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WHAT'S THE POINT OF (AGRICULTURAL) ECONOMICS?

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1. Extended Outline

The brief for this paper (contained in the title) is, of course, far too wide for one ½ hour session. However, it may be useful to try to summarise the critical messages of agricultural (applied) economics to the 'real' world of agribusiness and management. In so doing, I hope to be able to highlight the critical shortcomings of the discipline of economics as well.

The problem? At the considerable risk of over-simplification (the congenital condition of applied economists), the world is divided into two unequal parts – those who believe in and fully subscribe to the proposition that 'economics rules, OK'; those who consider that economics is either marginal to the human condition and sustainability, or should be made so very quickly. On the one hand, markets and commercial viability (and associated competition, level playing fields, minimal regulation and free trade) can be considered as the bedrock of economic sustainability, without which all talk of environmental or social sustainability is mere romantic rhetoric, with no clear guidance for current or future behavior short of praying for the second coming. The devil is in the detail. On the other hand, pursuit of profit at the expense of all other considerations is seen as being at the heart of our current problems – notably the issues of environmental degradation, climate change, financial market instability and consequent real economic instability. These issues are clearly seen as potentially leading to the demise of democracy, the emergence of anarchy and the ultimate degradation of the human condition. The devil is in the conception. How can we make sense of these apparently inherently contradictory conceptions?

What, exactly, does economics 'do'?

In essence, the discipline concerns itself with the appropriate use of scarce resources in the face of practically infinite aspirations, wants and desires – so say the text books. Perhaps more relevantly the core principles of economics are simple, and apparently very powerful as a consequence. Economists reduce the complexities of life to the fundamentals: how to earn a living (supply) and how to live a life (demand). There are no choices involved in these basic questions unless resources (otherwise known as capitals) are finite. As specified in the sustainable livelihoods framework (DfID, 1999, Ellis, 2000, Chambers and Conway, 1992), our scarce resources can be categorised as natural, social, physical, human, and spatial.[1] Rational use of these scarce resources to satisfy near infinite desires generates the enormously powerful notions of opportunity cost and comparative advantage. General equilibrium concepts are the consequence, which show that real supply curves necessarily slope upwards, and real demand curves slope downwards. Trade, and associated specialisation in production, are the rational corollaries.

People of all cultures have learned this through trial and error, with the most successful societies surviving at the expense of the less successful. This evolving trading system generates the quasi-physical balances of the circular flow of income and the associated flows of funds, and the parallel homeostatic monetary system, determining the value of money in terms of real goods and services, through the quantity

[1] The Sustainable Livelihoods framework does not separately identify *spatial* capital as a dimension of the overall resource base. Instead, it refers to *financial* capital. However, finance is the major means of converting both income streams and different resource bases into each other, rather than constituting a logically separate sort of real capital. Finance is a transformation system, while the remaining capitals are structures. Positional (spatial) capital, on the other hand, includes a critical feature of much of the resource base – where it is in relation to other people and other capitals, including its temporal relationships – where things and people are in relation to their histories.

equation of exchange. Those societies learning these lessons best will develop more. As Winter,1988, notes: *"natural selection and evolution should not be viewed as concepts developed for the specific purposes of biology and possibly appropriable for the specific purposes of economics, but rather as elements of the framework of a new conceptual structure that biology, economics and the other social sciences can comfortably share."* (p 614).

The proposition that economic systems are essentially evolutionary casts a different light on the conventional economic concept of competition and efficiency. The correspondence between natural selection and competitive economic behaviour is well recognized in the joint development of ecological and economic models. Both explain how natural systems, which do not care, nevertheless contrive to be prudent by default - Adam Smith's invisible hand in a nutshell. Treated as well-defined games, there is one optimum strategy. Both natural ecologies and competitive economies end up minimising purposive effort to best effect - by innovating better fits with a local environment that is partly their own making. Economies might use more sophisticated tools, and appear to follow human rules, but the motives are essentially animal – survival and growth (consumption) and replication (income and profit, providing the wherewithal to continue growing). Even the basic evolutionary strategies are the same – in conditions of uncertainty, breed as fast and prolifically as possible and take no care of the offspring; in more secure conditions, limited reproduction and family care make more sense.

