those with the best intentions. As noted by Ietto-Gillies, there is a preference for statistical significance. I would submit that this is an honest attempt to develop falsifiable statements. Alas, the term is a misnomer as noted in my primary textbook in the 1970's (Wonnacott and Wonnacott p. 188); the term should be "statistically discernable". In addition the "size effect" – how much of the variation in the predicted variable (reading age, the price of a share, student scores etc) is being explained, multicollinearity – the close correlation of explanatory variables and the experimental effect (called the Hawthorne effect in business similar to the placebo effect in medicine), all make statistically significant findings highly dubious. Even in the sciences, epidemiological studies send out a stream of conflicting advice about the causes of cancer based on the same flawed statistical methodology. Unfortunately, the alternatives (e.g. grounded theory) simply offer different flaws. Nevertheless one worries that the cynics might be right. The gatekeepers might just try to keep out any real cure – not wanting to come to any conclusion. Remember that Dr Marshall actually had to give himself stomach ulcers before the disbelieving brotherhood would ordain this heretic. The Gavescon debate is only the most recent example of interests distorting truths. But there is also a good side: the cold fusion debate and Creationism did not make it through the review system and anti global warming papers are sidelined. My point is that although there are examples of appalling review decisions and a failure to ask inconvenient questions, the root cause is not the review process but the problems of developing uncertain knowledge and the high stakes in terms of career advancement. Seen in this light, an open access system might do no more than give increased access to the process of coalition building. Would papers previously accepted be shot down in such a system? I suggest not, the loss of anonymity as suggested by Ietto-Gillies could well make any form of criticism career threatening. After all, why do we have anonymity? Would review be better for a kind of popular "bottom up" process leading to acceptance of papers that would have otherwise been rejected? I am not convinced, this is after all the role of conferences and maybe they should take this role more seriously. But the worry is that open access with minimal editing might merely give a platform to new low standards of debate. Authors could well be unwilling to make as much of an effort as the rewards will be less apparent and hastily written comments may be given undue prominence.

Clearly, there is a need to rethink the journal process for the XXI century as the process has undoubtedly been in part shaped by a technology that is no longer extant. Journals are, as Ietto-Gillies observes, beginning to use the techniques of the web with more developed comments sections – though this was always a rationale for hardcopy versions. But should a traditional review process precede web comments? My answer is an unfortunate, yes. At least it is a well defined "currency" in a very ill defined scenario. The key to my mind is to have an independent and anonymously reviewed comments section as a way of reviewing the editorial process – a kind of independent role to the whole process, as with a non executive director. Then perhaps the more abstruse contributions of certain "brotherhoods" would be shown for what they are. Although peer review is far from perfect, the big problems, as I have indicated, lie elsewhere. And should there be a "Gallerie des Refusés" under the control of the comments editor? Why not, as long as it is bytes, not books.

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Comment by Marco Gillies (Goldsmiths College London)

Peer Review and interdisciplinarity

In a recent (9th May 2008) talk at University College London, David Delpy, the chief executive of the UK Engineering and Physical Sciences Research Council (EPSRC, the main UK governmental research funding body in engineering and physical sciences), gave some interesting comments on peer review and its short comings. The UK research funding councils are increasingly trying to encourage more ambitious and interdisciplinary research projects, but are having great trouble doing so. This is largely due to the peer review process being disproportionately hard on interdisciplinary projects, with the effect that most of these projects being rejected, despite the research councils desire to fund such projects. Interdisciplinary work seems to be particularly problematic for the review process as it inevitably requires reviewers to judge work that is, at least, partially outside their expertise. The result is often that reviewers judge a proposal too narrowly from within their discipline. Prof. Delpy gave the example of bio-engineering projects being found wanting by biologists because they lack a clearly formulated scientific hypothesis, despite that not being suitable for an engineering project. The opposite extreme, that Prof. Delpy also found to be common, is that reviewers of interdisciplinary projects tend to comment, often negatively, about elements of the project outside their field, despite their lack of knowledge. This problem is potentially even more problematic than the first as it essentially means that projects can be rejected based on non-expert reviews.

