

and volatility will deviate significantly, or for long periods, from the real long term averages of the past.

Still if oil prices rise as much as Piers suggests should New Zealand, and New Zealand forestry in particular, really worry? If Piers is right and oil is going to cost US\$100 a barrel and petrol \$5 a litre I would like to suggest the NZ forest industry will be creaming it. All those trees currently unloved and unwanted by the pulp & paper and MDF industries can, and will be, turned into bio-petrol. At that price a lot of sawlogs will also go exactly the same

way too. An untaxed petrol price of less than \$2 per litre is about all that is required to make a forest based liquid bio-fuels scheme viable, and that viability includes paying a reasonable price to those growing the trees for the fuel industry! At \$3 a litre the NZ forest industry would be busily converting dairy blocks back to forest and at a price of \$5 per litre the country will clearly have joined, and become a leading member of, OPEC.

Gerard Horgan

A forester bets on the future price of oil

Sir

I enjoyed reading Piers Maclaren's thought provoking editorial regarding oil prices in the May issue. It brought to mind a couple of points I would like to share. First, I find my colleagues in the field of Economics can be divided into three groups: (1) those who do not predict the future; (2) those who predict the future but are not willing to make any bets; and (3) those who are confident about their forecasts and are willing to bet on the outcome. Although those in the third group appear to be limited in number, foresters can sometimes profit from some in this group. For example, I made a bet with Julian Simon (a professor at the University of Maryland) on the future price of wood. Although he knew the price of wood had been increasing since 1900, Simon was willing to bet money that the price of wood in South Alabama would decline over a five-year period. In 1997, he sent me a check for \$1,000. Some readers probably know that Julian Simon wrote several books and in one chapter entitled "When Will We Run Out of Oil? NEVER!" he wrote about "The non-finiteness of oil." Simon believed the price of energy would always trend downward (with a number of price spikes along the way).

Second, although I am neither a geologist nor an economist, I am willing to bet on the future price of oil. Over six years ago I read an article entitled "The next shock?" in "The Economist" of March 4 1999 (for more see www.economist.com/displaystory.cfm?story_id=188181). At that time the price of a barrel of oil was US\$10 and a historical graph was used to support the claim that "Judging by the oil market in the pre-OPEC era, a "normal" market price might now be in the \$5-10 range" and "...may be heading for \$5." This prediction prompted me to find out how many economists were willing to bet the price of oil will continue to decline. Therefore, I wrote a letter to "The Economist" (March 27, 1999 issue, page 6) and made a bet that by the year 2010, the price of a barrel of oil would be greater than US\$12 a barrel (in 1999 dollars). I was willing to bet US\$1,000 that the price of this non-renewable resource would increase by at least 20% due to factors related to supply and population growth. As it turned out, no economist took me up on my bet. Perhaps few betting economists in 1999 really believed the words that were written in "The Economist" article. Or then again, perhaps only a few economists (like Julian Simon) are willing to make bets on their predictions of falling

commodity prices (who knows which is correct?).

Perhaps many economic forecasters are in the second group because they want to protect their reputations. They may realise the variability associated with their projection is too high to risk making a bet. In my area of research, I can supply a 95% confidence interval for an observed mean but when someone predicts the price of oil will fall to a specified dollar amount, no confidence interval is provided. If the 95% confidence interval is typically large (say \pm US\$50 a barrel), then no wonder they are reluctant to make a bet. The interval may be so large that it includes a rise in price! To illustrate this point, 18 months after "The Economist" predicted a barrel might reach the US\$5 mark, they placed an image of an empty European petrol gauge on the cover (September 16, 2000 issue).

Fortunately, I was eventually able to find one economist who was confident enough to make a 10-year bet with me on the price of oil. I bet the price on January 4, 2010 will be greater than US\$25 a barrel (in year 2000 dollars). If the uninflated price is greater than US\$50 a barrel, then Zagros Madjd-Sadjadi will send me a check for US\$1,000 (for details see www.sfnmc.auburn.edu/sfnmc/web/oilbet.html). If Piers or any reader knows of another economist who is willing to bet that a barrel of oil will be less than US\$25 in 2010, please send me their name. Unfortunately, I expect the number of economists in this group is now smaller than it was in 2000.

It is too soon to tell who will win our bet, but the trend is going in my favour. Perhaps I will again profit from someone in the betting group of economists. However, there is the possibility that I might lose if the Russian-Ukrainian theory of deep, abiotic petroleum origin (see www.enviroliteracy.org/article.php/1130.html) proves to be correct. If geologists soon discover inexpensive ways to tap into vast supplies of oil hidden deep in the earth's crust, then someday a barrel of oil might return to 1999 prices.

In summary, I enjoy discussing the future with colleagues and speculating about what challenges humans might have in 2020. However, talk is cheap and only a few are willing to stake their reputation on a forecast that might have a 50% chance of being wrong. This reluctance is associated with both cornucopians and doomsayers alike. When either loses a bet they will keep hold of their beliefs and might say..."well it hasn't happened yet but I have faith that it will happen at some point in the future."

David South