This correspondence has two important implications. Firstly, the typical benchmark of pure economic competition is not a natural climax condition of the economic world. Competition, specialisation and trade thrive on and self-generate diversity, not homogeneity. Trade and specialisation (the foundation of economics) cannot happen in a uniform and undifferentiated world. A uniform world does not trade. A level playing field is a thoroughly misleading metaphor for the real world. The more differentiated and diversified become the products and the associated ideas, the more niches are opened up for competition. The richer the ecology (and the economy), the more diverse are its species and the more niches it contains. Winners do not and cannot take all in a sustainable evolutionary system. Mature economies, like ecologies are niches all the way down.

Monopolistic competition is the climax condition of rich economies. It is product differentiation or quality dimensions that enable elements of care and commitment to be incorporated within conventional contracts.[2] The supposed inefficiency of this market structure compared with perfect competition is merely the price we are willing to pay to be different, and thus exercise choice. Perfect competition with homogenous products is indeed nasty, brutish and short, as marketing experts and consumers well know, and which producers, as well as policy makers and analysts, ignore at their peril.

Secondly, the sophisticated calculus of our economic models representing the optimum allocation of scarce resources does not represent the actual behaviour of participants, a fact that our textbooks and erudite analyses frequently forget. The marginal conditions for an optimum, and the supposed production and utility functions to which they refer, simply define the conditions that characterise the optimum allocation. They are derived from severely reduced forms of the actual relationships and processes that produce these (so far) best possible outcomes. The underlying structural equations (even if they exist) are currently far beyond our ken, and we do ourselves no favours to pretend otherwise. Even so, there are two major *buts* to the assertion that even a naturally (rather than perfectly) competitive market can achieve a genuine social optimum[3].

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[2] The same point is made, in a different way, by Antle (1999) who reminds us that there are critically important quality dimensions to both demand and supply functions. However, the common preoccupation of economics modellers with the theory of oligopoly as the relevant model of imperfect competition typically misses this point.

[3] There is a huge literature on socially optimal patterns of production and consumption that there is neither reason, time or space to deal with here. Van den Doel and van Velthoven, 1993 is an important reference.

But One: Who Chooses?

The choices underlying the economic equilibrium are determined by economic power as income and wealth, with the driving motivation as consumption, which in turn is supposed to satisfy personal utility. Investment is only a means to an end – more consumption in the future. The richer we become, the less pressing are these resource constraints and the greater are our feasible sets of choice. We face the curious paradox: the poor have very little choice, survival is all; the rich have so much choice that any given option typically carries very little salience, which makes actual choices both difficult and likely ephemeral.

Furthermore, the logic of the market encourages the agglomeration of resources, at least in the medium term, since markets are driven by rent-seeking behaviour. Adam Smith's free market relies on the freedom of individuals to pursue their own welfare, both as consumers and producers, competing with each other for necessarily scarce resources. The equilibrium outcome, under a freely competitive market, is a Pareto optimal allocation of resources, given the initial distribution of these resources. However, even under this simplified system (absent any public goods and externalities, or complications of transactions and organisation costs) the inevitable dynamics of the pursuit of an ever-changing equilibrium (as technologies and tastes change) must result in temporary accumulations of super-normal profits, as the signal for market adjustment. Super-normal profits manifest as pure rents in excess of transfer earnings, and accrue to the underlying resources. Economic theory cannot explain initial endowments of wealth and capital (of all forms), but it relies on the continual pursuit of profit and rent, and on the happy accidents of well-fitted inventions, each leading to temporary accumulations and differentiated distributions of wealth, which become augmented by life-cycle and inheritance effects – the accidents of birth.

Here, it should be noted, is a clear but seldom remarked distinction between the free market and capitalism. Capitalism involves one important additional step in the argument. It divorces the ownership of capital from its operation and deployment. Capitalism depends on trade of capital stocks and assets, thus facilitating the transfer of value from the declining to the growing sectors of the economy, and the balance between savings and investment. The dynamics of these transfers of ownership and associated adjustments in the purchasing power of the assets generate additional agglomerations of wealth, and thus of economic power, as margins are shaved from the mere transfers of asset ownership and continual stock revaluations. Any economies of size in capital and organisation aggravate the agglomeration.

The system may be economically sustainable, in the sense that the resulting equilibria are neither explosive nor degenerative, but the tendency for initial distributions of wealth (resources) to become more concentrated through the processes of both market and capitalist transactions is socially unsustainable. The rich become richer while the poor remain at least relatively poor. As Marx (1887) suggested, naked and unrestrained capitalism may well contain within it the seeds of its own destruction.