Social Authorship

Bedeian, in his article on peer review (Bedeian, 2004) identifies the social authorship inherent in peer review. This paper stresses the negative aspects of social. I would disagree on this matter, because social authorship and discussion can produce better work, by bringing new insights of which the original author was not aware, as well as correcting errors.. So what is the problem in the case of PR? One issue that Ietto-Gillies identifies is the power relation involved. But another point that she does not stress is the lack of visibility and attribution of the social authorship. A process of revision, that can change the opinions expressed in the paper to ones different from the authors, and addition of elements by the reviewers, occurs completely invisibly from the final readers. The post-hoc comments system would make this process much more visible and turn it into a proper debate. This should be supported by a system that allows authors (completely at their own discretion) to progressively refine papers in light of comments. Ideally there would be a history system where previous versions are retained so that readers can get a full picture of the debate. One possible result is that authors might tend to upload work in progress (e. g. pilot studies) even earlier in order to get comments and start debate (and probably to get an early priority). This would mean that the positive aspects of social authorship could go much deeper, influencing the research while it progresses, without so many of the negatives.

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Comment by Paul Ormerod (Volterra Consulting, UK)

A recent experience

I thought the following experience I have recently had with the refereeing process might be of interest in the context of Grazia Ietto-Gillies' paper "A XXI-century alternative to XX-century peer review"

I have written a technical paper looking at whether there are cascades across countries which lead to global recessions. In other words, what are the chances that a recession which starts in one particular country will spread to others.

I use data in 17 countries from 1870 to 2006. I discover empirical features of recessions which are not in the standard economics literature:

- the statistical distribution of duration of recessions within individual countries,
- the statistical distribution of 'wait times' between recessions within individual countries,
- the statistical distribution of the proportion of developed countries in recession in any given year.

I have a simple theoretical model, based on cascades across a network, which is consistent with all three of these key empirical findings

We might think that both these empirical findings and the aim of the paper itself would, especially in current circumstances, be of interest to economists.

I sent my paper to the *Quarterly Journal of Economics*, which has carried articles on cascades of various kinds in the past. Within 24 hours (!) I received the following from neo-classical Nobel prize winner Robert Barro:

> 'I am sorry to report that we will not be able to publish your paper, MS 14032, entitled "GLOBAL RECESSIONS AS A CASCADE PHENOMENON WITH HETEROGENEOUS, INTERACTING AGENTS." I have concluded that there is not enough value added for a general economics audience in the present paper to warrant publication in the Quarterly Journal of Economics'

So establishing new empirical results on the structure of recessions is not, in Barro's view, adding enough value for a general economics audience. And this is in April 2008, when there are worries everywhere about whether a US recession will spread!

I cannot help but note that real business cycle models will be unable to replicate these key features of recessions in the capitalist economies which I have discovered.

I'm always prepared to take comments and criticism on papers I write. I don't mind papers being rejected on quality, but not to even send such a paper to referees when the question of a global recession is a key current issue seems to me very odd.

Anyone who would like a copy, please email me at pormerod@volterra.co.uk (my website is currently being re-designed and only a very old version is accessible)

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Comment by Menakhem Ben-Yami (Israel)

“Right” books, “right” periodicals, “right” paradigm

Mainstream science and economics are as sluggish in changing their course as a 500,000-mt tanker. The inertia is tremendous. Fishery science is a good example. More and more independent scientists and even some scientific bodies are recognizing the shortcomings of the old models and methodologies, hence, the low reliability of stock assessments. Nevertheless, those models and methodologies are still being used throughout most of the world’s fisheries. One of the mainstays of the prevailing paradigm is the way scientific articles and papers are peer-reviewed. In most cases they are sent to “peers” of the same discipline and the same educational background, who usually only check whether the consensual methodology has been followed and no mistakes made. The reviewers don’t question the basics, because they wouldn't admit that they had for years practiced inadequate science.

Similarly, there's a he problem with some economists; not that they are not qualified professionals, or that their statistical methods are wrong. The problem, in my view, is rooted in their very pretense that economics is an objective discipline and, hence, that the prevailing economic school can produce, using certain methodology, impartial recommendations for “efficient” policies and (among others) fishery management that would be beneficial to society and nation. This prevailing economic school dominates also the “peer-review” system. Reviewed by the “right” peers, reports and papers would be published in the "right" books and periodicals, as long as they stick to the “right” paradigm.

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Rejoinder by Grazia Ietto-Gillies

(London South Bank University, UK)

I would like to start by thanking very warmly all the people who have taken the time and trouble to respond to my article. Taking all the contributions together, I can see some agreement, some criticisms and some novel points. They are all very welcome. I will not try here to respond to each separately but I will summarize the main points of my proposal as related to the overall comments.

