

A DIGEST OF NEWS AND VIEWS ON BRITAIN'S ECONOMY AND OUR ROLE IN OVERSEAS TRADE AND PAYMENTS

Winter 2003	Vol. 33, No. 4
-------------	----------------

Some New Year Observations	3
Taxpayer Value	5
Energy and the World to 2050	12
Sovereignty	20
Let Renewables Compete	24
The Edward Holloway Collection Review	26

HOWARD FLIGHT - JOHN MILLS - BRIAN LEWIS

Editor: Jim Bourlet

The articles published in this journal do not necessarily reflect the views of The Economic Research Council

Published quarterly by **The Economic Research Council 7 St James's Square, London SW1Y 4JU** Tel: 020 7439 0271

Price: U.K. £15 Australia \$35 Canada \$35 New Zealand \$45 U.S.A. \$25 Japan ¥4,000 ISNN 0045-2866

	Lord Biffen Damon de Laszlo
Vice-Presidents	Tim Congdon Russell Lewis Brian Reading
Hon. Secretary	Jim Bourlet
Executive Secretary	Professor Peter Davison

MEMBERSHIP

Membership of the Economic Research Council is open to all who are in sympathy with its declared objects. The minimum annual subscription for individual members is $\pounds 25$ for full members, $\pounds 15$ for Associate members, and Student members $\pounds 10$.

Corporate membership is open to all companies and other bodies, minimum annual subscription £55 (Educational institutions £40) in respect of which they may send up to six nominees to any of the Council's discussion meetings and lectures.

Executive Committee

Dulcibel McKenzie
Christopher Meakin
John Mills
Alan B. Parker
John T. Warburton
-

SOME NEW YEAR OBSERVATIONS

During my recent sixty days travelling to Los Angeles, New York, Singapore, Taiwan and Bermuda, plus a few side trips to Paris and Geneva, the emergence of the world recovery has become clearer.

Since August real evidence of life in the Japanese economy has appeared. Medium and small companies are restructuring and starting to see growth. Asia is booming, led by China. The most interesting observation coming out of my visit to Taiwan was the concern there with wage rates. Taiwanese companies are automating fast to compete with China, they are also increasing the rate at which they are moving production facilities to the mainland. In very round numbers, China mainland labour rates are US\$50 per month, and in Taiwan they are US\$500 per month, but interestingly engineers command a wage in China of two-thirds the Taiwan rate, and Taiwanese companies are recruiting in the US. The balance of trade surplus of China could, at the current rate of expansion disappear in the next two to three years, as domestic demand mops up the product that is now being exported, and China continues to import vast amounts of commodities; driving up the world price for coal, oil, steel and even gold.

The Russian economy is also growing and Putin's clamp-down on the heads of Russian oligarchies that meddle in politics is probably a good thing. When industrial barons use their financial power to disrupt the executive rather than contribute to the country's stability, there is a danger that the power of the executive is undermined to the extent that it can no longer 'rule'. This is not good for economic stability, as the Russians have learned to their cost. While Russia is a dangerous place to do business for anyone except the very very large companies, the country's economic growth is important to the stability of the world.

The USA continues to fascinate as the economy picks up, along with the market, there is less reason to be concerned about the State, Federal and International deficits. State revenue is increasing and the Federal deficit will receive large increases in revenue going into 2005/6. While the consumer boom will, and probably needs to, slow down, commercial stock building and industrial investment will pick up. China's boom will mop up Asian production more and more; couple this with the rapidly rising freight rates, and the decline in the dollar, US industrial growth is going to increase even more rapidly than the current rate, and the consequence of this shift in production will be to greatly reduce US imports of consumer goods and increase the export of US capital goods.

All this activity will result in an increasing shortage of labour and productive capacity. I am constantly fascinated by the assertion that the US has surplus productive capacity and the Federal Open Market Committee's view that, 'the persistent slack in the Nation's labour market and the large amounts of unused production capacity, coupled with continued productivity gains, are likely to hold inflation to very low levels for the next year or two'.

The productivity gains are extraordinary and result from new production capacity using embedded computer systems. This new capacity, however, makes the old unused capacity referred to by the FOMC redundant. It is highly unlikely that anyone is going to restart a recently closed steel mill or production line. Old computer capacity or telecom switches are very unlikely to be brought back into use. It may be that the return of inflation can be postponed beyond the next year or two but I think this is unlikely as the capital expenditure required to meet industry's investment needs will greatly increase demand for skilled labour, pushing up costs of both labour and capital. All the above adds up to rapidly increasing earnings, which will leave the present market looking cheap.

Europe is probably the only major area of economic concern, particularly following the debacle in the Constitutional Treaty negotiations. Germany and France managed to frighten the new entrants to the Common Market from Eastern Europe this Spring when they threatened them with retaliation following their support for the US invasion of Iraq. Those extraordinary threats issued by Schröder and Chirac focussed attention on the proposed constitution. Poland and Spain particularly realised that their positions as 'partners' in Europe would be reduced to the status of 'associates' if the proposed voting system of the new constitution went through. Further statements by the Franco/German leadership and the Prime Minister of Luxembourg that there should be a European core group of the six founder members, has made the whole political drive for European unity intellectually untenable. While a European free trade area is a wholly excellent idea, the appearance of the Franco-German axis' desire to use the EU as a political tool to control the rise of Europe has now become clear from the statements of both countries. The next hurdle for the European experiment will be the budget negotiations next year. Germany has already publicly threatened Spain and Portugal that they will be punished financially for not supporting the new EU Constitution.

Following Germany and France's blatant disregard for the core of European economic policy, the stability pact, the budget round could become deadlocked. It's of considerable concern to me that the European area could easily be destabilised by the warring factions, only held together by a monetary unit – the Euro. The economic consequence of this scenario doesn't bear thinking about. Leaving Europe and Africa aside the global economy is, I think, set for a rapid recovery, which will also scoop up Latin America.

There is an old adage that 'Confidence is what you have before you know what the problem is'. At the moment I don't see any problems that are not self-correcting.

Best wishes for a very Prosperous New Year.

Damon de Laszlo

TAXPAYER VALUE

A talk given by Mr Howard Flight MP, shadow Chief Secretary to the Treasury, to members of the Economic Research Council on Tuesday 2nd December 2003

With ageing populations and the extent of existing public spending (where the tax-take is already damaging economic performance in continental Europe) for the next fifty years the major domestic issue for western democracies will be how to get improved and better value from public expenditure. This summer, the European Central Bank pointed to poor management and substantial waste by the UK government compared with the USA and Japan – which they quantified at $\pounds70$ billion p.a., 18% of public spending; albeit making the point that France and Germany and most of the rest of Euroland were even worse!

In the UK, as all the focus groups and polling research show, the key and inter-related domestic issues – where the public are looking to the Conservative opposition for the answers – are how to improve the delivery of public services and at less cost and better Taxpayer Value. The central thesis of Taxpayer Value is that public services can be improved through eliminating waste and unnecessary bureaucracy; that public sector delivery units should be empowered to manage their tasks with the minimum of central intervention and that decreased central intervention and control should also serve to stimulate the economy.

