



UK SHEC

**Major change, its risks and the part 'trust'  
might play in managing them: comparing  
the current pensions crisis and the  
impending energy crisis**

**UKSHEC Social Science Working Paper No. 17**

Paul Bellaby, Rob Flynn, Miriam Ricci,  
Institute for Social, Cultural and Policy Research  
University of Salford

June 2006



psi

# **Major change, its risks and the part ‘trust’ might play in managing them: comparing the current pensions crisis and the impending energy crisis**

**Paul Bellaby, Rob Flynn, Miriam Ricci  
Institute for Social, Cultural and Policy Research  
University of Salford <sup>1</sup>**

Much attention has been given in the sociology and politics literature to an alleged long-term decline in ‘trust’ between people. For example, Putnam (2001) claims it in his discussion of ‘social capital’ in contemporary USA. Some have modified his conservative claim by suggesting that trust has changed form and a more active and discriminating form is emerging with ‘reflexive modernisation’ (Beck 1992, Beck, Giddens and Lash 1994, Adam, Beck and van Loon 2000). Trust (or confidence) in ‘abstract systems’ (Giddens 1990) has to some extent taken the space once occupied by trust (or reliance on) other persons.

Fukuyama (1995) stresses that, while economic rationality, contracts and law are essential to modern societies, they also depend on interpersonal relations of trust, moral obligations and reciprocity. Indeed, in much of the economics literature, trust is a fundamental topic. Trust is taken as a non-rational basis for economic exchange, which is functional, for instance, in minimising transaction costs (Deakin and Michie 1997).

In this paper, we consider the relevance of these ideas for the management of the uncertainties and risks surrounding energy for the future. These risks are insecurity of energy supply and climate change as a result of global warming.

The UK Government’s 2003 Energy White Paper (*Our Energy Future - Creating a Low Carbon Economy*) identified four principal objectives for UK energy policy (White Paper 2003):

1. Reducing carbon dioxide emissions by some 60% by about 2050 with real progress by 2020
2. Maintaining reliable energy supplies
3. Promoting competitive markets in the UK and beyond
4. Ensuring that all UK homes are adequately and affordably heated

---

<sup>1</sup> The paper is a contribution to building capacity for studying how trust may play a part in managing the new uncertainties in energy – its supply and its environmental impact. The project of which it is part is funded by ESRC as part of the TSEC agenda and is allied with UKERC.

Uncertainties will undoubtedly arise in the transition to a sustainable energy system. First, the interests of the various stakeholders probably do not coincide at the outset and may or may not converge later. Second, the benefits of decisions made now are quite speculative and the risk is likely to be high. Finally there is a high cost of disinvestment in old and reinvestment in new technologies and infrastructure.

In realising such objectives as those of *Our Energy Future* how would these foreground uncertainties have to be managed? Could change be managed without depending on trust? Is either the *market* or *plan* likely to deliver by itself or would both depend upon trust?

Those who look into the future have to anchor their analysis in the present. Accordingly, we shall consider a crisis already with us, which affects present generations - pension provision: the problem of securing sufficient investment for state and personal pensions in old age. Consideration of the part played by trust in the development of this crisis and any solution to it connects with broader debates about public confidence in the welfare state - that is, in attempts to secure public goods by state plan - and the corresponding risks associated with market alternatives (Taylor-Gooby, 1999, 2000).

We shall explore the comparison between the two crises in three sets of relations or role-sets: a) between state and citizens, b) between producers, distributors and consumers in the market and c) between the producers and distributors and the Exchequer and regulators involved in the exchanges between state and market. All three role sets are to be found in both the pensions and the energy arenas. We explore the extent to which relations between each of these sets of actors and any prospect of a solution to the crises may be predicated upon trust, albeit in different forms and degrees.

How much can be extrapolated from what we learn about the current pensions crisis to the impending energy crisis? Can lessons learned in the one be used to avert the other?

## **Conceptualising 'Trust'**

'Trust' is not a precise term. In general it implies relying on another agent to act in one's interests. A specific usage denotes a legal or quasi-legal institution that manages resources put into its care by its founders: for instance a pension fund. The term has at least two diffuse applications. If we set aside 'trust' in abstract systems (technologies, institutions – for which, with Luhmann (1988) we prefer the term 'confidence'), trust is interpersonal and may imply either 'deference' to a hierarchical superior or 'mutuality' between peers. Trust also varies in scope: how much one entrusts to another.

If deference, it implies followers trusting the words and the deeds and relying on the steadiness of a hierarchical superior who appears more expert and competent than they. If mutuality, it implies peers placing trust in each other's commitment and ability to deliver. Scope varies widely - from the immediate purpose of an economic transaction (as in 'contract') that is not to be repeated, to life-long commitment to another as a feudal retainer or a marital partner (as in 'status') - with many shades in between.

#### *Trust in economic transactions*

Economists have often considered how trust enters into economic exchanges, where, ideally, participants are free and equal and so mutuality should prevail. Mollering (2001) argues, in this context, that trust has to have a prior social base. This has attracted the attention of economic sociologists and anthropologists (Lyons and Mehta (1997) call it 'socially-oriented trust'). Following Granovetter and Swedberg (1992), Polanyi (1957), Douglas and Isherwood (1996) and Durkheim (1984), we can argue that markets are embedded in tacit understandings and grounded in institutions, such as banking and the credit that banks enable. Secondly, trust always involves for each taking part suspension of doubt or a leap of faith, as Simmel (1978) argues in his thesis on money. To participate in the market each has to suspend doubt in the currency in which deals are made, and usually much else. Third, this leap of faith, grounded in a social base, must lead to an expectation that the other will deliver her side of the bargain (Lyons and Mehta call this 'self-interested trust'), or else the transaction will not take place.