I would first like to stress that a new Open Access system for putting papers into the public domain is already with us or underway. Most researchers now post their papers on their own web sites prior to publication in journals. Moreover, the move towards assessment of research output via metrics is having an effect on this process. Some very prestigious universities – including Harvard and University College London - are organizing web sites of all the research papers – published, unpublished, current and past – by their staff. The aim is to have an institutional e-archive in which their academics' works become easily accessible and other researchers throughout the world can access and cite them. The reasoning and purpose behind this initiative is obvious: if what matters is citation, then let us make citation easier and this means making one's works more accessible[1]. So the move towards an Open Access system is well underway. It could, indeed, be claimed that what I propose is too conservative and that people do not see a need for an overseeing editorial process at all: they can just put their papers on the web and it is for others to decide which to read and cite. It is already happening: many of us cite papers published on the web rather than in journals. Whether we like it or not, the process is unstoppable.

My proposal is for a more managed process, one in which there are light-touch editors in charge; editors who would also encourage and channel comments and debates which I consider essential to the process. Why do I want an OA system for putting research results into the public domain? The answer in one word is: *efficiency*. There are several respects in which the proposed system is more efficient than the current PR system. It would put fewer obstacles for ground-breaking, unusual works to find their way quickly into the public domain. It would greatly lower the costs of having works put into the public domain: here the savings are seen both in terms of financial costs and in terms of opportunity cost of all the time that editors and referees of journals put into the process. It would ensure a speedier system for getting papers into the public domain. It would encourage a culture of open debate in which the community of researchers will not shy away from making critical comments or adding new points to somebody else's paper because they know they will get attribution. It would create sites of specialized research contributions similar to the current system in journals. A further advantage of my proposal is that it would make access to research works more democratic because it would be equally accessible by researchers in rich as well as in poor countries: all the researcher needs is a computer. Currently many researchers in developing countries are cut off by the high costs of journals in relation to the resources of their libraries.

Now for the comments. We have all received and continue to receive rejections to papers by journals' editors and their referees; they are always hurtful and the more so if the process is perceived to have been unfair. Some of us have inflicted rejections on others – hopefully not unfairly - and continue to do so. Yet, hurt feelings and fair or unfair referees' reports are not the reason for my proposal; my main reason is just efficiency made possible by the new technologies. After all, would it be less hurtful to have strong criticisms published

[1] A long term effect of the spread of e-archives will be savings on journals' subscriptions by libraries. This, of course, will undermine the viability of many publishers.

on an open site? Some may respond that signed criticism would be less strong. Well, researchers and academics in general do not shy away from strong critiques when writing book reviews, why should they do so when commenting on a research paper?

Let us now look at the main objections to the proposed system. There will be a lot of worthless papers put into the public domain; yes, undoubtedly, but there already are on the web and in journals; but, at least, putting them on the web will be less costly for the research community world wide than it is at present. Moreover, the OA system envisages a bottom-up evaluation process via comments from peers.

Yes, what I propose is not fully tried yet and there will be problems when we try it; but this is true of any new system and the problems cannot be fully experienced and faced until we start embracing the new system. In fact, I see a major problem with a period of transition between the old PR and the new one: as long as the PR system is seen as the gold standard of quality assurance in publications, researchers may become reluctant to move away from it for fear of damaging their career prospects or chances in grants applications. However, here the introduction of metrics/citation indices into the assessment of research may act as a spur towards a new system; the establishment of institutional e-archives as mentioned above is a good example of this development. Last, but not least important, we should not underestimate the resistance to the new system by the publishers of journals.

Nonetheless, it is worth reiterating that access to unpublished papers on the web is already with us and that the process is unstoppable. What I propose is a system in which fairly open entry into the public domain is combined with encouragement of comments by peers in a process that furthers the social nature of research.

A few months ago when Edward Fullbrook offered me to publish my paper in *Real-World Economics Review* I had already committed it for a special issue of a journal to be edited by a friendly American colleague. I withdrew it from the latter and I still hope that the colleague remains friendly and understanding. The reason for opting to publish in the current *Review* is partly consistency with the nature of the paper and partly to give the paper a chance to be read widely and commented on; given the subject I thought that this latter element was important. My instinct was right and I thank Edward Fullbrook for his offer. We have had a good number of comments and the overall experience in *test flying*, minuscule though it is, shows the following.

- People do contribute to debates particularly when encouraged.
- Researchers are prepared to give both supporting and critical comments.
- Attribution of comments may have encouraged some novel points to the debate.
- The process has led to self selection; it is people interested in the issue who have contributed to the comments, whatever the reasons for their interest.

On the whole I think that the research community is ready for a new system that takes full advantage of the available technologies for the benefit of the community itself. When it comes to evaluation and dissemination of research results all I am saying is: let's give technology and efficiency a chance.