The politicians and journalists making up the Westminster village may take it for granted that the Labour government is now running into a serious 'tax spend and failure' problem; but in my experience, the public wants to know what has gone wrong and why, as well as how the problems can be solved.

In this month's Lombard Street Research Economic Review, Professor Tim Congdon makes damning criticisms. I quote, 'In the four years to the second quarter of 2003, general government consumption increased by 8.6% a year, where the rest of national output rose by only 4.1% a year; that spending money is easy: the hard bit is spending money wisely and effectively and achieving more real output. On this score new Labour's programme has been a disaster.' The numbers are 'an appalling indictment of Mr Brown's stop-go on public expenditure and of the resulting waste and inefficiency. What they mean is that prices and costs in the government sector climbed by over 6% a year, while in the rest of the economy they crept ahead at a mere 1.5% a year. Mr Brown's spending binge was so badly handled that it failed to deliver noticeably better services, but instead aggravated shortages of teachers, nurses and doctors, and encouraged suppliers to the public sector to put up prices. The incompetence was on such a scale that inflation in the government sector was four times that in the remainder of the economy.' He concludes with the comment that Mr Brown ought to 'apologise for gross mismanagement of the nation's resources'.

The figures are indeed damning. Since 1997, both the tax-take and government spending have risen by approximately 50%. On the government's own, Office for National Statistics (ONS) figures, 82% of additional public services expenditure has been consumed by rising public sector inflation, which has increased from 1.6% p.a. in 1997 to 7.5% p.a. on the latest figures. Public sector productivity – output per employee – has declined by over 5% since 1999.

Much of the ineffective spending has gone into increased, unproductive public sector employment. By 2006, the number of people working in the public sector will have increased by 674,000, costing taxpayers an additional \pounds 19 billion p.a., of which only a modest proportion is represented by extra doctors, nurses and teachers. Since 1997, the cost of the central civil service has doubled from \pounds 12 billion p.a. to \pounds 23 billion p.a.

At mundane levels the evidence of a profligate government is depressing.

The cost of the Blairs' Downing Street flat has doubled since 1997 and the costs of Chequers has doubled to nearly £500,000 p.a. The costs of the Foreign Secretary's residence at No. 1, Carlton Gardens, is up 40% to (62,500 p.a. since 1997; Margaret Beckett's department spent a whopping £276,000 on houses for ministers last year and the running costs of residential properties used by Treasury ministers and officials has more than doubled since 1997 to $f_{157,000}$ p.a. A huge $f_{1.1}$ million was spent on John Prescott's flat at Whitehall. The Prime Minister's office costs have nearly doubled in the last five years to f_{13} million p.a. with 69 more staff - mostly engaged in media handling. Health ministers' office costs have increased by $f_{1.3}$ million p.a. - 70% up on 1997. Cabinet Office taxi costs have risen by nearly 1000% and rail travel costs have increased by 464%. The Department of Culture, Media and Sport increased rail and air travel costs by 80% to £519,000 p.a.; the Department of Work and Pensions have spent over 80% more on UK rail travel and nearly 85% more on air travel over the last two years. Foreign and Commonwealth Office taxi costs have more than trebled. The Crown Prosecution's travel bill went up by 350% to $f_{1.9}$ million last year. The Department of Health spends nearly (2 million p.a. more on plane and train travel than it did in 1997. Mobile phone costs have increased by 153% at the DWP, 108% at the Department of Education and 277% at the DTI. Theft and fraud in Whitehall departments increased last year to a total of £72 million. The Department of Health spent nearly f_1 million on the production and distribution of an NHS magazine of which only 22 copies were ever sold. £232,000 was spent on changing the name of the Department of Work and Pensions, while the cost of merging the Department of the Environment and Transport was estimated at between f_{10} million and f_{16} million. The new corporate identity for DEFRA has cost £,500,000. 18 departments have been spending over (11 million p.a. on newspapers, magazines and periodicals. Worst of all have been IT failures and waste - $f_{12.6}$ million at the Passport Agency; £450 million at the Child Support Agency, £134 million on the LIBRA project and f_{140} million on the Defence Logistics Organisation. Such lack of control of this type of expenditure has for long been viewed as typical symptoms of bad management and corporate decline in the private sector.

The key political question is, therefore, how the next Conservative Government will improve the delivery of public services and improve the value which citizens expect and should receive for the taxes they pay: and which all the available evidence shows the public is now seeking in earnest.

The recent history of initiatives to improve efficiency in the public sector starts, particularly, with Lesley Chapman in the 1970s. He is still very much alive and 'on the ball', and has been my inspiration. Some of you may have read his amusing book published in 1978 by Chatto and Windus Your Disobedient Servant'. The book described what happened when, from 1967 until 1974, he held a senior management position in what was then the Ministry of Public Buildings and Works where he sought, in a variety of ways, to reduce waste and extravagance. The book describes the reasons why his efforts, like those of many others in the public sector, met with only limited success, and sets out the changes which he believed needed to be made to bring about improvements. The essence of his investigations was about the sort of waste which involved ten employees where five were sufficient; the cost of unused and idle buildings and other assets, and the waste that stems from general inefficiency and mismanagement. He set out to achieve savings of 15% p.a. And ended up achieving 35% p.a. Not surprisingly, he is still resented by many who worked in the public sector, for 'blowing the whistle' on them. His work was very much the inspiration for the incoming Conservative Government in 1979 and the appointment of Lord Rayner. He achieved only limited success, largely because he was overwhelmed to address the problems of public sector inefficiency and frozen out by 'Sir Humphrey', and because the incoming Conservative administration in 1979 had not considered sufficiently what arrangements would be required to defeat the vested interests which dominate the public sector. Overall, however, and particularly via the privatisation and next step initiatives, the Conservative governments of the 1980s achieved significant success. The central bureaucracy was reduced from 800,000 to 450,000 - the numbers have since gone up again under Labour to over 540,000. The moral of the 1980s is the need for both a well researched and disciplined top down plan for achieving Taxpaver Value and for an ongoing 'bottom up' investigation of waste and inefficiency - similar to that implemented so successfully by Lesley Chapman.

The Taxpayer Value approach borrows from 'shareholder value', which has been for some time the dominant business discipline. Its objectives are to achieve optimum value from the costs incurred and the assets employed; and to strengthen value adding and cut out value reducing activities.

An important part of the change in disciplines in the business sector has also been the abandonment of 'management by objectives', used in the 1970s to identify key target indicators to improve corporate performance – and on which Labour's failing and out of date public sector targets' regime

has been based. In the private sector, management by objectives proved to be counter-productive. Businesses measured what was easy to measure rather than what mattered and staff felt they were being over-controlled and their morale was undermined; what got measured tended to get fiddled. Businesses have since abandoned this type of command-control model and shifted to an approach which shares corporate goals with employees, involving them and motivating them to contribute to improve performance. The next Conservative Government will pursue a similar approach in the public sector. Only vesterday a director of a major hospital trust called me up in disgust because the DHS had, in effect, just been giving verbal indications on how to cheat on the figures for the target to make sure all patients in A&E units are seen within four hours. There will be certain exceptions to the figures recorded, one of which will apply to all patients who are given a locker. Look out for the rising orders which NHS trusts will be placing for lockers! What disgusted him, in particular, was that the DHS is now giving the key on how to fiddle the figures.