Mollering counsels against conflating trust with expectation rather than with the three-stage process of which expectation is the outcome. 'Social capital' in Putnam's sense is a stage further still in that process. It arises from exchanges that repeatedly deliver on expectations. By virtue of the repetition, trust tends to be taken for granted by participants, which in turn makes the process that sustains social capital less visible to them.

Taken-for granted or not, the process has to be worked at by those involved. As in juggling balls, breakdown follows if participants do not deliver on what is expected of them. So trust is not a static phenomenon, not a store of good will that can never be exhausted and which might be easily transferred to new management, but variable, contingent and in need of maintenance (Luhmann 1988).

### | *Trust and planning*

Using the British system for donation of blood as his exemplar, Titmuss (1970) argues that trust, not only in leaders but also in fellow citizens - notably strangers, was the foundation on which the post 1939-45 war welfare state was built in Britain, and that this trust had been forged in the war itself. He claimed in effect that the trust was not so much self-interested as socially oriented (Lyons and Mehta 1997).

It would be a mistake to attribute all that was achieved in the 1939-45 war and the postwar reconstruction to trust because in that period Britain used an unprecedented degree of state regulation and planning to achieve major changes. The state pension did not originate in postwar reconstruction, but it became universal in the course of it. Similarly Britain developed during war and continued after it an integrated policy on energy involving nationalisation of the 'commanding heights' of coal and steel production and public transport. Yet, it is a moot point whether this degree of state planning and regulation could have succeeded without trust.

### *Trust and the market*

Since the 1940s, *plan* has steadily retreated from the position it occupied in wartime and during reconstruction. Even if the retreat accelerated in Britain under Thatcher's governments from 1979, it began much earlier. As confidence in the ability of the state to plan for the future receded, belief grew in the 'hidden hand' of the *market*.

Markets, as neoclassical economics conceives them, allocate resources efficiently when prices allow the supply of products and services to be cleared and demand to be satisfied at the same time. At this moment participants have transparent information about products and services on offer. Another key condition is that no producer or consumer has an advantage over his or her competitors and none forms alliances that enable an advantage to be gained.

Of course this view of the market is an ideal type: in real economies there is uncertainty and therefore risk rather than perfect knowledge, while individuals or alliances of producers or consumers do gain advantages that they exploit to administer price.

Under uncertainty in imperfect markets, trust is often believed to lower the costs of transactions (Deakin and Michie 1997). In such a case, trust would enable people to act rather than retreat into inaction in order to avert risk. Trust is the foundation upon which rational expectations are built - it allows imperfect markets to function with a measure of rationality.

It does not, however, guarantee equity of outcome. When 'trust' denotes an institution to which shareholders (or pensioners) entrust their assets for safekeeping, it also implies that when people act together out of mutual interest

they may gain an advantage not available to them in the free market. Thus 'a trust' may attract justified suspicion from anti-monopoly regulators. Indeed, in recognition of how mutual trust may reinforce the market imperfections that arise between classes of participants, in the United States the term 'trust' tends to evoke institutional alliances in constraint of competition and this view has long been the target of 'anti-trust' legal actions, as, for instance, in the celebrated case of *US v Microsoft* (Brinkley and Lohr 2001).

### *Trust as functional*

Our discussion already suggests that it is important not to over-generalise about 'trust' but to be discriminating about the forms it takes and analyse how each works in context.

When viewed in a 'systems' context, it is often seen as functional for each party to trust the other to take decisions that affect his or her interests. Thus Luhmann (1979) argues that trust is essential for reducing social complexity.

Functionalist sociology tends to assume that trust arises out of mutual dependence. However dependence on another is a necessary not a sufficient condition for trust to emerge (Barber 1983). Dependence by itself may be a lever for coercion of one by the other and an axis on which conflict between them turns. Thus, in industrial relations, economic necessity on the part of waged employees may enable employers to force them to work unacceptable hours in hazardous conditions. Even mutual dependence does not remove the fact that employers have an interest in profits and employees in the wage - interests that are as often in conflict as they are compatible.

Social systems can also be bound together by physical coercion. Even where there is trust, force may be its other face. Lack of deference, failure to 'respect' authority and unwillingness to 'render unto Caesar' often invoke a coercive response from those in power. Similarly, breaching mutual trust may lead to a violent reaction from those who feel betrayed, as 'strike breakers' have often found.

Thus, it is a mistake to assume that trust is always necessary for social order or even that trust precludes economic necessity or force as additional principles of order. It is probable that in any given social system, consensus, economic necessity and force sit alongside each other. If so, it is unlikely that they are mutually reinforcing all the time. Rather their interplay may be a source of instability or accompany social change. This is our next topic.

### *Dynamics of trust*

Relations typically differ in the scope of what is entrusted to one by the other. Where the scope is specific to one transaction or a specific type of transaction, the term 'contract' would be used in classical sociology. Contracts of sale depend on mutual trust – that the producer will deliver the goods or the service and that

the customer will pay the asking price. Where credit is offered, the transaction is widened in scope and lengthened in time. But a contract is for a purpose and may be dissolved when the purpose is achieved. Indicative of the part trust plays, the contractual element in transactions is almost always tacit, rarely written down and very seldom enforced legally, for formalising it implies low trust and enforcing it signifies the breakdown of trust in the other (Deakin and Michie, 1997; Flynn et al.1997).