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Economic freedom is negative liberty:

A comment on Legum (2007) and Stanford (2007)

Joshua C. Hall, Robert A. Lawson and Will Luther

(Beloit College, Auburn University and George Mason University, USA)

Two recent articles in this journal by Jim Stanford and the late Margaret Legum strongly condemn the measurements of economic freedom published by the Fraser Institute and the Heritage Foundation.[1] As researchers associated with the Frasier Institute's Economic Freedom of the World (EFW) index we feel that it is necessary to address some issues raised by their commentaries as they relate to the EFW index.[2]

Both Legum and Stanford believe that the problem with these indexes is that they are pro-business indexes that ignore normal, regular people. In the critical words of Stanford, the indexes say "what is good for investors and employers, is good for everyone."

This is a mischaracterization of the approach and methodology of the EFW index. The index conceives of economic freedom as a *negative* liberty. That is, economic freedom is defined as the absence of external obstacles that prevent an individual from engaging in activities that they would like to engage in given their available resources.[3] Freedom is not defined in the *positive* sense of being able to do some particular thing; rather it is defined in the negative, non-interference sense.

By utilizing the philosophy of negative liberty, the EFW index thus treats all individual interests equally. Can individuals enter into contracts? Can buyers and sellers trade freely at prices agreeable to each? Can individuals create business enterprises and compete with others without interference? Can employers and employees freely negotiate employment terms without government intrusion? Are people permitted to own the fruits of their labor? To take one example, the EFW index counts military conscription as a negative in the index because it is a clear violation of person's ability to choose freely how to spend his time. In what sense is this pro-business?

To the extent that individuals are free to start businesses or workers to join labor unions freely, the index treats these equally as good things. It is only when individuals (or groups of individuals) attempt to use the *political* process to gain forcibly at the expense of others that EFW scores are reduced. When businesses get special favors and subsidies the EFW index treats that as a negative. Similarly, when labor unions receive special treatment under the law, as in fact they do, that is a violation of economic freedom. The EFW index does not favor either business or labor.

It is important to distinguish between how individuals interact in the market compared with the political process. Mutual agreement provides the basis for economically free activities in markets. Unless both parties agree to an exchange, the transaction will not occur. On the other hand, "majority rule" provides the basis for democratic political action. Inevitably, the

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[1] Legum, Margaret. 2007. "Should We Aspire to a High Score for 'Economic Freedom'?" *Post-Autistic Economics Review* 42, p. 60. 18 May 2007. http://www.paecon.net/PAEReview/issue42/Legum42.pdf.
Stanford, Jim. 2007. "A Silly Project." *Post-Autistic Economics Review* 43, p. 59. http://www.paecon.net/PAEReview/issue43/Stanford43.pdf

[2] Gwartney, James and Robert Lawson. 2007. *Economic Freedom of the World: 2007 Annual Report*. Vancouver: Fraser Institute.

[3] For more on the distinction between positive and negative liberty, see Berlin, Isaiah 1969. 'Two Concepts of Liberty', in I. Berlin, *Four Essays on Liberty*, London: Oxford University Press.

political process involves some people forcing, in a quite literal sense, some other people to follow along with whatever decision the majority makes. While democratic decision making may be a convenient way to achieve certain objectives such as building dams and roads, creating public parks, and waging war, it is fundamentally at odds with any concept of individual freedom. In contrast, the market process simply does not allow for people to force others to trade with them; it is most consistent with economic freedom.

Legum and Stanford also argue that advocates of economic freedom believe this freedom is the only thing that matters. They point out correctly that there are other things that people find important besides economic freedom. We agree, in part, on this point. There is much to life besides economic freedom. Countries with higher degrees of economic freedom are given higher scores, but it does not follow directly that these countries are somehow better. Whether one should prefer more or less economic freedom is indeed a normative judgment. However, for those who make their normative judgments on consequentialist grounds, the existence of this measurement makes it possible to test long-standing claims, and counterclaims, that economic freedom enhances prosperity and other social goals.

Many, many studies have used the EFW index to examine the role institutions play in economic development. All have found a significant, positive correlation between EFW scores and growth.[4] Nor does growth seem to be the only thing affected by economic freedom. Other measures of social progress, including the UN Human Development Index, are positively related to the EFW index.[5] Lawson (2008) finds that income distribution is no better or worse on average in freer countries, but states "there is clear evidence that low-income people in freer countries are better off than their counterparts in less-free countries."[6] At least one study even shows a positive correlation between economic freedom and the environment.[7]

Critics of the measurement of economic freedom such as Stanford and Legum need to reply to this growing body of empirical evidence that economic freedom is associated with a wide ranging array of desirable social outcomes. Baseless commentaries on the "pro-business" nature of the index and attacks on the motives of the authors including name calling (e.g., "right-wing think tanks") do very little to advance our understanding of the relationship between different conceptions of freedom and human flourishing.