But Two: Collective Interaction & Public Choice

But the poor do something about it, and the rich recognise that they will, and take steps to preserve their power by doing just enough to dissuade the poor from doing too much. Competition for resources now becomes competition for the rights to social control, either as a means to individual prosperity and reproduction, and/or as a means of social enhancement.[4]

The anarchy of an ungoverned market economy is insufficient to be socially sustainable, for two major reasons. First, the long arm of the law is necessarily attached to Adam Smith's invisible hand: to protect the specie; to enforce market contracts; define and protect property rights; and outlaw theft (e.g. Bromley, 1997)[5]. To implement and enforce authority, government must coerce society to conform to social laws and choices.

[4] This assertion is little more than a rational extension of Becker (1974).

[5] Colman (1994) deals with the associated observation that many of our economic relations are also strongly influenced by *invisible handshakes* (Okun, 1981, p. 82) as well as by the invisible hand.

As Dunn (1999) observes: "coercion is the core of states." Equal first, expectations are frequently frustrated and confidence in the market is misplaced, so we seek redress. Collectively, we try to manage the arbitrary distribution mechanisms of the market to achieve a more stable, sustainable and humane society.

In short, we choose whether or not to accept the social outcomes of trade and exchange, and their associated income and wealth distributions. These choices are necessarily made through the coercive state apparatus. We inevitably concede the power to make social or communal decisions (including the definition of property rights) to government. And, for the state to be sustainable, we have to respect this authority and its arbitration of disputes. Williamson (2000, p 598f) notes that the market theory of property rights, following Coase (1937), needs to take account of the costs and difficulties of organising and implementing the associated transactions. However, even these theories necessarily presume that the arbiters and organisers themselves have the confidence and trust of the people involved, otherwise neither the rules of the game, nor its various plays, will be legitimised by the participants. We choose which games we play, so long as we are rich enough to have the choice[6].

If producers cannot win control over their market conditions, due to atomistic (perfectly competitive) structure, then they can be expected to pursue these ambitions through the political machinery of the state. Here, the marginal net returns to political action for producers are more concentrated than for consumers, because of specialisation in production. Consumer dominion over the market place is thus over-ridden by producer (or factor ownership) domination of public intervention in the name of fair and just distribution or of prudent economic management. Developed country agricultural policies are the archetypal examples (e.g. Harvey, 2004), typically resting on arguments about just farm incomes or contributions to economic activity and trade balances, or, more recently, environmental (even social) care.

It follows that income and wealth distributions under any political economy general equilibrium, even under ideal competitive conditions, are determined by political influence and authority, typically manifesting as an uneasy balance between labour and the owners of capital. Left and right are thus natural manifestations of capitalist state politics. The later believes in the supremacy of the market, which apparently generates the factor incomes. Paid labour and atomistic sectors, on the other hand, are apparently at the mercy of the market and capitalists, and seek remedy through the political system. Arrow's impossibility theorem (see, e.g. Heap *et al.*, 1992, p 209ff) demonstrates that such systems, even if defined as perfectly as possible, will frequently generate inconsistent public preferences, and will thus cycle over different political control of the negotiating agenda, depending on rhythms of conviction about the social desirability of unrestrained markets.

In short, the apparently neat and self-contained theory of general equilibrium is not self-contained. It requires and exploits government – the critical social constraint on the animal magic of the invisible hand. Figure 1 illustrates the story– the structures of our social systems. Through these systems we augment or abuse our finite resources through a process of choice, which is necessarily constrained, otherwise there is no choice.

The development of our human systems for making these choices is subject to a fundamental evolutionary logic – those that fit best with the surrounding social environments and political climates will survive, prosper, reproduce and perpetuate. Ill-fitted systems will fail to survive. But the critical difference between social evolution and its natural counterpart is that we get to choose who lives and dies – we try to govern ourselves, rather than submit to the exogenous authority of bio-physical laws. Our rules for survival and replication are *endogenous*, not g.o.d (given outside determinant) given and exogenous. We cultivate and try to civilise our own selection systems. Our institutions, the social codes, realities and authorities (North, 1990), are the manifestations of the ways we choose to

[6] See Barrett, S., 2003, for an exemplary exposition of the insights afforded by a game theory approach, especially to international environmental conventions and treaties.