If the scope of the relation is diffuse, 'status' replaces 'contract'. The relation is wide in the interests it covers, tends to be longstanding and involves obligations that stretch well beyond the situation at hand. The social basis of trust will have been arrived at over a period of time (maybe even by previous generations) and has established a tacit bargain, in which the one who trusts the other expects a return, not immediately but in due course (as Malinowski's anthropological fieldwork among Trobriand islanders revealed (1922)).

In both contract and status, trust tends to be conditional on delivery. Mollering (2001) is right to say that suspension of doubt is a key moment in the social-psychological process that generates trust, but if the expectation that follows is not fulfilled, trust is often damaged.

In contract, failure to deliver as agreed is a clear breach. It may be pursued in law. In status, there is likely to be a more permissive view of performance, because too much is at stake to pursue a breach that may only be temporary. The bargain that underpins a relation based on status rather than contract can limit scope for manoeuvre on either side. Thus, past promises by leaders and tacit understandings between equals can impede change that may become necessary in changed circumstances (Gouldner 1955, 1965).

Trust can also be perilous. Where rapid change is taking place for exogenous reasons, interests can be pushed apart and the dependence that is necessary even if not sufficient for trust can disappear.

Finally, breakdown of trust tends to leave behind negative feelings, that is, *mistrust*. If trust can impede as well as facilitate change, mistrust can encourage parties to retire to their bunkers and so make change impossible. Luhmann (1979; 1988) argues that, while trust is a specific solution for a particular set of risks, it is required if a negative outcome forces a person to regret their original decision. Neither trust nor mistrust is feasible as a universal attitude: both are contingent and variable.

As mentioned earlier, Luhmann (1988, see also Seligman 1997) distinguishes between trust in people and confidence in institutions. Individuals trust or mistrust others in interpersonal situations and their primary concern is with people's role performance. At the systems level, technologies and institutions require confidence in the proper workings of what Giddens (1990) later termed 'abstract

systems'. However, institutions, even technologies (such as a call centre), are often at one and the same time 'abstract' and 'fronted' by a person, who is either known to the public or an unknown functionary expected to manage an impression for the institution (Goffman 1971). Trust in that person may be critical to confidence in the institution itself.

## **The Pensions and Energy Crises Compared**

The concepts that we have reviewed and tried to clarify can now be used in seeking to understand how current cohorts orientate to the risk of inadequate income in old age and future generations may orientate to the risk that present forms of energy will not be available and/or will cause irreversible environmental damage for the future. Each topic raises fundamental questions about how people assess risks and what role may be played by 'trust' in managing the uncertainties and risks that society faces.

In the UK, Western Europe, North America and several other countries in the developed world, individuals already face loss of or reduction in the pensions that the state, their employer or their private plans led them to expect on retirement. This could become commonplace as the baby boom generation (of the late 1940s to early 1960s) reaches the age at which they become eligible for a pension. By comparison individuals do not yet face acute energy shortages, but these and the effects of emissions from fossil fuels on air quality and global warming are expected by ever more experts and lay people to become acute in the more distant future.

We look at the issue from two points of view: 1) the risk that present and future generations face and 2) the trust they may (or may not) need in others to confront these risks. We also consider how risk and trust may vary for different role sets in the pensions and energy arenas, and whether there is additional variation by the type of political-economic system in which the role-sets are located.

*Risk* connects with uncertainty. It is the probability of a hazard, a condition which would be absent if there were no uncertainty and meaningless if nothing were known, for it entails a rational expectation about the future. *Trust* concerns the perceived conduct of other actors. A person that trusts another does so not only out of dependence but also out of belief that the other will act altruistically.

The complex political-economic system found in developed capitalist societies is neither *market* nor *plan* in ideal form but a contest between the two, as Esping-Andersen (1990) has argued. Figure 1 suggests that perfect markets depend on both perfect knowledge (transparency) and also a level playing field for all participants. On the other hand, planning depends on both commitment to the public good and also perfect control by the planning agency (e.g. the state). Neither extreme has been realised. This is largely because neither transparency



**(A) Risks**

Figure 2A suggests risks associated with both competition and state planning and control in a market economy. They differ for consumers (savers) and those who produce and distribute pension packages. The effect on the body of citizens as a whole is different again.

**Figure 2: PENSIONS – risk and trust**

		<b>(A) RISK</b>		
		(i) CITIZENS	(ii) CONSUMERS	(iii) PRODUCERS
MARKET				
Regulation	↑	Unequal incomes in old age; insecurity for many	Loss of value of 'savings' in volatile markets	Regulation & uneven terms make unprofitable
Dirigisme	↓	High cost to earners/tax payers of support for old	Earners, who are young not willing to save to order	High level of 'unproductive' investment
PLAN				

		<b>(B) TRUST</b>		
		(i) CITIZENS	(ii) CONSUMERS	(iii) PRODUCERS
MARKET				
Regulation	↑	If problems not solved, trust in 'steering' impaired	Rising cost loses trust in producers and regulators	If returns kept low, trust in the regulator may fall
Dirigisme	↓	A promise has been made that now seems to be broken	Need persuading to accept sacrifice now for future gain	Have to trust state to deliver returns on investment
PLAN				

*(i) Relations between state and citizens*

The mixed market in pensions that has evolved to fill the gap left by the retreat of the state in Britain has produced unequal life chances in old age. Those who have had ready access to occupational pensions, property (especially in housing) and private annuities have prospered. Those who have had to depend on the state pension have lost ground. Women (Ginn and Arber 1999, 2000) and the unskilled have been particularly vulnerable. On the other hand, if the state were to accept all or most of the cost of pensions, the cost to those who pay taxes would be high. They are mostly current earners.

