The Oil Drum: Australia & New Zealand
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

2009: Predictions for Australia

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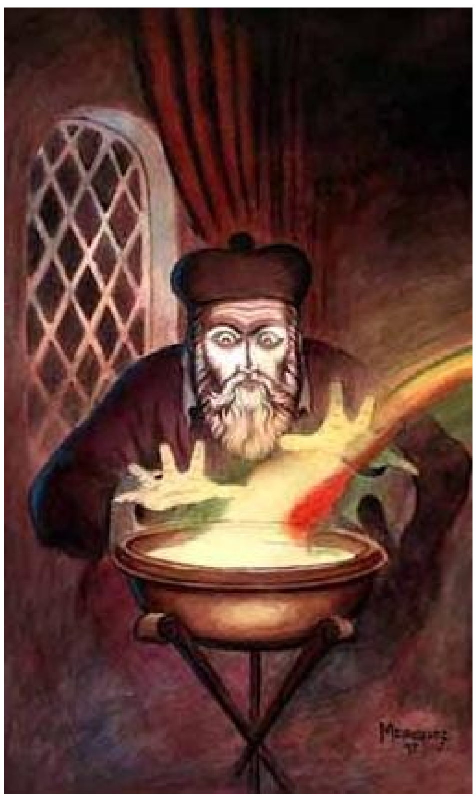
As we exit 2008 it seems like a worthwhile exercise to consider from an Australian perspective what happened and what might come next. My "predictions" for 2009 and beyond should be viewed as nothing more than "Food For Thought". When I review my past predictions (going back to early 2005) I find that the events of 2008 occurred earlier and were more pronounced than I predicted - So I don't recommend betting money on this crop of forecasts!

I will use these predictions to define my actions over the next 12 months, so your views are welcome!



Me at my crystal ball

The big picture:-
As I (and most of you) have said many times over recent years, the big picture problem is that the emerging economic downturn will complicate the response to Peak Oil and Climate Change. A crashing economy looks likely to force us down the easier (but ultimately disastrous) energy paths (CTL, GTL, tar sands, shale oil, etc), rather than the harder (but safe and renewable) energy paths. The projects associated with "easier" paths may be economically more defensible,

but they will lead to worsening CO_2 levels.

In summary: Short term we have an economic crisis to deal with, mid-term we have an energy crisis, and in the decades ahead we need to prepare ourselves (and our children) for a climate crisis.

The situation as we exit 2008:-

Financial situation.
In 2008 the Dow Jones industrial average dropped about 4,500 points, or around 34%, its biggest loss since 1931. Blue chips like Citigroup and Alcoa lost more than 65% of their value. The broader Standard & Poor's 500-stock index dropped 39.5%, almost exactly matching the decline in 1937. As many predicted (though 1 year ahead of my personal expected schedule), the US economy is in crisis. The Australian economy is generally following the US lead, but our resources are keeping us from suffering to the same extent.

So the economic crisis is emerging a little ahead of my expected schedule.

Oil.
As we know, oil prices hit frightening heights with terrifying rapidity. Then they collapsed at an even more alarming rate. This drop in price has led to a decrease in new exploration and development projects (http://www.canadianbusiness.com/managing/strategy/article.jsp?content=20...). The impacts of this will be felt in coming years.

The oil crisis emerged significantly ahead of my predicted schedule.

Climate.
There were numerous indications in 2008 that we were in trouble:
- An increased release of methane from both marine and permafrost sources was detected and confirmed in 2008, suggesting that we have crossed a boundary and may have triggered a positive feedback mechanism.
- The IEA released a study that suggests that it is now too late to avoid the first impacts of Climate Change. The IEA concluded that the lead time needed to develop and construct the required infrastructure is measured in decades. In that time the concentration of CO_2 in the atmosphere will exceed critical levels. Quite simply, the longer we delay, the more impacts we will feel.
- Acidification of the oceans was identified in several oceans in 2008. As a result the ability of oceans to act as a sink for CO_2 has probably slowed and may be reversing. This would represent another positive feedback mechanism.
- Several authorities now suggest that 350 ppm is the correct target for CO_2. This target has already been exceeded - we are at 385 ppm and climbing.

The Climate Change crisis has surprised many people by moving faster than even the worst-case predictions.

A watched planet never boils

My predictions for 2009 and beyond:-

(Note: The formal qualifications that equip me for economic predictions are...errrr.... negligible. Any economic forecasts that I make should be viewed within this context. Once again, these are personal views that may form some food for thought.)

Financial:
- The US needs to roll over a massive amount of short and long-term debt in the next 3 years, as well as selling a lot more debt to cover the bailouts and stimulus packages. People are currently buying this debt because it represents a “flight to safety” investment strategy. I suspect that in 2009 people will finally ask the question "If most of our economic problems are coming out of the US, why are we investing in the US?" If this occurs, the US will be unable to sell debt in the required quantities, and so may be forced to print money. Hence there may be a decline in the value of the US dollar. This may lead to the beginning of inflation in the US in late 2009 or later, depending on the timing and degree of printing that occurs (but less, or no inflation in Australia, since we will not be required to take these actions?).