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[4] For a survey of the literature, see: Berggren, Niclas. 2003. "The Benefits of Economic Freedom: A Survey." *The Independent Review* 8 (2): 193-211. http://www.independent.org/pdf/tir/tir_08_2_berggren.pdf and De Haan, Jakob, Susanna Lundström and Jan-Egbert Sturm. 2006. "Market-Oriented Institutions and Policies and Economic Growth: A Critical Survey." *Journal of Economic Surveys*, 20 (April): 157-181.

[5] Grubel, Herbert G. 1998. "Economic Freedom and Human Welfare: Some Empirical Findings." *Cato Journal* 18 (2): 193-211.

[6] Lawson, Robert A. 2008. "Economic Freedom and Property Rights." Making Poor Nations Rich. Benjamin Powell. Stanford: Stanford University Press.

[7] Norton, Seth W. 1998. "Property Rights, the Environment, and Economic Well-Being." Who Owns the Environment? Peter J. Hill and Roger E. Meiners. Lanham: Rowman & Littlefield.

Rejoinder: Philosophical underpinning of "economic freedom" laid bare

Jim Stanford [Canadian Auto Workers]

In their response to critiques of their measurement of economic "freedom", Joshua C. Hall, Robert Lawson, and Will Luther have done us a favour in laying bare the extreme libertarian philosophies which underpin their work.

The Economic Freedom of the World project (an international initiative coordinated by Canada's right-wing Fraser Institute) attempts to quantify a highly neoclassical conception of freedom: namely, the extent to which economic agents (investors, entrepreneurs, workers, and consumers) are free from interference or constraint from government regulations, taxes, collective bargaining, or other intrusions. As Hall *et al.* explain, this conception is a nominally neutral conception of "negative liberty": that is, it measures the extent to which individual agents are not interfered with. But it captures no positive rights which individuals may claim in the economic sphere – such as the right to employment, the right to a basic standard of living, or the right to organize a union and bargain collectively.

Hall *et al*. claim that this measure is neutral with respect to different agents or classes in society. This is true only in the same sense as Anatole France's famous adage: "The law, in its majestic equality, forbids the rich as well as the poor to beg in the streets, steal bread, or sleep under a bridge." We can't pretend that these laws are equal in their impact on all individuals, without considering the real-world social and economic imbalances that fundamentally impact the manner in which the laws are implemented. The worth of a person's freedom to keep as much money as they possibly can accumulate, without paying taxes on it, is obviously contingent on how much money the individual owns or can realistically hope to own. (Not surprisingly, low taxes are an important component of the EFW index.)

Taken to an extreme, this judgement that freedom equals non-interference implies a rejection of collective democracy in its entirety. As the authors themselves claim, "Democratic decision making … is fundamentally at odds with any concept of individual freedom." The pinnacle of freedom, in this view, is a world in which every individual is out for their themselves, with no obligation or accountability to the society in which they live, work, and accumulate. It matches the idealized neoclassical vision, but would repulse most democrats. And, historically, it has never described how real-world capitalism works – even in its early days, when the collective power and interventions of (pro-capitalist) governments played an essential role in fostering the early development of the new system.

The corresponding assumption that all private contracts (including employment contracts) are "voluntary" and hence mutually agreeable likewise ignores the real-world economic and social context for the operation of markets. In reality, compulsion, coercion, and even (surprisingly often) outright force underpins the so-called "free exchange" between workers and employers that the EFW approach celebrates. No wonder, then, whereas a high minimum wage or unionization translates into negative intrusions on liberty (namely, the right of employers to hire labour, free from government or union intervention, for the lowest price that the poverty and desperation of working people will allow), for workers minimum wages and unionization translate into a bit of economic freedom – namely, freedom from the compulsion for exploitation that is the deliberate aim of neoliberal labour market policy. Workers' freedom and employers' freedom are in this view quite opposite – and the EFW approach (with its emphasis on deregulation, low taxation, and liberalization) clearly takes the employers' side.