*(ii) Relations between consumers, producers and distributors*

For current earners, the risk in the market lies in fluctuations in the value of their savings. If they have private or occupational pensions, the value fluctuates with the performance of the stock market. For state intervention, the risk lies in not being able to persuade younger people to save - putatively for their own old age, but largely as of now to maintain the older generation. Thus, class, gender and generation are all underlying issues in the pension crisis.

*(iii) Relations between producers and distributors and the Exchequer and regulators*

Pensions provision in the UK has a state sector, part of it involving a flat rate benefit, part an earnings-related benefit, to which contributions are made by both employer and employee, in the first case compulsorily, in the other voluntarily (one can opt out of the State Earnings-Related Pension). They also have a 'corporate' sector: that is, there are numerous self-standing industry- or company-specific schemes, contribution to which is made by the employer and usually by the employee, often as a condition of service. Finally, there is an open market for personal pensions and annuities.

The producers of private pensions and those who distribute them to consumers have concerns about the profitability of the products, in particular about the extent to which private schemes must compete on unequal terms with pension trusts established by employers in agreement with their employees and their trades unions.

Employers who fund or part fund their own schemes for employees have in many cases sought to dilute the terms for which they are liable, for instance by replacing 'final salary' as the criterion for level of pension with average over a number of years of earnings.

For the state, the alternative to encouraging private pensions without an employer's contribution and yet at affordable price to the consumer is to subsidise or fully fund pensions at attractive levels out of taxation. In the UK, the state pension now fails to replace an adequate level of earnings for all but the lowest paid, even with the earnings related option. As a result, there has been speculation about an increase in retirement age, which would reduce the volume of benefits and increase that of tax revenue, so enabling feared pension shortfalls to be met.

**(B) Trust**

*(i) Relations between state and citizens*

Citizens were 'promised' universal state pensions by a social contract formed with the postwar Labour government in Britain that was enacted in 1948. Specific employer and employee contributions were to be paid out of the wage, yet they and the benefits were at first at a flat rate for all.

On the other hand, earnings related contributions and benefits to a state scheme, though common throughout Western Europe, North America and Australasia, came late to Britain (in 1978) and are a weak element still. Elsewhere, they betoken both citizenship *and* relative status. In Sweden, for example, middle class employees were included in the social contract between state and citizens by protecting their differential status in old age (Esping-Andersen 1990).

In Europe, trust in existing pensions has probably fallen most where social security has carried over a higher percentage of lifetime earnings into retirement, as in France and Germany, and especially among public employees. Here there is a sense of 'broken promises' and consequent mistrust of the state that is proportional to the threat to status that the breaches represent.

*(ii) Relations between consumers, producers and distributors*

In Britain lack of trust in pensions currently is not necessarily the most likely impediment to finding a remedy to the crises in the market. Two other likely impediments are costs and risk perceptions.

For pensions, the remedies themselves are expensive. The cost of providing for adequate pensions for those soon to enter retirement already seems prohibitive for earners. In the UK earners are being encouraged to think that they should 'save' for their own retirement. Saving was represented as a virtue in the postwar reconstruction too. However, then it was 'national savings' (in the collective interest) that were urged. Today it is savings for one's own future. The problem for current propaganda is that, except for those who are investing in assets that hold their value or can be enjoyed already (such as houses), this message is likely to make the relatively young think that voluntarily deferring gratification in the hope of a prosperous old age is not a good bet.

Any such investment is beyond the capacity of the relatively poor and, if the policy does not maintain state pensions at an acceptable level, but puts in its place the expectation that individuals will 'save', it is the poor who will suffer most. As Taylor-Gooby (2005b) discovered, the poor have little choice but to rely on the state, few have confidence in the value of state pensions and only affluent, younger consumers appear to be confident in their own ability to provide for their needs in old age.

*iii) Relations between producers and distributors and the Exchequer and regulators*

A report by Pickering (2002) himself an insurer for the Department of Work and Pensions, includes a plea to government to simplify the diverse provision for pensions to make the options more transparent to consumers and to level the playing field, so that insurance companies offering personal plans can compete with the relatively favourable terms that corporate (employer) schemes have long enjoyed. However, separate state action is required to address the situation of

those who, by economic necessity, depend on the basic state pension and/or means-tested benefits.

The Exchequer seems reticent about raising taxes to cover the shortfalls in pensions or to raise the value of the basic state pension, yet has taxed excess returns by employer pension funds. The regulator too has penalised financial advisors who can be deemed to have promised that endowment policies to secure mortgages on homes would maintain their full value at maturity. Thus there is not inconsiderable mistrust between the state and stakeholders in the pensions sector.

## **ENERGY**

The impending energy crisis has been widely debated. A conceptual map of the variant approaches of participants in the debate by Unruh (2000, 2002) refers to 'carbon lock-in' (global dependence on fossil fuel) as the common background and to three broadly different approaches to the global warming issue: 'end-of-pipe' (emissions control). 'continuity' (a mix of fossil, nuclear and renewable energy solutions) and 'discontinuity' (a plan to substitute renewables wholesale for non-sustainable forms of energy). There is, of course, another focus in the energy debate: security of supply, partly a matter of the extent of known and unknown reserves, partly a matter of control of production and distribution from reserves.

### **A) Risk**

#### *i) Relations between the state and citizens*

The dilemma that the impending energy crisis presents to the state is that, while in due course a shift to renewable and/or nuclear power is inescapable, if societies were to await that time before they acted on the threat, they would at best be ill-prepared to make the switch and at worst have caused irreversible damage to the ecosystem of the planet. States have to act in the public good, which is not necessarily the same as individual interests or indeed the interests of individual states as they appear in the short and medium term. Individual citizens may have to make considerable sacrifices. The credibility of government could well depend on its ability to steer a safe passage through the energy crisis.