The key to reform in the public sector is to take politicians out of the management of services. Taxpayer Value measures public services by the value they provide, rather than their costs, and seeks to save the huge amounts that are now wasted in unproductive bureaucracy, in the central government micro-management and regulatory costs and the growing mezzanine layer of public administration. It is also to empower the delivery units to get on with their job. Allowing government to manage public services without any effective focus on the value delivered is a licence to waste taxpayers' money.

The policy initiatives already made by the Conservative Party have made it clear that we will make schools and hospitals self-governing, as far as possible, cutting out the escalating costs of government micro-management. In healthcare and education, our 'tariff' and 'passport' proposals mean that money will follow the patient and the student, both giving citizens greater power of choice and enabling hospitals and schools to manage their affairs on a business-like basis.

The Taxpayer Value approach will continue Conservative policy of the 1980s when, in particular, we set up the next step agencies as the first step in moving away from traditional Whitehall bureaucracy, to make public services responsible to taxpayers' needs. We will need to make fundamental changes in the role of government, switching away from micro-management to concentrating on the macro-policy tasks – and in particular the efficient channelling of funding to the delivery units. We will get rid of the plethora

of strings which have been attached to public sector funding and the marzipan layer of unnecessary bureaucracy which has become a major drain on tax revenues. We will devolve management responsibility to those running the delivery units on the ground.

In the analysis which we have been working on over the last year, the first point to note is that the public accounts appear to be kept, deliberately, in a fashion which obscures clear understanding. The crucial figures are the Total Management Expenditure (TME) relating to each area of government. These are vastly different in many cases from 'departmental expenditure' – in part, because much of TME is spent at a local government level – but there are also problems with a TME approach, largely because government departments do not match the 'functions' used in the TME analysis. I have gained the very strong impression that the structure of the public accounts has been set up to deliberately obscure outside understanding as to how and where money is spent in the public sector.

Taxpayer Value planning for government requires financial planning, departmental planning, legal planning, the training of ministers and the secondment of senior executives with relevant business and government expertise of improving efficiency.

We are investigating on a top down basis the extent and scope for Taxpayer Value savings for all departments of government; and on key cost cutting areas, specific papers are being produced.

IT has been a continuing area of waste, where it has been estimated that 5% of annual, public sector IT spending could be saved from better IT management.

While some local authorities have already embarked on impressive reforms to reduce procurement costs, public sector procurement overall remains a shambles. A private sector specialist is reviewing for us the potential savings from instituting professional procurement staff and professional procurement management throughout the public sector.

Regulators and regulation have been a major area of growing, non-value adding public sector expenditure. The numbers employed by the offices of the regulators have grown over the last six years by 157% and the direct cost by 261%. The direct costs exclude the compliance and indirect costs for business, as well as the opportunity cost impact on innovation. The much larger saving potential is from reducing the general burden and cost of regulation on the private sector. Separate teams will be reporting on Taxpayer Value policies for both regulators and regulation.

In January a leading figure from the business world, together with a group of accountants seconded from the profession, will start a bottom up investigation of public sector expenditure – 'shining the torch on the buried bodies', on areas of serious mismanagement in the public sector which have been hushed up. Here, our first task will be to target the major areas to investigate in detail. What is already apparent is the need for capital expenditure to be monitored much more carefully.

With government spending and the government's borrowing requirements running out of control, the government itself seems to have woken up to the need to address the problems. From the feeble Treasury paper which was issued in the autumn, I fear that the usual mistakes will be made of cutting delivery expenditure, rather than effective reform of bureaucracy.

I have no doubt that Labour spin will seek to rubbish what we have to say when we are ready to say it, by claiming quite dishonestly, that our plans will be about cutting teachers, doctors and nurses – where in fact they will be about cutting bureaucrats and changing the culture within civil service and the public sector – and not cutting teachers, doctors or nurses.

The more I dig into what goes on in the public sector culture, the more horrified I am at the mismanagement and waste – and above all, from my own experience of having spent nearly thirty years building and running a business, at the general lack of concern for efficiency and integrity in the public sector.

What is already quite clear and, I believe, the public – who are not stupid – understand, is the need for much more efficient and much lower cost channelling of the funding from central government to empower the delivery units; and the need for competitive pressures – citizen choice – in the consumption of public sector services. Why should people not be able to choose which hospital, on their doctor's advice, they want to go to; or which state school they want to send their children to?

The public also need to realise that they cannot afford to elect a government which will not effect major Taxpayer Value reforms in the public sector, without which the tax burden will rise inexorably, citizens' disposable incomes may fall and the productive economy will be crowded out and our economy will under-perform.

Public sector monopolies throughout the world become, inevitably, inefficient. The public now realise very well that Labour's return to 'tax and spend' is failing to achieve improved delivery. The Taxpayer Value agenda is to achieve both what is needed and what is achievable.

ENERGY AND THE WORLD TO 2050

Extracts from a talk given by Mr John Mills, member of the Executive Committee, to members of the Economic Research Council on Thursday 30th October 2003

Almost everything that's written which looks forward to the next twenty or even fifty years is full of doom and gloom. But to me this is unrealistic and I want to present to you what is, on the whole, a remarkably optimistic scenario and see whether I can persuade you in this short talk that we've actually got a great deal to look forward to – unless we make some very unnecessary mistakes.

With the new Economic Research Council's publication 'Recharging the Nation' by Dan Lewis it is appropriate to tackle, first of all, the question which may be uppermost in your minds in looking forward fifty years – 'Since modern civilisation is hugely dependent on energy, will energy resources run out?'. This question is the first of five interlocking parts for our scenario, the others being 'What is the population going to be in 2050?', 'What is the standard of living going to be in 2050?', 'Is it all feasible?' and 'What is the likelihood of this relatively rosy scenario I am going to put in front of you in economic terms being derailed by events of all sorts that might go catastrophically wrong?'.

Will we run out of useable energy resources?

Currently, about forty per cent of the world's energy comes from oil. Any future shortage would imply major rises in price, an increase in the proportion of world GDP spent on purchasing oil, and extra funds being devoted to finding new supplies. At present oil represents about 1.6% at source level of world GDP so even if the price went up significantly, as a proportion of world GDP it still wouldn't be such a big problem. Recently oil has been fluctuating at a price around \$20–\$25 (it's been down as low as \$17 recently), up to about \$30 or just over. There seems to be very good reason to believe that it will probably stay somewhere in that region for quite a while, partly because if it goes much above that you get a good deal of price resistance coming in, and people are more serious about trying to use it more economically.

But if the price did go up, say to around double the current price, representing perhaps 2% or 3% of world GNP, we would then have the possibility of more or less inexhaustible sources of oil in shale. The sources

of oil in shale which are known about represent about 250 times world known sources of oil (which are, of course, mostly in the Middle East). So the chances of us running out of oil as an energy source over the next fifty years, let alone a long way beyond that beyond that, really are very low. Taking into account technological progress (which apparently has in some areas, already reduced oil from shale costs to around \$8) increased fuel efficiency and the existence of alternative carbon based fuels (particularly coal) we can see that we are simply not going to run out of energy overall. Nonetheless, given that oil and coal generate harmful emissions, what are the alternatives?