The claim of a clear empirical link between economic freedom (EFW-style) and mass prosperity (again, reminiscent of the neoclassical conclusion that an unregulated general equilibrium maximizes social welfare) is spurious, and reflects the worst traditions of simple-minded econometrics. Regressions of global economic measures (even broad ones, like the U.N.'s Human Development Index) on EFW scores may produce positive correlations (which imply nothing about causation). But this correlation is mostly catching the impact of economic development on institutional stability and democracy. For reasons that have little if anything to do with neoclassical theories of optimization, very poor developing countries (especially those that have been wracked by war, political turmoil, or disease) also have very low EFW scores. Merely developing stable institutions and rule of law (a central qualitative feature of economic development) will enhance a country's GDP as well as its EFW score, and hence create an apparent (but spurious) collinearity between the two. Control for the general level of economic and institutional development, however, and the relationship between EFW-style "freedom" and actual human well-being becomes insignificant or even negative. Among OECD countries, for example, countries with larger governments, more regulations, and higher taxes score disproportionately high according to their human development. The UNDP's top-ten human development list for 2007 includes high-tax Iceland, Norway, Sweden, Netherlands, and France – while the low-tax (and hence more "free") U.S. ranks twelfth (despite its very high GDP per capita).

In short, economic freedom is very much in the eye of the beholder. The Fraser Institute's EFW index, despite its pseudo-technical trappings, represents a highly ideological effort to further the neoliberal policy agenda (deregulation, privatization, tax cuts, and globalization) that has so exacerbated inequality in the global economy. And as both myself and the late Margaret Legum suggested in our initial contributions to the *post-autistic economics review* on this subject, it would be a worthy project for a network of progressive economists to develop a quantitative index of economic freedom for those of us who live on the other side of the tracks.

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Opinion

If it ain't broke, don't fix it . . . post autism and political correctness

Benjamin H. Mitra-Kahn [City University, London; New School for Social Research, N.Y]

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> *"During times of universal deceit, telling the truth becomes a revolutionary act."*
> - George Orwell

Where did the *Post Autistic Economic Review* go? Remember the summer of 2000 when a group of French economics students wrote a letter to their professors? That this letter would propel both French academia and economics into the world spotlight probably did not occur to these students. If it did, it might have been in a flight of fancy and optimism. But that is exactly what happened, they had hit a nerve.

The students denounced economics as a discipline which had separated from history, society and indeed reality. They declared that "we no longer want to have this autistic science imposed on us".

Suddenly, with coverage from *Le Monde* and the media, what was a student mission statement of sorts, became a movement supported by academics from across the theoretical spectrum. Nobel Prize winners to undergraduate students agreed with the core message of the French students: It was time for change in economics. Telling the truth became a revolutionary move.

This movement led to the creation of the 'Post-Autistic Economics Network' and their 'Post-Autistic Economics Newsletter' in September 2000. In only ten issues, and barely 14 months, the newsletter had become a fully fledged journal: the *Post Autistic Economic Review*.

The story could end there, but as of March 2008 the *Post Autistic Economic Review* is gone. Why? Has economics re-connected with society and history? Are students learning an applied social science? Did the revolution come and go quietly? No.

> *"The most radical revolutionary will become a conservative the day after the revolution."*
> -Hannah Arendt, *The New Yorker,* 12 Sep. 1970.

Why did we have a *Post-Autistic* journal? Because it is noticed. Because it has an underlying message. Yes, it is controversial and provocative, but that is why it always stimulates a conversation from the uninitiated about *what* post autistic economics is. It is perfect for students and academics who want to stand up and make people pay attention. It is not the *American Economic Review*, the *World Bank Economic Review* or a *Real World Economic Review*. It is Post-Autistic economics.

So what happened? Sociologist would say that social movements must be understood as reactions to and against the deepening irreversibility of certain forms of domination and hegemonic power in any society. Once the activists feel that their work is accepted or gets drawn into mainstream politics (and publishing), the need for their alternative model, and radicalism, is spent. Did it only take 8 years for the flame of post-autistics economics to be extinguished?

Consider the language in the first newsletter, where the editors note U.S. economists who "spoke of the increasing 'Stalinization' of the profession"[1]. They cite a Belgian article '*Economie autiste*' which "both reported on the events in France and offered its own analysis of neoclassical economics as a quaint political ideology masquerading as science"[2]. The editors agree that there is "'a real schizophrenia' created by making modelling 'an end in itself' and thereby cutting economics off from reality and forcing it into a state of '*autism*'"[3]. The language is strong, it is provocative, and it is unapologetic.