#### *(ii) Relations between consumers, producers and distributors*

Some remedies for the impending energy crisis are expensive for consumers, the more so the more they involve substitutes for fossil fuel use. Much the greater part of still rising demand is currently met by fossil fuels – oil, natural gas and coal, and the supplies of these are not renewable and certainly finite, even if we do not know the limits for sure.

To date prices of fossil fuels, mainly oil, have risen and fallen as a result of interruption of supply by war (as in Iraq currently) or by OPEC raising the price of

the commodity by restricting production (as in 1973, during the Yom Kippur War). Though crude oil prices are rising and pump prices are also going up as this paper is written, there is as yet no unequivocal sign of the secular rise in price that one would expect as suppliers seek to protect diminishing reserves. Until that point is reached, the price of renewables and even of nuclear power is uncompetitive.

**Figure 3: ENERGY – risk and trust**

		<b>(A) RISK</b>		
		(i) CITIZENS	(ii) CONSUMERS	(iii) PRODUCERS
MARKET				
Regulation	↑	Climate change/ insecurity of supply: inability to solve	Low prices are a habit: make change in energy difficult	Low prices make for low profits: disincentive to invest
Dirigisme	↓	A state that goes it alone risks being uncompetitive	Opposition to tax- driven price changes	High investment costs fall on taxpayer
PLAN				

		<b>(B) TRUST</b>		
		(i) CITIZENS	(ii) CONSUMERS	(iii) PRODUCERS
MARKET				
Regulation	↑	If problems not solved, trust in 'steering' impaired	If prices rise, trust in producers and regulators falls	If price kept low, trust in the regulator may fall
Dirigisme	↓	A promise could be made that later seems to be broken	Need persuading to accept sacrifice now for future gain	Have to trust state to deliver returns on investment
PLAN				

It is currently up to consumers to decide how much they can save by reducing their consumption, whether a longer-term investment in alternative energy might pay off or if they are prepared to pay a premium to be 'green'. The remedies most competitive with current fossil fuel prices are savings in energy that can be made without investment in new technology. They include improved insulation in homes, choosing more efficient boilers, appliances and lighting in the home, greater energy efficiency and reduced emissions from petrol and diesel cars, switching where possible from private to public transport (2 MtC 1997, *CRed at*

Home 2005). Many of these will save money for individual consumers. However, poorer consumers will need help with even modest and ultimately money saving investments such as loft insulation.

To go beyond savings in existing usage of fossil fuels and start to substitute renewable or nuclear primary energy for fossil fuels would involve much higher investment. Individual consumers might switch quite cheaply to hybrid cars or internal combustion engines powered by bio-fuels. From the long-term perspective many of these cheaper options are either niche developments or blind alleys. Technically effective substitutes like hydrogen-powered fuel cells and photo-voltaic heating and electricity generation are currently very expensive and add less additional value than has been typical of new technologies that have appealed to consumers in recent years, such as the PC and the mobile phone. It is a puzzle how they might take off and thus become cheap enough for mass consumption.

*iii) Relations between producers and distributors and the Exchequer and regulators*

Both crises arise in markets in which the state levies taxes and regulates price and supply, directly or indirectly.

The main effect of the pensions crisis upon *consumers* is that it divides them, whereas so far the impending energy crisis has been represented as something that might unite consumers around a perception of public good, whether that is the preservation of their way of life or the protection of the planet's ecosystem.

The equivalent difference in the role set that encompasses the state and producers and distributors turns on how the two markets are structured, partly by the producers and distributors within them, partly by the state.

By comparison with the pensions sector, energy production and distribution no longer has a state sector in the UK. Electricity generation, including by nuclear power, has been privatised, and both oil and natural gas are private sector operations. On the other hand, the state taxes energy at a level far in excess of its taxes on pension funds. It also regulates the supply to the consumer, partly in order to ensure that consumers are not deprived of the means to heat and light their homes, partly also to control the prices that producers and distributors charge to consumers, including those in industry and transport.

The private energy sector consists of large players, often multinational, that form oligopolies and in some areas monopolies of supply and so are powerful enough to administer prices. For instance, the national grid for electricity distribution is a natural monopoly. In an attempt to offset its monopoly power, privatisation has broken supply to consumers up among competitors. None owns power lines. The prices they can charge are subject to state regulation as are those set by electricity generators.

Oil and natural gas prices depend on world markets. Since tax forms a large part of the final price to the consumer, the Exchequer exercises considerable control over the domestic market for oil and natural gas, notwithstanding its inability to regulate their primary supply prices. It also taxes the production of oil and natural gas within UK fields. This gives politicians considerable steering capacity, but also lays them open to lobbying from pressure groups, such as hauliers, farmers and those who claim to speak for 'motorists'.

In the energy arena, the over-riding aim of government intervention has been to keep prices to consumers low (consistent with treating energy as a source of state revenue that helps avoid raising income tax). This aim meets with the resistance of producers and distributors on the grounds that investment in energy infrastructure is expensive and requires higher returns on sales of energy than they are allowed to make by the regulator.

Indeed, if we are to begin now to tackle future shortage of fossil fuels and even more so environmental degradation, commercial interests need to invest heavily in substitute technology and energy. In a market economy, commercial producers and distributors have to envisage a return on their investment that is realisable within an acceptable time-scale. There should be relatively low risk, otherwise the return on investments has to be high.

## **B) Trust**

### *(i) Relations between state and citizens*

The two crises have similarities. The first respect in which they are similar is that both disappoint public expectations raised by the state and business in the past.