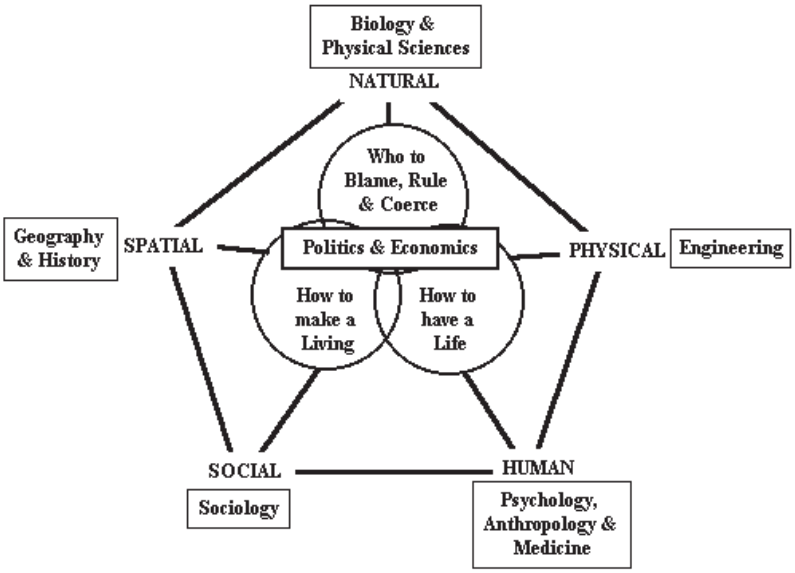

Figure 1. The Structure of Social Systems – from an economic perspective

do this – our governance structures[7]. These are, however, also subject to continual competition with each other, and thus subject to re-invention and adaptation in a blind pursuit of better fits. Social science, if it is to make any difference, must be focused on providing insight to this blind pursuit.

How does this help?

Economics is alone amongst the social sciences in purporting to tell a story about how the (socio-economic and political) world works. None of our sister disciplines try to explain how all the social transactions and interactions fit together into a coherent whole. Indeed, most other social sciences consider it madness to even try, and are derisory about those who do, pointing to the stupidly simplistic and quite unrealistic simplifications economists make. Economists have a strong tendency to believe that they are the 'social physicists' of social science – there are two sorts of science: physics and stamp collecting (Rutherford's classic aphorism defining scientism). Our sister social sciences, rightly, repudiate such claims, pointing to the obvious deficiencies and simplicities of the economic picture of the world. Many economists, too, are more than fully aware of our own deficiencies and are seeking to deepen and extend our concepts of transactions, information accumulation and organization, political economy, charitable and not-for-profit activities and so forth. Yet, to date, and following the 'defeat' of Marxism, there is no competing paradigm which seeks to explain and understand our global condition, other than capitalism.

Meanwhile the world faces a major crisis – how to ensure that 9bn. people are able to live with reasonable prospects of increasing functional capability (Sen, 1999) in the face of increasing scarcity of natural resources and an increasingly less reliable and less benign climate. We need urgently to develop more sustainable systems. Up to now, our history, as a species, has been one of trial and error – the latest major one being the trial of communism and the discovery of its errors (at least as practiced, if not necessarily in principle). Our history also strongly suggests that humans are only capable of addressing major challenges and of making progress with the assistance of a guiding ideology or worldview. At present, capitalism is our global guiding ideology. Yet it is abundantly clear that this worldview does not command universal respect or admiration, and is even incapable of generating majority acquiescence.

[7] Harvey, 2001b, provides an outline of where this strand of thought might lead.

I argue that we need rather urgently to develop and proselytize one, and that capitalism in its present form, and as mostly argued by its most ardent advocates, will not do. What, then, does the alternative look like? Hofstede (e.g. 2001), on the basis of extensive empirical research, proposes that different cultures solve their fundamental social problems of harmonising personal and social ambitions, with their associated attributions and transaction system mixes, in identifiably different ways. Hofstede detects five major axes of cultural difference, where differences can be measured according to the balance particular societies chose along these principal axes. Hofstede's principle axis – the balance between individual and collective ambition and aspiration – is fundamental, since for any society (of whatever form) "positioning itself between these poles is a very basic problem all societies face" (*op cit.,* pxx)[8].

I argue (Harvey, 2008) that we ought to be able to identify the principle *phyla* of our complex socio-economic and political transaction and negotiation systems by considering their real world exhibitions – the social science disciplines which seek to explore and understand them. In the natural world, evolution has generated a distinct and recognizable taxonomy of living systems, as species and genera and phyla. We should expect that social evolution would also generate such a taxonomy. Perhaps we are too closely involved with this taxonomy to recognize it. However, the survival and persistence of the major disciplines of social science strongly suggests that the appropriate taxonomy has already been exhibited in the nature of these disciplines. Of course, the 'devil is in the detail' as far as this simple hypothesis is concerned – the disciplines themselves cannot agree even what their own central focus is, other than as more or less meaningless generalities. An alternative perspective, however, is that 'life is in the detail', the devil is in the conception. Instead of searching within the current disciplines for the central, guiding pre-occupation of each in terms of specific transactions, perhaps we can identify these major strands be re-considering our history as a species.