More so, the post-autistic economists called for action "to bring sanity, humanity and science back to economics"[4]. We should get involved and "click on your forward button and send this issue to someone"[5]. When new universities joined the cause, the editors would urge the readers to sign the petitions because they "need your support"![6] Clear optimism, encouragement, winds of change, and now…

Now those same editors seem to have lost sight of their original purpose, as we have the rather un-inspiring, and uncontroversial *Real World Economic Review*.

"*There is no monument dedicated to the memory of a committee.*"
-Lester J. Pourciau

If ever there was an example of name by committee, the recent name-change of the *Post Autistic Economic Review* is a textbook case. One can almost imagine the meeting, where committee member A pointed out (correctly) that autism is a serious condition, not to be taken lightly. With member B, contributing, upon reflection (and recalling a documentary on savants) that people with autism can have a great deal of insight, and perform amazing feats, despite a lack of social skills, and this was definitively not what they wanted to say about neoclassical economics. Then member C would note that the journal had changed its name before, and members D and E would recall submitting their CV's, and being asked why they didn't publish in something 'serious', or more traditional? Brewing at the back of the committee's mind is the book publishers who are uncomfortable with the headline 'Post-Autism' for the forthcoming volume of papers taken from the journal, and they would prefer something more… *mainstream*?

It seems this committee separated itself from the history and context of the journal and found themselves logically suggesting, timidly at first, a name-change, so it could be more serious / 'publishable' / respectable / sellable. Doesn't this make it the *bête noir* of post autistic economics? Politically correct, academically neutral and out of context. If so, the journal may as well disappear in the sea of other titles, which make up a 'decent' CV and does not upset anyone.

Did the readers ever complain about the old name? Were we consulted on the new? Why not? Maybe because we felt it appropriate? In fact, Nobel laureates and students alike found it both appropriate to read and to contribute to the journal. The *Post Autistic Economic*

[1] The Editor, "United States", Post Autistic Economic Newsletter, No. 1 (2000).
[2] The Editor, "Belgium", Post Autistic Economic Newsletter, No. 1 (2000).
[3] The Editor, "France", Post Autistic Economic Newsletter, No. 1 (2000).
[4] The Editor, "Closing Remarks", Post Autistic Economic Newsletter, No. 1 (2000).
[5] The Editor, "In brief" (closing sentence), Post Autistic Economic Newsletter, No. 3 (2000).
[6] The Editor, "A moderate proposal", Autistic Economic Newsletter, No. 7 (2001).

Review established a 'brand' name and a movement in economics, and this is also important. So what rational, social and contextual justification is there for this change? Personally, I cannot see one, and rather than pursue this unnecessary course of politically correct, red, purple and blue action, could we please have our *Post-Autistic Economic Review* back? We know what it means, and no, we are not offended.

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Editor's Note

I alone am responsible for both the journal's original name and the name-change. Nonetheless, the committee that Mitra-Kahn so vividly describes existed in part in my mind when considering the change, and so his analysis is close to the mark.

But there is another and more personal dimension to the history of the journal's name, which, I fear, reveals my naiveté. In American English the word "autistic" predates its clinical use. For example, *The American Heritage Dictionary of the English Language* gives the word's primary meaning as: "Abnormal subjectivity; acceptance of fantasy rather than reality." It was the word's general meaning rather than its clinical one that I thought I was signalling. In choosing the name *Post-Autistic Economics Newsletter* – autism did not figure in my thoughts, nor, stupidly, did it occur to me that others would in the context of economics read the word in the specialist context of psychology. Nor was I aware that the word "autistic" in its general and primary sense was inoperative in British English. Even so, it is possible that if I had been better informed regarding the word "autistic" I would have chosen it anyway. With hindsight it appears to have served an important cause, one potentially affecting billions, rather well. It was the "committee's" judgement, however, that the label, at least for the journal, has out-lived its usefulness. But like individuals, committees are often wrong.

When the going gets tough, economists go very quiet

Simon Jenkins [United Kingdom]

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They're happy to take the credit in the good times, but the disciples of this false science are hard to find as recession looms.

So the Footsie has tumbled again. Forgive me for asking, but where are the economists? As the nation approaches recession, an entire profession seems to have vanished over the horizon, like conmen stuffed with cash, and thousands left destitute behind. They said recessions were over. They told politicians to leave things to them and all would be fine. Yet they failed to spot the sub-prime housing crash, and now look at the mess.

When I studied economics we were told we would be masters of the universe. Ours was not a dismal but a noble science. It had harnessed the verities of maths to those of human behaviour and would go on to conquer politics. Rampant recession would go the way of hyperinflation. Like leprosy and cholera, they were epidemics that modern medicine had rid from our shores.