Somewhat as pensions constitute a promise from the past that is proving harder by the day to fulfil, 'cheap energy' has been policy in the developed world, and has fed rising consumer expectations – for central heating, air conditioning, more cars and not least cheap air travel. The style of life based on cheap energy is now appealing to rapidly developing countries, such as China and India, which have massive internal markets.

Insecure energy supply (or severely constrained rationing) would disappoint expectations. On the other hand it would not break an explicit 'promise' made by the state to citizens or an employer to employees - a 'social contract' - as is often the case with pensions. The mechanism by which expectations of energy supply would be disappointed is essentially price 'at the pump'.

The urgency of tackling the impending energy crisis implies persuading citizens to switch to alternative energy from fossil fuels as a public good, even at a time when it is not an individual economic necessity. On the other hand, if states treated the issue as a public good, they would be entering into what is in effect a

'social contract' not dissimilar to that which initiated pensions for old age. Further down the line, 'broken promises' might become an issue.

*(ii) Relations between consumers, producers and distributors*

The pensions crisis today differs because promises formed in the past have been broken. Energy supply and consumption are at present market driven. In the UK, pensions have also become market-driven. Thus the site on which pensions have ended in crisis some 60 years after the postwar reconstruction, is that on which energy has begun what may well become its crisis.

In this market context, it is individual consumers' over-riding interest in preserving their way of life at affordable energy prices that drives. Though consumers *qua* citizens may profess a commitment to energy conservation, the cost of not conforming to the current economics of energy is great. As for producers, while there is scope for niche developments that supply the relatively affluent market of the environmentally friendly consumer, there is little for mass producing devices that generate or are driven by renewable energy at present.

Trust is not a negligible factor in this market, but it hinges (uncomfortably) on low prices for energy.

*iii) Relations between producers and distributors and the Exchequer and regulators*

Both crises arise in markets in which the state levies taxes and regulates price and supply, directly or indirectly.

The main effect of the pensions crisis upon *consumers* is that it divides them, whereas so far the impending energy crisis has been represented as something that might unite consumers around a perception of public good, whether that is the preservation of their way of life or the protection of the planet's ecosystem.

The equivalent difference in the role set that encompasses the state and producers and distributors turns on how the two markets are structured, partly by the producers and distributors within them, partly by the state.

By comparison with the pensions sector, energy production and distribution no longer has a state sector in the UK. Electricity generation, including by nuclear power, has been privatised, and both oil and natural gas are private sector operations.

However the domestic market in energy is not a free market for the state taxes transport fuel to the final consumer, relieves some forms of transport fuel of the tax levied on others and subsidises gas distribution and electricity production and distribution. It also regulates the supply to the consumer, partly in order to ensure that consumers are not deprived of the means to heat and light their homes, partly to control the prices that producers and distributors charge to consumers.

The private energy sector consists of large players, often multinational, that form oligopolies and in some areas monopolies of supply and so are powerful enough to administer prices. For instance, the national grid for electricity distribution is a natural monopoly. In an attempt to offset its monopoly power, privatisation has broken supply to consumers up among competitors. None owns power lines. The prices they can charge are subject to state regulation as are those set by electricity generators. Oil and natural gas prices depend on world markets. Since they are a component in the cost of generation of electricity, the regulator's powers are restricted and do not extend to 'at the pump' prices to the final consumer. But, since tax forms a large part of the final price, the Exchequer exercises considerable control over the domestic market for oil and natural gas, notwithstanding its inability to regulate their primary supply prices. It also taxes the production of oil and natural gas within UK fields.

In the energy arena, the over-riding aim of government intervention has been to keep prices to consumers low (consistent with treating energy as a source of state revenue that avoids raising income tax). This aim meets with the resistance of producers and distributors on the grounds that investment in energy infrastructure is expensive and requires higher returns on sales of energy than they are allowed to make by the regulator. It also makes domestic prices relatively insensitive to external price movements. For example, recent sharp rises in the price of crude oil have not translated into price rises to the final consumer that approach their magnitude

Indeed, if we are to begin now to tackle future shortage of fossil fuels and even more so environmental degradation, consumers need sharp price cues to reduce their use of hydrocarbons. Commercial interests need to invest heavily in substitute technology and energy. In a market economy, commercial producers and distributors have to envisage a return on their investment that is realisable within an acceptable time-scale. There should be relatively low risk, otherwise the return on investments has to be high.

## **Conclusions: Solutions for the pensions crisis? Ways of averting an energy crisis?**

The argument has traversed plan and market solutions for pensions and energy crises and considered the risks each entails and the part to be played by trust in seeking a way forward. We have also considered the two crises at three levels, each corresponding to a role set: the state and citizens; consumers, producers and distributors; finally the producers and distributors and Exchequer and regulator.

To pull this discussion together and consider what lessons can be drawn from it, especially for averting an impending energy crisis, we have drawn a summary

diagram for each of the crises. Figure 4 focuses on the two ways of resolving the pensions crisis, their advantages and disadvantages, and where building trust fits in and the problems it may bring.

**Figure 4: Three strategies played out at three levels - PENSIONS**

Levels:	(i) Citizens	(ii) Consumers	(iii) Producers
Strategies:			
Market	<i>To each according to what they can pay</i>	<i>A social divide between those who can choose and those who have no choice</i>	<i>A mix of corporate and private schemes; concern about lack of level playing field</i>
Plan	<i>To each according to their needs</i>	<i>More egalitarian</i>	<i>A single state scheme</i>
<i>Plan in market economy for public good underpinned by trust:</i>			
Trust	<i>An inclusionary social contract</i>	<i>Generally accepted provision, likely to include an earnings related element</i>	<i>Corporate and/or state scheme</i>

One strategy depends chiefly on the *market* to provide for old age. The market includes (in column three) private pensions and annuities or other forms of saving and also voluntary employers' contributory pension schemes. The first column enunciates the individualist ethos among citizens that underpins it. The second column suggests that the outcome is uneven for consumers. Those who are affluent can choose, but the deprived have to take what they can get, usually the state pension and means tested benefit. The UK and the USA today are close to this ideal-type strategy.