My guess is that nuclear power, whilst continuing to be a source in countries where there has been heavy nuclear power plant investment, such as France and Japan, will not, because there are big problems, be an increasing source of fuel overall. It is about twice the price of carbon-based sources, there are security problems and there are difficulties in decommissioning and the disposal of spent fuel. A possible route out of the nuclear impasse may be fusion technology if it could be made to work but, with the hugely high temperatures involved this may not be possible for another 20 or 30 years – if at all.

Renewables almost certainly will play a larger part. Hydroelectricity already supplies something like 10% of the world's total. The rest however make a pretty small contribution, wind farms perhaps 0.4% and voltaic cells something similar. Rather more is being produced by burning rubbish and so on but that produces the same problems as carbon fuel – so they are not really the 'flavour of the month' at the moment. There are real problems with the high capital costs of harnessing tidal flows and wave energy, so I am fairly sceptical about whether renewables are going to be a really big deal over the next fifty years so. Looking ahead 20 or 30 years, as you move towards 2050 I think that the renewable most likely to be successful is photovoltaic cells. The position here is that costs have been falling and falling and falling so that whilst this source is still more expensive than carbon based electricity, the gap is narrowing all the time. If the cost does fall far enough there really is an inexhaustible supply of energy there. The energy from the sun falling on the earth is many thousands of times the amount currently used and I'm told that if 2.6% of the Sahara desert was covered with voltaic cells (and you could find the transmission lines to spread it around the world) that would supply the whole of the world's present electricity requirements.

So, overall, the chances of our being constrained by energy shortages are

very low and, given the low proportion of world GDP spent on energy at present, even higher prices, implying massive supply increases, would not be cause for great alarm.

World population - double by 2050?

Before going further we need to take a brief look at some overall population figures. In 1950 the world's population was just $2\frac{1}{2}$ billion – about 50 times the population of Britain. In 2000 it was just over 6 billion and the United Nations has projections running ahead for the next 50 years showing what the population could be in 2050. They have a low estimate (just under 8 billion), a medium estimate (just over 9 billion), and a high one (nearly 11 billion) – so if you hit the high one we are going to see the population nearly doubling.

Growth ahead for the standard of living

The next key part of the jigsaw is 'What is likely to happen to the standard of living over the next fifty years?'. I think that the most likely trend that we will see is a continuation of what has happened for the last fifty years. Although the last fifty years hasn't been all that even, the growth in standard of living was higher for the first 25 years up to 1975 than it was for the last 25 years. But if you take the average over the whole period for the next 50 years then there are going to be some staggering increases in living standards. Using US year 2000 dollars, incomes will be \$30,000 per head compared to \$8,000 at the moment.

World GDP meanwhile, which rose from just over \$7 trillion in 1950 to about \$50 trillion in 2000, will rise to about \$275 trillion in 2050. In almost any scenario you can envisage, broadly speaking, total income will be 5 to 6 times higher in 2050 than it is at present. To take two extreme scenarios, one where the western world does little to help (particularly in trade opportunities) the poorer parts of the world especially Africa, and another where the western world does far more. In the first case, incomes will stay low (the UN suggest, below \$2,500) and people find that with no social security the best way of getting through old age is to have large families – so the population will grow faster. In the second case we find that in all cultures, once incomes rise above about \$2,500, population tends to fall because it becomes worth investing in children in a completely different way – which means smaller families and more education. But either way, world GDP arrives at much the same figure. But will this lead to shortages of raw materials, food and water? Is it all feasible?

The chances of running out of raw materials are very low

The 'Club of Rome' in 1973 published a famous study suggesting that we were going to run out of almost everything by about 1990 and I am sure that it would surprise none of you to hear that not only did we not run out of anything but actually the prices in real terms were lower in 1990 than they had been in 1973 for almost all of these raw materials. And I have to say that I think the prospect of us running out of any significant raw materials, allowing for substitution and for the fact that 'reserves' of raw materials always tend to run 25 to 30 years ahead because it simply isn't worth exploring much beyond that, is really very unlikely.

It is interesting to look at the amounts of various raw materials purchased. Cement is about a third of the total, aluminium is about 12%, iron ore 11% and copper about 8%. These four make up about two-thirds of the total Amongst the rest there is a fair degree of substitutability and there are huge reserves of the four major materials already found. So the chances of running out of raw materials are very low.

No shortage of food

Output per head of food is still rising everywhere as a result of improvements in technology (you may have differing views about whether you think GM crops are a good thing or not, but there's clearly a huge amount of mileage there). Yields are much higher in the West than they are in nearly all less developed countries so there is a huge catch up that can take place. There is still quite a lot of land that could be brought into cultivation. Cheaper transport now means that food can be grown wherever the cost of doing so is cheapest, so that the amounts to be stored can be reduced and the risks of famine reduced.

Water is a problem of management not shortage

Rainfall amounts world wide, to the astonishingly high figure of about 5,700 litres per day per person. In the EU water use is about 566 litres per day per person and in the US about 1,400. Rainfall is not distributed in a

way that is ideal of course but the fact that there is such a large surplus gives some indication of the fact that there are problems there that ought to be soluble for most of the world. In some areas de-salination, if the energy is available, can also provide solutions.

So water, in the end, is unlikely to be a limiting factor. There are certainly some issues about water pricing – there is a huge amount of waste of water because it is not properly priced, but in principle running out of water is not what is going to happen.

Waste is not overwhelming

Some people have been concerned that the limiting factor is going to be waste and pollution. But actually the proportion of waste that is produced in relation to GDP per head is falling and likely to go on falling as we move more into a post-industrial society. And the total landfill space required to accommodate all the world's rubbish is a tiny, tiny fraction of the total world's surface. There are certain NIMBY type problems about disposing of waste but they are not insoluble ones. Industrial pollution is an issue of course but if you look at the totality, the developed world is a much, much cleaner place now than it was 50 years ago. You need to make sure that the rivers are clean, the air is relatively pure, and the rest of it, is a relatively high standard of living. We will certainly have the resources to deal with these problems.

We can cope with possible climate changes

Climate change is a big potential threat but again, in relation to the resources likely to be available, it is a pretty small one. Even assuming the worst in terms of temperature increase we'll probably need to use something like 3% of one year's output at some stage to deal with flooding and other problems that global warming will produce (incidentally, not everybody by any manner of means is a loser on global warming and Britain will probably be, in most respects, a gainer rather than a loser). The Kyoto Agreement and all the rest hugely depend on whether there are trading arrangements for the various permissions to do with emissions. If there aren't then it's a very, very expensive way of trying to solve a problem which will actually take a long time to materialise. There are big dangers about panicking over greenhouse gases and introducing solutions to a problem which are far more expensive than the problem itself would turn out to be if left alone.

One of the really important issues over the next 50 years is that we get that one more or less right.