It did not matter if the economists were welfare Keynesians such as Myrdal, Robinson and Galbraith or free-marketeers such as Marshall, Friedman and the Institute of Economic Affairs. All were "social scientists". They claimed to have cracked the DNA of economic exchange, to have turned the base metal of money into political gold.

We believed them. We believed the Keynesians until we slumped into stagflation. We believed light-regulation capitalists such as Margaret Thatcher and Gordon Brown, that they could convert boom-bust into an upward sloping plane of glory. We believed the Bank of England when it said that, in its hands, inflation was dead and prosperity eternal. Bliss was it in that dawn to be alive - and an economist.

If Britain were now in the grip of bubonic plague, there would be all hell to pay from some profession or other. An "influential" Commons committee would be summoning the chief medical officer and subjecting him to the third degree. Why no national rat strategy? Why no crash inoculation? Why so many planning delays on plague pits?

The espionage pundits were likewise castigated for wrongly leading the nation to war against Iraq, for giving dud professional assessments on fallacious intelligence. The architectural profession has taken the rap (very occasionally) for the grotesque failures of public housing in the 1970s. Climate scientists may yet be damned for the costly lunacy of new energy sources, such as wind turbines and biofuels.

Yet economics is a Teflon profession. A quarter of a century ago 364 practitioners wrote a letter denouncing the policies of the then Thatcher government as having "no basis in economic theory". They were wrong in fact and wrong in judgment. Thatcher's policies laid the groundwork for a strategic shift in the underpinning of British prosperity. There was no inquiry, no hearing, no peep of retraction or remorse.

Since then economists have flooded into government; there were roughly a thousand at the last count. What do they all do? Despite reports of demoralisation in the Treasury, that department remains the home base for public sector management through financial aggregates. During the Blair/Brown era it has held government in thrall.

Economic managers have always claimed credit for the success of Brown's Treasury regime. They have espoused quantifiable outputs, targets and delivery indicators. They invented the celebrity consultant and the maxim that only what measures matters. Above all, the economics profession (and its house journal, the Economist) was ecstatic when Brown delegated monetary control to the Bank of England. This was supposed to isolate the economy from political pressure, subcontracting the regulation of interest rates and markets.

Today we are older and wiser. Controlling the agencies of credit has proved beyond the finest professional minds in the game. Where now are the effortless pundits of the Treasury and the Bank? Where now the gilded ones of Moody's and Standard & Poor's, credit raters to the mightiest in the land? They should have stuck to goose entrails.

Alan Greenspan, former chief of the US Federal Reserve Board and a Brown adviser, is unrepentant. He recently declared that "anticipating the next financial malfunction ... has not proved feasible". There is nothing so unseeing as a wronged economist. The Bank of England's apologias over Northern Rock have been protests that regulation is a mess and government indecisive.

When muck hits fan, economists always blame politicians. They would have some justice if they did not take credit when things go right. I was always uncomfortable at the overselling of economics as a science, when it is rather a branch of psychology, a study of the peculiarities of human nature. Its spurious objectivity, manifest in its ridiculous love affair with maths, induced a "Jupiter complex", a conviction that scientific certainty, applied with enough rigour to any problem, triumphs over all.

Economic management is and always will be about politics, about the clash of needs and demands resolved through the constitutional process. The delegation of interest rates to the Bank of England worked when it ran in parallel with politics, but not any more. Now that reflation seems urgent for recovery, the system is biased against common sense, yet no politician dare tell the Bank to cut rates and risk inflation.

The newest craze is "nudge" economics, from the Americans, Richard Thaler and Cass Sunstein. They put the subject firmly among the behavioural sciences - if not the arts. Human actions are too mysterious and unpredictable to be liable to quantification and modelling. They are responsive to what the academic Paul Ormerod called "butterfly economics". Nudge steers, but does not order or plan.

This requires knowledge of the working of markets, incentives, expectations and panics. But converting micro-economics into macro has always been a dangerous game. Much has been made of the success of Spain's dirigiste banking regulators in putting security before runaway profit. But this was a triumph of politics over economics. Greenspan may laconically remark that "we can never have a perfect model of risk", but we can have alertness to risk and we can have caution.

Economics has long traded on being a science when it is not. In this it is like war. For a third of a century since the 1976 IMF crisis it has enjoyed great influence over British policy. Now it has met its Waterloo and a little humility would be in order. Once again economics must be rescued by that true master of all things, politics.

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