A second strategy is a state *plan* that involves egalitarian provision to consumers on the principle of each according to their needs. In the immediate post-1945 reconstruction, the UK approached this ideal type, though there were already privileged groups whose pensions were more generous than the flat rate provided by the state (including public employees) and others who provided for themselves by buying annuities. Variable need was met by means-tested benefits or special payments, for instance for constant attendance by another in the event of disability. State socialism – as in the USSR – may have met the *plan* ideal type more closely, but it has failed to survive the era of globalisation.

A third strategy is proposed that connects plan and market but depends integrally on building trust (a new 'social contract') in a state-led initiative. The trust of

citizens in such a strategy will have been negotiated in such a way as to include within a comprehensive scheme not only those who would have little choice in the free market, but also the relatively affluent. The price of being inclusionary is that pensions are graduated so as to reflect differential earnings during working life and to replace a substantial proportion of those earnings. The provision itself may be either by the state (as in Sweden) or else by corporate bodies representing employees and employers (as in Germany and the Netherlands).

The UK's already imperfect approximation to *plan* proved unstable. Rather than follow the 'social market' approach of West Germany or the 'social democratic' path of Sweden, by seeking to include the affluent in a comprehensive state-led scheme, the country slowly devalued the state scheme and gave tax breaks to voluntary corporate schemes for the relatively affluent.

It seems to follow from the recent history of pensions that the only stable alternative to the market and its sharp divisions of outcome is a state-led or sanctioned scheme based on building *trust* that is also relatively inclusionary. However, schemes based on a 'social contract' tend to produce citizen opposition to change when attempts are made to meet such new external circumstances as flagging economic growth or a rising dependency ratio. They also imply a promise, the breach of which, should it ever occur, could engender significant mistrust of the state (or employer) that made it. Finally, the Exchequer in Britain, which follows in economic policy the neo-liberal agenda of the USA, rather than the social democratic/social market agenda of much of Western Europe, takes the view that a social contract would inhibit flexibility and so increase risk in negotiating the uncertainties in the pensions arena.

How transferable are these observations about the pensions crisis to the impending energy crisis? Can we use them to work out a way of averting an energy crisis? These are the questions that Figure 5 attempts to address.

A relatively free market for energy is represented on the first row. Citizens are not likely to get cues from the market at this early stage (indeed such cues as there might be are blunted not sharpened by tax and subsidies as we have seen), and the process that is leading towards depletion of reserves or, worse, towards irreversible damage to the environment could become advanced before the market supplies such cues. At this moment, conservation of reserves and substitution of renewables for fossil fuel is a public good, not an economic necessity or a source of added value. While there are people affluent enough to buy them, there may be niche developments, such as hydrogen-fuelled vehicles, which fail to reach sufficient numbers to make a price break-through. More problematic still, producers of electricity and of vehicles in developing countries are likely to continue to demand increasing volumes of fossil fuel well before their markets reach the point at which it begins to make economic sense to substitute renewable energy for fossil fuels.

Far from averting the energy crisis, the global market is likely to engender it. Does this suggest that the solution lies with state intervention? It does, but plan is unlikely to succeed by itself. This is partly because the world economy is dominated by large capitalist corporations and a country that champions globalisation - the USA. Except in the 1939-1945 war, the level of mass mobilisation and central planning and control required to avert an energy crisis has not occurred in modern states. Consumers would have to face fuel or vehicle miles rationing, a severe change from the current situation. It is true that military spending, notably so in the USA, has served as a spur to develop new technologies that have been applied elsewhere, but military uses of renewables (for example, hydrogen as rocket fuel and for powering mobile equipment) are so specialised as to be unlikely to have spin-off for the mass economy.

**Figure 5: Three strategies played out at three levels - ENERGY**

Levels:	Citizens	Consumers	Producers
Strategies:			
Market	<i>Until scarcity raises the price of fossil fuels, citizens will not act on that prospect, far less on global warming</i>	<i>The affluent who are greens may pay a premium for alternative energy, but the poor will not be able to do so</i>	<i>Production of alternative energy will be for niche markets and fail to reach the masses or poorer countries</i>
Plan	<i>A dirigiste approach is easier for one state than many, but each tends to protect its own and many have to collaborate to be effective globally</i>	<i>Fossil fuels will have to be rationed in the interim and steadily substituted for by renewables</i>	<i>Nation states have led innovations (as in war or reconstruction) by investment in the 'commanding heights' and/or the military – at what cost would this be done in peace?</i>
<i>Plan in market economy for public good underpinned by trust:</i>			
Trust	<i>A relation has to be negotiated between states globally and between citizens and states locally to focus on energy</i>	<i>Consumers have to accept a high fossil fuel tax regime, and savings in energy and/or carbon in expectation of a major return</i>	<i>Producers and distributors have to be confident in future energy policy and have sufficient margin on sales for investment in renewable energy</i>

Another reason why plan is likely to be of limited application is that state plans tend to be national in scope. Few if any national economies today are autarchic. Thus, if any one state were to switch from the universal cheap energy policy in order to favour investment in substitutes for fossil fuels, it could damage its competitive position. Excepting (for instance) Iceland, which has easily accessible geothermal sources of energy, the state that could make this switch at least risk to itself would be the USA, because of its sheer size. Even so, it needs

to be further advanced in its development of renewables in order to reduce the risk of unilateral action and it needs to be confident that China and India, which constitute the greatest threat to its supremacy for the future, would follow suit.