Having said all that however we should acknowledge that there are risks which at present we know little about, that there could be various 'triggers' that could take place, particularly in regard to ocean currents which, who knows? – might even herald the end of the Gulf Stream or a new ice age. But these are possibilities over many thousands of years, of which 50 years is a very small part.

Catastrophies?

i) The need to put war into perspective

I think there is very little doubt that over the next fifty years we are going to see the continuation of terrorism in various guises, and local wars. But on the other hand I think the chances of any of the sorts of nuclear complications which might have happened during the cold war period are really very unlikely to materialise. There is always the risk of rogue states possibly attacking somebody else or even (say) China or Pakistan or India getting involved in a war. But the chances of that war being on such a scale that humanity would be obliterated I think is very small. Let me give you some figures to get warfare into perspective. If you look at the effects of the first world war, the inter-war slump and the second world war with all the huge carnage and material damage there was, and then look at the long term trend base in standards of living to see to what extent all those events put back the growth in human GDP, it's somewhere between five and six years so even those events didn't make a huge amount of difference. Even if there was a suitcase bomb that went off and blew up the whole of the City of London or some such terrible event, in the great sweep of history I cannot see that it would make an enormous amount of difference.

ii) Natural disasters that probably won't happen

Nature is a much harder game to call. We might get struck by an asteroid for example, and indeed there was one that landed in Siberia in the early years of the twentieth century which left a huge crater (few people lived there and nothing else much happened). But the chances of this happening in the next fifty years are small and the chances of it landing on a major city a great deal smaller. Volcanoes are another possibility. There have been some pretty big volcanic eruptions over the last couple of thousand years, but nothing that's really had an enormous impact on humanity. The last really big eruption was in Lake Toma about 73,000 years ago which caused massive changes in the earth's temperature which probably very nearly wiped out the humanity that existed at that time. So such a thing could happen – a possible area being around Yellowstone in the United States where the land is already heaving and where there have been huge eruptions about every 600,000 years. Now even though the last one happened rather more than 600,000 years ago I think there is a reasonable chance that it won't happen again in the next fifty years.

Then there are tidal waves. There is a chance that a large sheet of ice in the Antarctic could slide off raising sea levels by metres and sending tidal waves all the way round the earth. And some big cliffs might collapse... But they probably won't. And, as I have already mentioned, ocean currents may change if global warming affects such actions as the North Atlantic 'water pump' which keeps the Gulf Stream moving. And maybe the earth's magnetic field will reverse. There are indeed risks that such things could happen during the next fifty years – but they probably won't.

iii) Diseases we shall just have to cope with

Aids has suddenly materialised, Lassa fever was hardly known until relatively recently and there is no doubt that diseases can migrate from one species to another. But sometimes help comes from unlikely quarters. In Britain it was grey rats that drove out plague-carrying brown rats and it has been found that if mosquitoes suck the blood of a person with Aids they have some capacity to generate antibodies to kill the Aids virus before they can infect someone else. Just imagine how much more difficult our problems might be if nature did not work in these ways.

Nonetheless something awful might hit us in the next fifty years, but my hunch is that medical science will be so rapid that such things can be overcome, though the poorer parts of the world may be badly affected.

iv) Other ideologies are unlikely to halt the extension of western type democracy

One of the things that has certainly been the case over the last two hundred years since the industrial revolution started is that most of the ideas that have swept the world, most of the inventions that have swept the world, have come out of relatively free societies where there has been a relatively open capacity for ideas to spread and old ideas have been challenged rather than regarded as perceived wisdom which go on from generation to generation. One of the potential risks is that that stops happening and one way or another the whole world turns into what Soviet Russia was like or perhaps even what it was like in Iraq when Saddam Hussein was there. I think this again is a very unlikely occurrence. It seems to me on the whole that the western world has got a very strong base in terms of its democracy and so on, and the rest of the world on balance is probably moving in that direction. As long as you've got a large area of the world, especially a rich area, like the developed West where ideas can be developed and challenged, new technology can be produced, where you've got the market economy operating and 'capitalist juices' in full operation, the chances of us not getting the sort of technological changes that will drive the standard of living up is pretty low.

Therefore, at least for the next fifty years, a sort of Western type of democracy that we've got is likely to be extended rather than reduced and therefore there won't be a massive turning back on progress.

Conclusion at an ERC dinner in 2050

So I conclude that the scenario that we can look forward to is in many ways a remarkably optimistic one. Potentially, there are things that could go wrong, but the chances of them going wrong in a major way seem to me to be fairly low. Meanwhile, we've got possibilities now for lifting the whole of humanity out of poverty as incomes rise in poor countries over that highly significant \$2,500 per head level which can be achieved if the developed world can open up trade opportunities.

So our grandchildren have probably got quite a comfortable future to look forward to and if we were able to come back in another fifty years to a future ERC dinner we would find them enjoying a nice dinner and a pleasant evening and living in quite a good and happy environment.

SOVEREIGNTY

By Brian Lewis

If you are arrested under a trumped-up charge within the jurisdiction of another nation, you will find very little can be done by your own country's embassy or diplomats to help you, even if you are entirely innocent. Nations under the present rules of *sovereignty* can do what they like with you, and often do. Other nations generally agree that – short of war – outside interference is not permitted whatever the injustices being perpetrated. Bad luck for you! But of course our own country may also hold some of your citizens or control some of your trade. Nations can retaliate and compete – so the balance is two way. But what exactly are the rules that govern relations between nations?

Nation States have always gone to war since time immemorial, often on false pretexts, for national honour, new territory or financial gain. There are doubts in the UK as to how Tony Blair was actually able legally to invade Iraq! Nation States, it is generally agreed by diplomats and governments, are allowed to arm themselves to the teeth, although recently possession of weapons of mass destruction has become a more dubious right, depending which nation makes the decision. Some nations are more equal than others. Nation States can treat their people as they wish, kill them or enslave them. This all seems to have something to do with what is meant by *Sovereignty*! But it is still an ill-defined and rather obscure idea, more related to matters deriving from the divine right of kings than to any logical modern democratic concept. Tony Blair was able to go to war with Iraq more on the theory that he was empowered by 'royal prerogative' rather than any public support.

Who or what do ambassadors represent? The nation? The government? Or the Politicians? How are they appointed? Certainly not by any democratic process. Diplomatic custom has grown up over centuries around trade and the threat of hostilities between nations, whereby wars had to be *declared*; whereby *preemptive strikes* were not permitted between gentlemen; whereby *assassination* was not carried out by honourable combatants; whereby communications between nations still took place without threat to a *herald's life*; whereby promises could be guaranteed by an *exchange of hostages*; and whereby ambassadors would be allowed to get back home safely at a time of war. In intercourse between nations, the idea of *sovereignty* is always present, but often standing in the way of justice for the individual. Heads of government still bristle at any suggestion of interference in their domestic affairs, and it is not always clear to the layman why this should be so. Today *sovereignty* is still recognized as a powerful restraint on how far any nation can go in acting against another state. It is still the best modern excuse of all for rejecting foreign interference, even if one actively butchers one's own people. Yet in the modern world, it is no longer clear whether governments and diplomats are really acting according to established ancient and well-understood rules. These rules today are certainly not spelt out sufficiently logically for the rest of us to understand. It is still very unclear where the dividing line lies between the exercise of sovereign rights by countries and the decision-making power of the United Nations. Diplomats seem to like this ambiguity! Or indeed whether presidents and prime ministers are subject to the same rules on crime and morality as the rest of us.