In brief outline, the argument is as follows. Capra (1996) notes that biological life 'minds and responds' to its environment, in contrast to physical (and chemical) 'simple' existence and reaction. Human life, however, goes further. Humans (as Weber noted[9]) not only mind and respond, but also care and reply to their fellows and environments, and generate *consent* (Anthropology) as a major transaction system as a consequence. Further, we become cognizant, and recognize others as different from self, and relate to these others (including the environment). *Cognition* (as the second major transaction phylum – explored in detail by Psychology) leads naturally to rationalizing and reasoning about others behaviours and seeking to fit better (or fight) with those behaviours, developing *care* into a major transaction system as a consequence, as explored by Sociology. *Contract*, as specialisation and barter trade emerge, rapidly follows as a major transaction type, and Economics is centrally concerned with these transactions. As already outlined above, *coercion* and *convention* are necessarily co-inventions with contract, an exhibit as the disciplines of Law and Political Science. These 'last' three major transaction systems dominate the western common hegemony: *contract* – the liberal free trade and exchange systems; *coercion* – the rule of law, and their international institutions; *convention* – the politics, habits and practices of government. However, I argue that these three, on their own, are constitutionally incapable of securing our collective wealth, freedom, security and justice, illustrated in Figure 2 as the harmonisation of self and social (public) interest.

In particular, our social science understandings need to more thoroughly incorporate our arguably more primitive and fundamental transaction systems of cognition, care and consent, which typically manifest most completely in smaller, even closed, societies – i.e. at the local level, as evident in much

[8] The other four axes identified by Hofstede are: uncertainty avoidance (the extent to which society tries to control for or guard against the unknown and uncontrollable); power distance (the degree of inequality the society is prepared to accept and expect); male/female (a major emotional dimension of society's accepted practices); long term/short term (the extent to which society accepts delayed gratification of ambitions and is prepared to be patient and wait).

[9] See, e.g. Gerth and Mills, 1946; see, also, Swedberg, 1998

of the practice of development studies. But, perhaps more importantly, this perspective strongly suggests that we are very far from reaching the 'end of history' (Fukuyama, 1992 and 1995). The end of history, in an evolutionary system, is the end of the future as well. There are, I suggest, further transaction systems we need to embrace to cultivate a more sustainable future.

More sensibly, since evolution (as a chaotic system) is inherently unpredictable: what would we like our future to look like? If we can agree on a desirable future, it might be possible to cultivate it. Presumably, one world we are striving to create involves the development of genuine *commitment* to our social governance institutions, which implies not simply research and criticism of existing systems but development of new (or re-invention of old) transaction systems. These are only superficially covered under such maxims as 'participation', 'accountability' and 'inclusion'. It requires a conversion of our present stories of the ways in which the world works to be much more convincing as genuine, coherent and credible accounts of what we are trying to do, and how we come to be in our present condition.