On short to medium term economic grounds alone the USA is unlikely to take this risk. It would need to see the shift as an overwhelmingly important public good. It would also need to be party to a treaty between all major economies that is founded on trust. Thus, the trust that needs building to avert the energy crisis involves far more than the social contracts between citizens and their individual states that have underpinned (for better or worse) old age pensions. It demands global co-operation. It also demands a level of commitment to future generations and of sacrifice of one's own interests as consumer and citizen that is extraordinary in peace time.

We conclude that for all that it presents problems of its own, building trust is not dispensable in managing major change that carries uncertainty.

## References

2 MtC (1997) Environmental Change Institute, University of Oxford, 8-24

Adam, B, Beck, U, van Loon, J (2000) *The Risk Society and Beyond: critical issues for social theory*. London: Sage.

Barber, B (1983) *The Logic and Limits of Trust*. Rutgers Univ Press, New Brunswick NJ.

Beck, U (1992) *The Risk Society: towards a new modernity*, London: Sage.

Beck, U, Giddens, A, Lash, S (eds) (1994) *Reflexive Modernization: politics, tradition and aesthetics in the modern social order*. Cambridge: Polity.

Brinkley, J and Lohr, S (2001) *US v Microsoft*. New York: McGraw Hill.

British Social Attitudes Survey (2005): *Annex 3E: Public attitudes to energy and the environment*.

CRed at Home (2005) <http://www.cred-uk.org/CRedAtHome.aspx>

Deakin, S and Michie, J (1997), 'The theory and practice of contracting' in (eds) Deakin & Michie, *Contracts, Co-operation and Competition*, Oxford UP, Oxford).

Douglas, M, Isherwood, B (1996) *The World of Goods: towards an anthropology of consumption*. London: Routledge.

- DTI (2003) *Our Energy Future: creating a low carbon economy*, TSO.
- Durkheim, E (1984) *The Division of Labour in Society* (trans Halls, WD) Basingstoke: Macmillan.
- Esping-Andersen, G (1990) *Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.
- Flynn, R, Williams, G, Pickard, S (1997) 'Quasi-markets and quasi-trust: the social construction of contracts for community health services', in (eds) Flynn and Williams, *Contracting for Health*, Oxford UP, Oxford.
- Fukuyama, F (1995), *Trust*, Penguin Books, London.
- Giddens, A (1990) *The Consequences of Modernity*, Polity Press, Cambridge.
- Ginn, J and Arber, S (1999) [Changing patterns of pension inequality: the shift from state to private sources](#) *Ageing Soc* 19.3: 319-342.
- Ginn, J and Arber, S (2000) [Personal pension take-up in the 1990s in relation to position in the labour market](#) *J Soc Policy* 29.2: 205-228.
- Gouldner, A (1955) *Patterns of Industrial Bureaucracy*. London: Routledge.
- Gouldner, A (1965) *Wildcat Strike: a study in worker-management relationships*. London: Harper and Row.
- Granovetter, M, Swedberg, R (eds) (1992) *A Sociology of Economic Life*, Oxford: Westview Press.
- Luhmann, N (1979) *Trust and Power*, Wiley, Chichester.
- Luhmann, N (1988) 'Familiarity, confidence, trust' in Gambetta, D (ed) *Trust*, Blackwell, Oxford.
- Lyons B, Mehta J (1997) Contracts, opportunism and trust: Self-interest and social orientation, *Cambridge Journal of Economics*, 21 (2): 239-257.
- Malinowski, B (1922) *Argonauts of the Western Pacific*, London: Routledge and Kegan Paul.
- Mollering, G (2001) The nature of trust: from Georg Simmel to a theory of expectation, interpretation and suspension, *Sociology*, 35.2: 403-420.
- Pensions Commission (2004), Chairman: Adair Turner, *Pensions: Challenges and Choices*. TSO.

Pickering, A (2002) *A Simpler Way to Better Pensions*. Independent Report to Department of Work and Pensions.

Polanyi, K (1957) *The Great Transformation*. Boston: Beacon Press.

Putnam, RD (2001) *Bowling Alone: the collapse and revival of American community*, London; Touchstone.

Seligman, A (1997) *The Problem of Trust*, Princeton UP, Princeton NJ.

Simmel, G (1978) *The Philosophy of Money* (trans Bottomore, T & Frisby, D) London: Routledge and Kegan Paul.

Taylor-Gooby, P (1999) 'Markets and motives, trust and egoism in welfare markets' *Journal of Social Policy* 28, 1, 97-114,

Taylor-Gooby, P (2000) 'Risk and welfare' in ed. P Taylor-Gooby, *Risk, Trust and Welfare*, Macmillan Press, Houndmills, Basingstoke.

Taylor-Gooby, P (2005a) 'Uncertainty, trust and pensions: The case of the current UK reforms', *Jl Soc. Policy Adm.*, 39.3, 217-232.

Taylor-Gooby, P (2005b) *Public Expectations of Pension Provision*, Actuarial Profession.

Titmuss, RM (1970) *The Gift Relationship: from human blood to social policy*. London: Allen and Unwin.

Unruh, G (2000) Understanding carbon lock-in. *Energy Policy* 28: 817-830.

Unruh, G (2002) Escaping carbon lock-in. *Energy Policy* 30: 317-325.

White Paper (2003) [http://www.dti.gov.uk/energy/whitepaper/wp\\_text.pdf](http://www.dti.gov.uk/energy/whitepaper/wp_text.pdf)