In spite of traveling to and living in Europe, South America, the Middle East and Asia for the last forty years, I have never given much attention to how Foreign Office ministers, diplomats, the international community and global financial entities interface and communicate with each other to reach equitable decisions! I did not seem to need them! I realise now that the world of diplomacy is a closed book to me!

From an outside perspective, it looks to be a world out there of protocol, machiavelli, cronies and nepotism, and very few established principles. To ensure success at home, top politicians often never leave the sanctuary of their own countries (or Tuscany!) to live abroad (and even more so today!). Since success comes from national politics, one cannot help wondering whether the great and good may not have a lot of cultural hang-ups when confronted with strange cultures and unfamiliar peoples – whatever they say about discrimination at home. Poised to act, do they not stand aghast when the rules of *sovereignty* are explained to them by their own diplomats?

From time to time, things go wrong in international affairs. Certainly the old international system is evidently incapable of offering many helpful remedies, except to supply weapons of war and impose tariffs. The ordinary people of the planet continued to fight each other and often starve – sometimes democratically, but equally under the stern hands of dictators, often supported by the West – all because of *sovereignty*.

These days international executives can go through a whole career without ever visiting their local embassy and may indeed understand very well what is happening locally. Diplomats were never much interested in the real world of ordinary people or in the business decisions of their citizens resident abroad. They live isolated (in safely guarded compounds) in an old world of protocol, intrigue, expediency and cocktail parties, at a level distanced from ordinary people. There were occasions when I wondered why the world was not a better place, because in the back-ways, alleys and factories of the capital cities that I frequented, people were unexpectedly kind and hospitable. Today even the humblest people have access to news of what is happening in the world. We need to take account of this momentous change. The job of an ambassador has been somewhat downgraded of late!

That multinational company which once employed me, invariably was far more efficient than any government, and gave assurances for my safety that were beyond the capacity of the local embassy.

I remember one weekend in South Korea being rung by the Dutch Consul asking for help in removing some drunken (and imprisoned) Dutch sailors from off a tanker in Busan, and in putting them on a flight to Tokyo. I asked why I as a foreigner should be involved. Ah, came the reply, the Dutch Embassy in Seoul needed permission from The Hague to act. It was unfortunately a weekend and there was no one available in the Hague to make a decision. Also the consul was not able to make any decision at all that involved so much money without permission. I contacted our office in Tokyo over the weekend, and within a few hours had the sailors on a flight out of South Korea.

This example perhaps explains why governments are invariably slow. It was a surprise for me to realise that I as an international executive had more power to make decisions and greater access to resources than a local embassy.

At other times, I had contact with international lending organizations and banks. I remember an employee of a global development bank moaning how many of his projects were going wrong. Long delays were taking place. Dams that should have been ready a year ago were delayed 5 years. I was surprised!

Surely all that was needed was to fly in a new management team and some good engineers to the country concerned, and take charge? He looked at me as if I were mad. How could I be so naïve. These projects were based on *sovereign* loans. The money was agreed and then handed over to *sovereign* governments. After that the Development Bank had no further control, except by vague threats about what might happen the next time round. It seemed strange to me that you could hand over millions of dollars of development money to an unreliable country, and then have no further control, except perhaps years later, much later, by high level political sanctions. I had paid little attention up to that time to what word 'sovereignty' really meant in practice and how profligate our masters were with our taxes.

Even where I live now, where the local government claims to be poor – or at least its people are – has international grants available up to 50% of the cost of many infrastructure projects as long as the local government puts up the other 50%. These loans are often refused for obscure reasons, and even if accepted, sometimes lapse because they are not taken up within the time-frame stipulated. Why would a poor country refuse such financial help? Acceptance would tend to compromise its *sovereignty* and local politicians might lose local control over the toiling masses. What can be done when people are evidently near starvation? Nothing – because in the international world of diplomacy, rules governing *sovereignty* apply. Better to be poor than not to be *sovereign?*

A few months ago, a North Korean ship was stopped by a Spanish warship on the high seas, apparently laden with sacks of cement for the Yemen. Under the main cargo, tucked away, carefully concealed, were scud missiles – possible the same type that were fired at me when I was in Riyadh in the Gulf War ten years ago. So, caught red-handed on the high seas with missiles! Surely it was clear what the Spanish and USA would now be bound to do. But not at all. Under international law regarding *sovereign* nations, there was quite clearly nothing wrong with such a transaction. If you look at the geographical position of the Yemen, you might even wonder against which country the Yemen is intending to use scud missiles? Saudi Arabia? The Sudan? Ethiopia? Perhaps I exaggerate, my personal objection was that somebody once fired scud missiles at me when I was in Riyadh. Scud missiles are not weapons of mass-destruction, but I might have died anyway!

Of course such trade is quite acceptable diplomatically between *sovereign* nations. Trade in weapons are the bread-and-butter of American, British, French and Russian international business. These countries vote at the UN with their trade in weapons in mind. I wonder if the man-in-the-street (as he dies) fully appreciates the fine distinction between one sort of weapon and another. A recent BBC program stated that 500,000 people a year die from small-arms fire. It will take a number of atomic bombs to reach such as annual figure.

We come then to this question of what does 'sovereignty' mean? The Iraqis and many others protest we are violating their sovereignty. Under present rules, that cannot be allowed and diplomats agree! Our ministers and diplomats recognize the use of the 'sovereignty' word as a very valid argument for another nation's independent action.

The whole problem of terrorism is that the terrorist does not recognize the age-old rules of *sovereignty*, whereby an ambassador could lie abroad to his heart's content knowing his life was safe – as *sovereign* protocol always demanded. The ordinary people have always been at risk, and over the centuries have suffered terrible indignities as armies advanced over their lands. But now the people at the top see themselves at risk – and even subject to international courts of law.

Today something has changed. The new rules on preemptive strikes and the new political activism of terrorism, no longer offer sanctuary to the politician, the diplomat and the global functionary. Nothing has changed for the ordinary people, but an earthquake has hit the great and the good. For the first time, they have become as much exposed to the vicissitudes of life as ordinary people. Try as it might, *sovereignty* is no longer a valid protection for the diplomat and politician. Perhaps that is all to the good – although my carrying an identity card in my view won't help much.

The rules have also changed regarding preemptive strikes. These were always regarded with horror by the civilized world. When Japan launched its strike against Pearl Harbour in Hawaii in 1941, this was by general agreement 'a day that would live in infamy'. Gentlemen did not take preemptive action in this way, and clearly the Japanese were not gentlemen.

In the year 2004, we appear to agree that preemptive action is allowed. But perhaps the terrorists, who attacked New York on 11th September 2001, with their twisted logic felt they too were taking preemptive action on behalf of Islam? This is an exceedingly dangerous doctrine that we – anyone – our enemies are entitled to take preemptive action if interests are threatened. How can this be defined in international law? Action now seems to be within the discretion of anyone who feels aggrieved, including the terrorists themselves.

