

Vinyl 2010 Essay Competition Submission Template

ID number: 313

Summary:

With oil and food price shocks followed swiftly by a global economic slowdown, the well-being of society is at certainly at risk. But, despite the pressures, the situation presents an opportunity to see change for the better. With volatile energy and food prices the incentives are clear to move towards a more efficient and less wasteful society. With action from the bottom up and the top down, we could take huge strides forward in new energy options and food usage. For a secure and prosperous future, we may not have a choice.

Essay:

If money makes the world go round then the Earth is certainly spinning that bit more slowly on its axis. 2008 saw oil prices hit \$133 a barrel (EIA, 2009), driving up food and energy prices and exacerbating, if not contributing directly to, the global economic crisis that followed (see Fig.1). Driven by the increasing cost of transport and fertilizers, the world's staple foods have also rocketed in price. Rice, for example, rose from an average of \$516 per metric ton in the first quarter of 2008 to \$900 by the second (IMF, 2009a).

While oil prices have now slumped on the back of the economic slowdown – the International Monetary Fund (IMF) forecasts a price of \$50 a barrel in 2009 (IMF, 2009b) – energy, food and transport costs remain high. In a global society that uses 986 barrels of oil and 92,653m³ of natural gas per second (Energy.EU, 2009), our continuing reliance on fossil fuels will put society at risk from future fluctuations in prices. The knock-on effects for energy food prices are massive and we must take steps to insulate society from future shocks.

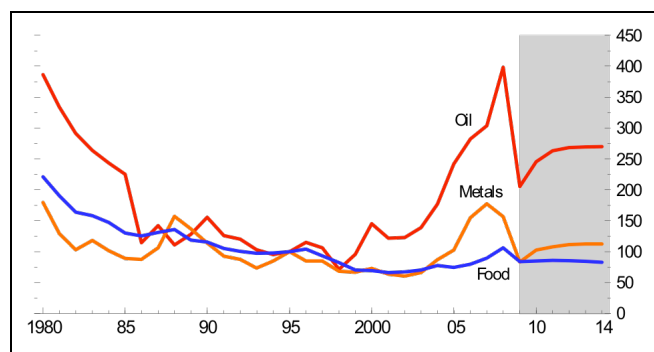


Figure 1 – Real commodity prices (1995 = 100)
Source: IMF (2009b)

The IMF forecasts that the world's economy will grow by just 0.5 percent in 2009 – the lowest growth rate since the Second World War (IMF, 2009b). So, if this is the worst economic performance since 1945, what can we learn from that post-war way of life? Faced with food shortages and rationing, a generation of people learnt that wasting food was not an option. Everything was used; gardens were cultivated in the push to 'Dig for

Victory!’ and little if anything was thrown away. Our current culture of buy, use, spend, consume, waste and borrow has a lot to learn from the cautious, resourceful, waste-nothing culture of my grandparents that has been long forgotten.

This is an option available to all, without needing to wait for government intervention – a true ‘grassroots’ approach. We can all learn how to cook, how to make the most of ingredients and how to think more about how we eat. In the process we may realise that home-cooked meals made from scratch are a lot cheaper and healthier than ready-meals and takeaways. People would not just be eating better, but engaging in their food and perhaps even learning how to grow fruit and vegetables. It could be the opportunity to educate and encourage a whole new generation of children to care about what goes onto their plate.

In contrast, the energy problem does require a top-down approach. Although individuals can – and must – contribute to the effort by saving energy in homes, at work and on the move, they cannot enact the diversification of energy sources that are needed to protect against future energy price shocks.

Despite the now-falling oil prices, there is no doubt that we are sleepwalking headfirst into further energy problems. The spike in oil prices caused massive uncertainty in most parts of the economy, while the unsettled nature of many of the oil exporting countries casts doubt on the reliability of future supplies. Natural gas too has been sharing the headlines as Russia cut off supplies to much of Eastern Europe this winter over a disagreement over prices (BBC, 2009). Where such insecurity has significant impacts on global food and energy prices and the well-being of society, the situation must be addressed *before* the next crisis. If oil prices were to rocket now, as they did in 2008, the economy is in no fit state to absorb the costs.

So what is the key to energy security? Again it is the mantra of ‘less waste’. A centralised power station where electricity is transmitted to end-user by high-voltage power lines is typically around 37 percent efficient (London First, 2008). Compare this to a decentralised combined heat and power (CHP) plant, which can be more than 80 percent efficient (ibid). Locating small CHP plants in towns and cities reduces transmission losses and allows waste heat to be used to heat homes rather than being dissipated in vast cooling towers.

This is exactly the path that Copenhagen chose on the back of the oil crises in the 1970s. Through local, low-carbon fuelled CHP plants, Copenhagen now has a ‘heat network’ that connects around 97 percent of the city’s buildings, dramatically reducing the amount of heat that is wasted in distribution (ibid). The benefits are obvious: maximising the energy taken from fuel not only saves money and resources, but also dramatically reduces carbon emissions from energy production. If London were to use this system for 25 percent of its energy supply to buildings, it would save 3.5 million tonnes of carbon dioxide by 2025 (ibid). The technology is available and commercially viable – it just needs to be put in place. Combined with investment in renewables and energy conservation measures, decentralised power could form the key to efficient and secure energy distribution.

While reducing reliance on fluctuating fossil fuel prices and inefficient energy generation can help insulate the cost to society, there is a much more significant benefit – that of reduced carbon emissions. The biggest threat to the well-being of society in the long-

term is climate change, and we need to be taking steps now to avoid consequences that our economy and society cannot cope with. As environmental degradation was a by-product of a consumer-driven society, environmental protection and enhancement could even be a by-product of a resource-efficient society. While that may be a sad state of affairs to some, saving the planet might never have been achieved so easily.

So, despite the global economic slowdown, there are options to improve society's well-being that are real and tangible, practical and practicable. As we emerge from economic recession in 18 months or so, we could be leaving behind a society of wasteful, consuming behaviour to one that eats better, wastes less, and is taking huge steps to tackle climate change. If that's not 'improved well-being' then I don't know what is.

[All prices are quoted in US dollars (USD)]

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