- A continued drop in retail prices across the board for the first half of this year. This looks like being severe in the US and UK, but noticeable even in Australia. Interest rates will stay low for at least 1 year. No inflation in 2009. Essentially, we may be looking at a period of deflation, with possible inflation later.

- Any given debt burden is much harder to manage in a deflationary environment than in an inflationary environment. Deflation is thus a trigger for more business (and personal) failures. This danger is a stimulus that should encourage the government to foster inflation rather than deflation.

- The degree of inflation/deflation depends (among other factors) on two factors that the government has at least partial control over - the amount of money in circulation and the velocity of that money. (http://en.wikipedia.org/wiki/Money_supply) Both of these factors currently point to deflation. Looking at money in circulation we find that the wealth destruction that we have just seen has vastly reduced the quantity of money in circulation. As for the velocity of money – people who have money are shell-shocked after seeing so much wealth destroyed, so they are reluctant to spend money in this environment. (http://en.wikipedia.org/wiki/Velocity_of_money) As a result, the velocity of money is near zero. Governments will have to reverse both of these factors if they want to reverse deflation. I don’t think this can be done quickly. When the cycle is finally reversed there may well be a rebound into severe inflation.

- Energy and resource prices will rebound a little in 2009 or early 2010. This will occur as a result of a combination of factors:
1. A perceived recovery in the US due to Obama's spending on infrastructure
2. Increased demand due to increased military and infrastructure spending in other nations.
3. Actions by OPEC to reduce supply
4. Reduction in spending on exploration and production of oil due to lower oil prices leading to a perception of an upcoming supply shortage
5. Speculation based on the factors above.

However this rebound is likely to trigger more problems in vulnerable economies, leading to further demand destruction and thus moderating the increase in price. The price cycles are likely to be shorter in duration and lower in amplitude because the exposed economies are now very sensitive to negative inputs.

- The hope that Obama will embark on an infrastructure spending spree may help stabilize the US early in the year. Unfortunately, anything Obama does will be based on borrowed money - so he will be making the future worse to save the present. From Australia's point of view, this is not all bad - any infrastructure building that Obama does will require resources, which is good for Australia.

- The fact that the US is already heavily in debt, and intends to go further into debt, will reduce its economic resilience. At a time of declining incomes and emerging deflation, debt is very difficult to manage; as a result the US economy will be sensitive to any further negative changes. So when the price of oil and other resources bounces the US economy may find itself vulnerable. As noted above, I think that infrastructure spending may cause a modest bounce in resource prices. If infrastructure projects are started based on low resource costs and the resource costs subsequently rise, then the projects are in jeopardy - so the created jobs are in jeopardy and the confidence in the US economic recovery is undermined. In summary: The US does not have enough resilience to survive another round of resource price rises - yet the strategy for economic recovery requires actions that will cause resource prices to rise.

- The "leveraged buy-outs" that have occurred in Australia over the last few years, in conjunction with various other insane debt-based business practises, will lead to a lot of businesses and high-profile individuals defaulting on loans. This will lead to some high-profile business failures.

- Small businesses (particularly retailers) will be impacted by the decrease in discretionary spending as Australians cut back on credit card spending. There are already talks of deserted shopping malls in the US and UK (http://news.scotsman.com/scotland/Final-city-Woolies-store-closes.484614...), but the effect has been much milder in Australia.

- Increased unemployment in Australia will follow as a result of the 2 points above. At the risk of stating the obvious: If you wish to improve your chances of staying employed you may need to be looking at the non-discretionary areas (health, defence, government, food). I looked at these areas and concluded that I would need to take a very large pay cut to work in any of them, so I have not followed my own advice here. The counter-argument is that high-paid jobs allow you to prepare better.

- I suspect that, even here in Australia, house prices will continue to drop. In my view, this is not a good time to be buying a second ("lifeboat") property. Perhaps late in 2009 or early next year?

Energy and Resources.
The cutback in new oil exploration and production projects will have consequences in the years to come. Energy constraints are virtually inevitable over the next few years - The IEA predicts an "Energy Crunch" starting in 2010, and becoming more pronounced in 2011. These constraints will limit economic recovery and will probably be felt as economic constraints rather than energy constraints.

In summary we have a declining spiral: Diminishing returns lead to energy constraints. Energy constraints limit economic recovery, which limits the ability to address the energy constraints. This is something that the people at TOD (and elsewhere) have warned of for many years now.

If you take a short-term (and somewhat cynical) view, this is not necessarily all bad from an Australian viewpoint. If the rise in energy costs prompts a further collapse of the most vulnerable economies (and assuming that Australia is not one of the most vulnerable) then we will see a re-run of the current situation - energy costs down because demand destruction is running faster than resource declines. This might be good - if you aren't exposed to the most vulnerable economies. Unfortunately, this scenario would probably imply the continued collapse of the US economy (as one of the "most vulnerable") - with associated knock-on effects in Australia.

If this scenario plays out, we may not see high-priced fuel again for years. Looking at the list of "most vulnerable economies"...well, it is a list that almost exactly coincides with the list of "largest oil users", so moderated oil usage may be a self-controlling system. We could be in for an economic roller-coaster ride as resource price rises trigger further economic decline in vulnerable economies, thus creating demand destruction and reducing the price.