We tamper with the time-honoured rules developed over thousands of years at our peril. These had and have a reason. We are violent people still, and rules of warfare exist for a purpose. We raise our hands in salute to show we carry no weapon. We declare war, but (these days only occasionally) let women and children get to safety before we fire. We don't take or kill hostages. We allow ambassadors to return home at the outbreak of war – to safeguard the lives of our own ambassadors. We – until quite recently – had a system of rules that governed international intercourse. It is a dangerous development to place pre-emption freely into the hands of the terrorist!

It would seem we have reached a watershed where the old rules have gone out of the window. Whatever *Sovereignty* has meant in the last 1000 years, we would be wise to be sure that we understand well what we are doing before we abolish it entirely. It might mean a return to the jungle – of the 'preemptive strike' and to the taking of hostages – where there are few or no rules. Where there are no rules, then we are all in peril. Do we seriously maintain that nations can take preemptive action at their own discretion in their own interests? Time-honoured rules had their reasons.

We need to define what is meant by the idea of *sovereignty* (or Royal prerogative) at a time when the nation state is less stable than it used to be, when the world is increasingly populated by an international middle class owing loyalty to no one, and when power is uncertainly shared between the capricious American Empire and the indecisive United Nations. The old rules served us well, but in some ways it is just and right that the politician and diplomat should now experience what the peasant has always suffered throughout the ages.

The old rules cannot be abolished to suit particular circumstances (such as Iraq and North Korea); then resuscitated when preemptive action is taken and justified by our enemies. But perhaps it is already too late. De facto new rules now apply and the modern freedom fighter and terrorist need pay little attention to the old idea of *'sovereignty'*.

The general public have never really understood the diplomatic usage of *sovereignty* to justify national objectives. *Sovereignty* sometimes seems to have no moral or ethical underpinning. The most terrible massacres and the most virulent diseases (Congo or Rwanda) take place within countries in which the general world community or the United Nations take not the slightest interest.

The next step on the long road to civilization must be to define quite clearly what is meant by *sovereignty*. Politicians and Statesmen find '*sovereignty*' a useful justification or excuse for the nasty decisions they have to make. It seems to have no underpinning from a democratic viewpoint. The rest of us might like to consider whether we can go on in a shrinking world using *sovereignty* in a 16th century way without being aware of what it really means. So far *sovereignty* has not yet meant *justice* for the ordinary people of the world. We have a long way to go before we can reach that goal of being really civilized, try as Amnesty International might.

A lawyer smiled when I said I was writing as essay on sovereignty! He was quite convinced that the ordinary citizen, even in so-called democratic states, had hardly any rights at all when a government takes action in the

international sphere. The Queen and the High Court of Parliament of England do not take kindly to being told that the hoi polloi wish to have a say in foreign affairs. They are cannon fodder still, just as in the Middle Ages.

LET RENEWABLES COMPETE

By Dan Lewis

Today's UK Renewable Energy market is anything but free. Riven with distortion and non-market aligned subsidy, powerful green lobbies have severely curtailed Britain's renewable potential. Lacking faith in competition they look to the European model of massive government subsidies and central planning, at the expense of local choice and price-lowering competition. It matters because all Britain's political parties are committed to producing 10% of our electricity from renewable resources – wind, solar, small hydro, biomass wave and tidal, by 2010. But can it be done?

It is a huge increase from just under 3%. Today, to put this in context, annually, the United Kingdom consumes on average some 35,000 Megawatts (MW) an hour equal to some 580 watts a person. Allowing for increasing consumption of 1% a year, the ability to meet peak demand in winter of up to 53,000 MW without blackouts, the target is approximately an *always available* 6,000 MW. So how do the different renewables compare?

Wind is the cheapest. Its true cost is hidden by subsidy, which in a level playing field it would not need. Although there have been many plausible aesthetic objections to windfarms, much can be done to change the framework of profit, ownership and planning to win local support. 10% of Britain's electricity from wind would cost £13 billion (18,000 MW capacity due to 30-35% load factor) and would require 36,000 acres of land. At sea, though, much less space is required due to higher windspeeds.

Energy crops – coppiced willow or miscanthus – grow quickly and are burnt to create heat and thus power turbines. But they are really the farmers' last refuge. To generate 10% of electricity would require between 3 and 10 million acres out of Britain's 60 million. This seems highly unlikely. However, existing poultry manure and landfill gas plants work well as the fuel is distributed over a small area, saving transport costs.

Hydroelectric dams work well, but almost all the best sites are now taken, mostly in Scotland. Refurbishment will be their best chance to

increase output, usually by 10%. Wave systems are still at the Research and Development stage, and will make no difference to 2010. A Severn tidal barrage would add huge capacity (8,600 MW) quite cheaply at \pounds 15 billion, but initially may have to run at a high cost to shorten the payback period. Yet while it has been on the drawing board since 1923, environmental objections have waxed and its prospects have waned. Probably the best chance is for expanding water power with offshore tidal turbines – 300 MW will be installed by 2010.

Solar is the clear loser so far. It currently costs 6 times more than wind and produces most of its electricity in summer when demand is low. For the UK, it has the lowest availability at 17% and the equipment is not made here. Solar power is a typical example of how the technologically feasible is assumed to be economically viable.

If the different renewables are allowed to compete, the losers in the UK will be solar and biomass. Let the numbers determine the energy debate. Government must drop costly bureaucratic grants to home and community generation plants. A system of neutral tax credit is the least interventionist pro-market solution. For Britain, cutting rather than raising taxes is the way to increase renewable capacity. Britain should also set a target date to end all energy subsidies. The future for Britain is more energy, not less. The right competitive framework will ensure it is clean as well.

Dan Lewis is author of "**Recharging The Nation**" – the challenge and cost of increasing renewable electricity generation, *published by the Economic Research Council*, www.ercouncil.org

THE EDWARD HOLLOWAY COLLECTION REVIEW

'A Treatise on Money' by John Maynard Keynes. Published by Macmillan 1930

At around 800 pages and in two volumes 'A Treatise on Money' must be the second largest political pamphlet ever written. Volume One 'The Pure Theory of Money' presents his intellectual claim to have mastered the subject, whilst Volume Two 'The Applied Theory of Money' reviews current monetary events, and then the whole is summed up in a simple plea for government action to lower interest rates. In today's world he would be called a Bank of England Monetary Committee 'dove'. One can see his problem. Nineteenth century policies on bank management, on government borrowing and on the Gold Standard needed modification but the political courage to do this required academic underpinning. The first World War had caused not only massive destruction but also massive disruption of previously established trade and investment flows around the world. Britain had lost markets and investments overseas and, through the concentration on traditional industries – textiles, coal mining, ship building, railways etc. – now needed to catch up in the newer industries such as chemicals, electrical engineering and motor cars. Until enough new investment in new workplaces was achieved, skilled men would be unemployed and nothing those workers could do in terms of offering themselves at lower wages, accepting re-training or moving elsewhere could cure this 'involuntary unemployment'.