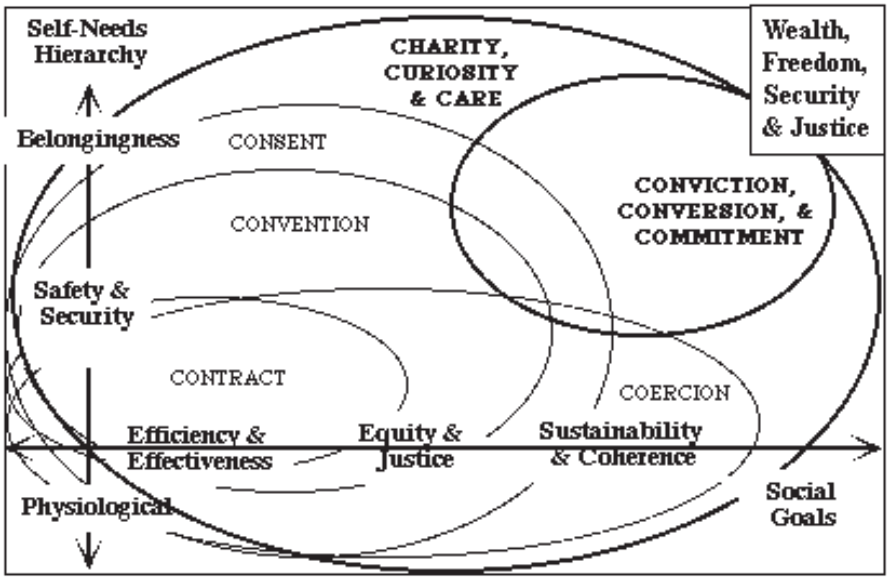

Figure 2. A schematic representation of social systems

Consider, for instance, an ideal, though dynamic, outcome in which the world's population can become convinced that all is for the best in this best of all possible worlds. In such an idealised state, one can imagine a fully *committed* population, willingly and enthusiastically merging their own self-interests with those of the community in near unanimous harmony – the communist ideal in a nutshell. Obviously, this condition is extremely difficult, if not impossible, to achieve.

However, suppose that we could achieve it. A penultimate phase of institutional evolution then becomes possible, in which a significant fraction of the population engages in creative *imagination* of how things might be even better and more harmonious, and is engaged in continual *re-creation* of the community and its environments, with the full support and commitment of the whole community in these endeavours. Such societies could reasonably be described as being driven by the pursuit of fun and *curiosity* - where imagination and re-creation appear as scholarship or as play. In short, such societies might be characterised as having a common faith in the ultimate benevolence of their communities and in the 'fitness' of their world views, and an associated freedom to doubt (and hence

question and seek to change) the rules, rulers and power-bases, in the common belief and trust that such activity will be regarded as perfectly legitimate, respectable and socially benevolent – pretty close to the second coming. Note that there will never be unanimous consent that the ultimate has yet been achieved. What we might reasonably aspire to is near-unanimous consent that the principles and practices of the community systems in conjunction with all its associated environments is both capable of moving towards this state of perfect harmony, and that the whole population is committed to this pursuit above all others - in short careful charity. We could, perhaps, label such an institution as a sustainable culture (or a mirage).

An evolutionary perspective suggests that we need to cultivate and civilise our social transaction and negotiation systems to recognise that the selection criteria are of our own making – we need to make better rules and tools for our livelihoods. This is, primarily, a social science enterprise, yet our social sciences presently seem to be part of the problem rather than the resolution. Even within economics, there are factions arguing about the role of the state, the appropriate ways of representing the world's market systems, and the meaning of the evidence. We are not going to get rid of this, and nor should we, but we do need to be far more constructive than at present in trying to develop a metaphysical story on which we can broadly agree. Following this, we might then have reason to hope that we can indeed cultivate a more sustainable future.

The communist experiment was supposed to be an alternative socio-economic system to provide for each according to needs from each according to ability – a benign aspiration, though the devil was clearly in the detail. The details are the myriad of transactions and associated information exchange, which transmit willingness to pay (and hence some sort of value) from consumers to producers, and, in return, indicate some sort of estimate of the real costs of production and delivery back to consumers. The critical questions about who decides how to produce what and for whom are dissipated and democratized through the market. The market itself is, effectively, a massive organic and distributed computer system for organizing production and consumption – capable of evolving apparently without the need for any central guiding hand. It is the people who decide, continually and reflexively. The advantages of the market over central planning are not in dispute, as is being demonstrated in the growth of the Chinese, Indian and Brazilian economies.

But it is not so clear that the capitalist system is actually better-fitted to meet the future challenges facing us. Much of the Marxist critique, though not the Marxist analysis, still has considerable force. It is not difficult to find more or less extreme examples of capitalist stupidity and brutality, immorality and outright exploitation. Even in the better democracies, there are still strong and debilitating examples of alienation and exclusion. Have we really found a better ideology? Many answer: no. In addition, the major challenges facing the world clearly do now need a communal guiding hand – how to price fossil fuels and the natural environment, and how to co-ordinate global efforts to deal with major natural events and disasters, and their consequences. But, what provides the credibility and legitimacy of the guiding principles? Science, alone, is not enough. We need a coherent and believable creed – a second coming. History, however, suggests that we will not recognize such a second coming if it happens, and will conspire to crucify it if it does. The answer has to lie in our own hands. As (agri)-cultural economists, we have the capacity to contribute to better answers, which are critical to the further transitions we need to make towards a sustainable future. To do so, we need to change our perspectives, not just our conditions or our tools and rules. Our present rules and rulers are insufficient – the challenge is to find better ones before it is too late. To do so, we need guided experiments – and therefore need a more coherent and sensible story about the way the world works than we currently have.

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