As long as Australia is not numbered in the "vulnerable economies", this scenario is slightly less ugly than some of the other possibilities. For the "vulnerable economies" the change will be sudden and dramatic as, one by one, they suffer further economic setbacks. We do not live in an economic vacuum, so this won't be fun for us either.

The other big factor that will be felt in the energy and resources sector is the "Best First" factor. The highest quality resources were extracted first. We are left with lower-quality resources. We can still extract resources from the ground, but they are in lower concentrations and so take more energy. But the energy resources (oil, gas, coal) are also of a lower quality, and so require more resources (steel, concrete, etc) to produce....

Mineral resources require increasing quantities of energy, but energy extraction requires increasing quantities of minerals. Another downwards spiral.

We are entering a time of diminishing returns. In the future, the highest-quality resources will probably be found by salvaging deserted shopping malls.

Climate.
Plans for the future need to consider the rapidity with which this problem is emerging. It has emerged faster than even worst-case predictions.

Climate Change defines my long-term goals. Given the effects of Climate Change in conjunction with resource constraints, it may not be easy to move my family and get re-established in future decades, so the choices I make now need to be consistent with where I want to be, and where I think my children might have the best future. I would like my children to be physically located in a good area, and provided with the skills, resources and mind-set to cope with the challenges of climate change.

The key word there is "change". We are facing a time of change, so they may need to be equipped to change the plan that I am developing now....this will require resources and skills that I need to define and provide.

The proposed "Kids Kit" - should cover all their needs?

Questions/Conclusions:-
- I was born in Queensland, but currently work in Victoria. Do I "go home", or stay in Victoria? Due to climate change issues, long term prospects for Victoria (or Tasmania) could be better than areas further north (which could get uncomfortably hot). However rain further north is likely to be better than in Victoria. Hence, if I settle in Victoria it needs to be close the coast and/or a large

river. Lovelock predicts a run-away positive-feedback scenario, with a temperature rise so high that we need to look to the poles to find benign temperatures. This is an extreme view, but needs to be considered as a risk. If Lovelock is right, then within my children's time even Victoria may not be far enough south. Lovelock and others suggest that (in a worst-case scenario) Antarctica may be a long-term survival option (http://www.rushprnews.com/2008/10/13/climate-study-forecasts-polar-citie...). I am probably going to stick with Victoria, but provide resources and skills that ensure that my children can relocate if required.

- Employment in a non-discretionary area (health, defence, government or food production) might be wise. Unfortunately, this may lead to a pay cut, which may limit my ability to provide resources and skills and thus not be compatible with the goal above. If I get offered the "Perfect Job", but it is in Queensland, I will probably accept. Money trumps location because money creates options. Accepting a bucket of money for a job that may die in a year or two may be a better option than accepting a lower-paid job that does not provide spare cash for preparations..... Hmmmm....I seem to be arguing this one round in circles.

- If the situation gets worse, the definition of "non-discretionary employment" may change. (The absolute worst case is that non-discretionary employment is defined as either "hunter" or "gatherer".) Regardless of what type of employment I decide on, I need to ensure that both I and my children have access to alternate non-discretionary employment (ie the ability to produce essential goods or provide an essential service). I have discussed previously the value of sailing - as it provides multiple different options (the ability to relocate if things get bad, the ability to offer transport as a service, and the ability to fish). Many of these options could be considered alternate non-discretionary employment.

Me at the helm of my next boat

- Given the "diminishing returns" situation discussed above, the ability to fabricate items from the materials at hand is a skill that is likely to be increasingly valued.

- There are two scenarios to examine: fast decline and slow decline. If the "vulnerable economies" go down slowly, one at a time, we have a fairly benign slow decline as long as we are outside of the vulnerable economies. However if Australia is a vulnerable economy, or there is a war that impacts Australia, or a serious outbreak of disease, or anything else that breaks the currently brittle situation, then a rapid decline is possible.

The Proposed Plan:-

The proposed implementation

There are two possibilities, based on the slow or fast possibilities.

Scenario 1. A slow decline overseas - no collapse for Australia.
Plan:
- Find a job in a non-discretionary area of employment. Accept the pay cut. The physical location should be near an ocean or large river, ideally in Melbourne, Victoria (I have a lot invested in our current house) - but for the right money I will go anywhere.
- Buy a small boat (probably a trailer-sailor, as my income might not stretch to anything more). Improve my sailing skills and teach my children.
- Invest time in other skills (ranging from welding to shooting)
- Get the necessary equipment to learn those skills (ranging from lathes to shotguns). This equipment needs to be tough enough to last for generations - but the pay cut will limit what I can buy. Take advantage of retail price decreases over the next 12 months - save money and start buying in 3+ months.

Scenario 2. A fast decline leading to economic collapse in Australia, with a timeframe of as little as 2-3 years.
- Find the highest paying job - don't worry if it is non-discretionary.
- Buy (as above, but with more money and less time).

So which way do I go?

Any thoughts?