Keynes used the term the 'natural rate' of interest to denote that interest rate which would allow investment and saving to equate and, he claimed, this rate during the nineteenth century had been really quite low, perhaps around 3%. The war years however, when governments needed to attract huge sums for bonds to pay for the war, had accustomed those with money to expect higher rates – 'market rates' which, during the 1920s had remained way above the 'natural rate' with the result that savings exceeded investment and Britain's exchange rates with the rest of the world were much too high. The solution which many saw as a 'vicious' attack on bondholding was to dramatically lower interest rates by the Bank of England lowering – perhaps to $\frac{1}{2}$ % – 'Bank Rate' and to back this up by government purchasing of bonds with new Bank of England subscription plus devaluation.

And so Volume One sets out the academic underpinning. He begins with a lengthy theory of money, endlessly (and sometimes annoyingly) subdividing the issues, illustrating his points and summarising the arguments in rather easy to understand equations. He sees money as debt 'created' by the banking system and sees the need for the total supply of new money to keep in step with increased real output – whilst along the way laboriously listing and exploring each kind of bank deposit and noting the likely 'time lag' effect between an increase in the money supply and its effect on economic activity and/or inflation.

In great detail we are taken through theories of price indexing, of velocities of circulation, of credit cycles and of 'international disequilibrium'. If anyone, after reading Volume One is unconvinced that Keynes is a master of the subject, has read and accounted for all the other contributory publications (such as Irving Fisher, Ludwig Mises, A.C.Pigou, David Ricardo, D.H. Robertson and Friedrich Hayek), and can thus speak with authority, then they must, as we might say today, have 'lost the plot'.

After re-reading Volume One however, I felt struck by the clarity of expression which is still today accessible to the intelligent layman and by the contents which include most of the main elements that still go to make up the study of macroeconomics. This book deserves even more recognition than the over-famous but much less understandable 'General Theory'. It looks dated today in regarding money as some kind of objective material to be understood like some other production item – rather than as tokens of debt coexisting with the world of production – and gold is still 'money' rather than just another item which can be bought with money. All the same, students today would be well advised to spend less time on the latest text books and much more on this original account.

'The Applied Theory of Money'

Volume Two ties theory into practice. How wonderful it is to remember the time when economists, economic historians and political economists could all talk to one another, understand each other and reach conclusions together. Keynes talks about Spanish Treasure, of War Booms, of the 'Gibson Paradox'. He describes the discussions between those who think that the creation of money is some kind of magic and those who pretend that it possesses algebraic relationships with stores of gold and reserves.

His way of explaining things is often amusing. At one point, in explaining how policy makers create volatility in credit cycles he draws an analogy with a medicine overdone through impatience over results. He says that this is like a family treating diarrhoea and constipation. At first they administer Bismuth and keep doing so without waiting for improvement, and then they treat the resulting constipation with castor oil and keep doing that until the opposite condition returns. 'Scientists will announce', he says 'that children are subject to a diarrhoea–constipation cycle, due, they will add, to the weather, or, failing that, to alterations of optimism and pessimism amongst the members of the family. If the time taken by the first dose to act is constant, they will discover that the cycle is a true one with a constant period. Perhaps they will suggest that the remedy is to be found in giving the child bismuth when it is constipated and castor-oil at the other extreme. But more probably the parents will divide into bismuth and caster oil parties, one of which, impressed by the horrors of diarrhoea, will renounce castor-oil, and the other, moved by the depression of constipation, will abjure bismuth. Thus it is not easy to keep to the middle path of continuous health.' (*page 223–4*)

At other times scorn is his weapon to cajole the cynic. Turning to movements in the equity and bond markets he says 'The ignorance of even the best informed investor about the more remote future is much greater than his knowledge, and he cannot but be influenced to a degree which would seem wildly disproportionate to anyone who really knew the future, by the little which he knows for certain, or almost for certain, about the recent past and the near future, and be forced to seek a clue mainly here to trends further ahead. But if this is true of the best informed, the vast majority of those who are concerned with the buying and selling of securities know almost nothing whatever about what they are doing. They do not possess even the rudiments of what is required for a valid judgment, and are prey of hopes and fears easily aroused by transient events and as easily dispelled.' (*pages 360–361*)

Keynes' conclusion; his policy advice, I have already mentioned – is to reduce bank deposit rates to a very low level 'say ¹/₂ per cent' (*page 386*) because otherwise 'our present regime of capitalistic individualism will assuredly be replaced by a far-reaching socialism' (*page 386*).

So what actually happened? As I understand it, interest rates were reduced somewhat, investment did pick up somewhat, housebuilding in the early thirties went into boom, thus helping the economy to move forward – a process that was then much later (around 1938–39) pushed further along through rearmament. Following the war we had a fairly large dose of Keynes' dreaded socialism the irony of which was that the Attlee Government was able to use the full authority of Keynes' advocacy of low interest rates to issue bonds at a very low interest rate cost for the very purpose of buying up the thus 'nationalised' industries. Lord Keynes' baronetcy was well deserved.

Of yes, and I forgot to mention the *largest* political pamphlet ever written. Keynes' 800 pages on this *Treatise on Money* advocating easy money for the 1930s is easily out-lengthened by that earlier work advocating free markets over corporatist-mercantalist government control, the 1,100 pages of Adam Smith's *The Wealth of Nations* published a century and a half earlier. But who has ever heard of Lord Smith?

J.B.

NEW MEMBERS

The Council, as always, needs new members so that it can continue to serve the purposes for which it was formed; meet its obligations to existing members; and extend the benefits of members to others.

Members may propose persons for membership at any time. The only requirement is that applicants should be sympathetic with the objects of the Council.

OBJECTS

- i) To promote education in the science of economics with particular reference to monetary practice.
- ii) To devote sympathetic and detailed study to presentations on monetary and economic subjects submitted by members and others, reporting thereon in the light of knowledge and experience.
- iii) To explore with other bodies the fields of monetary and economic thought in order progressively to secure a maximum of common ground for purposes of public enlightenment.
- iv) To take all necessary steps to increase the interest of the general public in the objects of the Council, by making known the results of study and research.
- v) To publish reports and other documents embodying the results of study and research.
- vi) To encourage the establishment by other countries of bodies having aims similar to those of the Council, and to collaborate with such bodies to the public advantage.
- vii) To do such other things as may be incidental or conducive to the attainment of the aforesaid objects.

APPLICATION FORM

To the Honorary Secretary Economic Research Council 7 St James's Square LONDON SW1Y 4JU Date

APPLICATION FOR MEMBERSHIP

I am/We are in sympathy with the objects of the Economic Research Council and hereby apply for membership.

This application is for (delete those non-applicable)	Individual membership (£25 per year) Corporate membership (£55 per year) Associate membership (£15 per year) Student membership (£10 per year) Educational Institutions (£40 per year)
NAME	
(If Corporate membership, give name of	f individual to whom correspondence should be addressed)
(if Corporate) ADDRESS	
PROFESSION OR BUSINESS .	
REMITTANCE HEREWITH	
SIGNATURE OF APPLICANT	
NAME OF PROPOSER (in block	k letters)
SIGNATURE OF PROPOSER .	