

Oil and the Real Economy: Interview with Andrew Oswald

March 17, 2000

Question

You believe that the economy is about to enter a period of slow-down and possibly sharp recession? Why?

Prof Oswald

Because that is what modern history and formal statistical analysis tell us. We saw this most notably in 1974, 1979, and 1990. On each occasion, an oil price spike was followed by recession in the world economy.

There was also highly innovative earlier research by an economist called James Hamilton, now at San Diego, who looked at US economic fluctuations in the first few decades after the war.

Après l'huile, le deluge. We have been there before. I expect we'll be there again.

The theoretical case makes sense too, of course. Oil is an important input. Most especially, its price influences the prices of other energy sources, and so, in turn, determines lots of other influential prices in the economy. Employment and output respond.

Q:

So your view is that this effect works through oil price rises being inflationary?

Prof O:

No, I don't. Not principally.

In doing economics I actually don't find it useful to think a lot about the nominal side of the economy; nominal things tend to look after themselves.

It is best in economics to concentrate on real variables. As real energy prices increase, firms' costs rise. Hence those firms start to cut back employment and output. Firms start to make losses. This all cumulates, because firms sell to each other in complicated networks of intermediate transactions, and of course through their profits pay out cash to workers.

Hence, to get back to equilibrium after an energy price rise, something has to give. That normally has to be the price of labour. In other words, a rise in the real price of oil has to be accommodated by a fall in the real wage. When the oil sheikhs get more of the world's money, someone has to end up with less.

But most commentators say that oil price rises are inflationary, so that governments have to cut back on demand, and that that is how a slowdown happens after oil price shocks.

I don't see it that way. By and large in economics, government policies probably do not affect the economy very much, I think. My hunch is that politicians overestimate their importance and are buffeted by forces out of their control. The idea that restrictive monetary policy caused the early 90s recession, for example, is probably wrong. The notion that somehow shrewd government actions by nations around the world created the late 1990s boom is equally incorrect -- another illusion of power. In these cases, energy prices did most of the job -- first in leading to a slump and then, after they collapsed, in stimulating boom.

You have predicted that UK unemployment will turn up in the summer. Is the world economy slowing yet, do you think?

Difficult to be sure, but yes I suspect it is. We have certainly had a few weak numbers in the last couple of weeks. And the UK unemployment figures just rose a few days ago.

I thought unemployment fell a few thousand this week.

That was the claimant count. Correctly measured, using something called the ILO numbers, unemployment actually rose quite noticeably. It is a bit early to be sure, of course. It is likely that the statistics will bobble around for a while as they run along the bottom of the trough. But I see no particular reason to revise the forecast of slowdown in 2000 that I gave in the FT in the early autumn of last year after oil prices had doubled.

Some journalists have begun to write that a slowdown could be caused by high exchange rates or the recent interest rate rises by central banks.

I haven't seen many journalists saying that, but will take your word for it. However, you are probably right that if an economic slowdown happens, various commentators will start to be wise after the event, saying they had expected it, or that it is due to interest rate movements, and so on.

Even so, it is straightforward to see that those arguments are not going to wash very well. For one thing, interest rates have not been hiked much or for very long. Even in the US, Greenspan has been lifting rates for less than a year, and we know from formal statistical work that firms respond with a much longer lag than that. Interest rate effects take years to be large. In the UK, a rise in unemployment in the next few months obviously won't be explicable by interest rate changes. Again those are too recent.

What about the high exchange rate?

Well, in the last week or two, we have seen some weakness in industrial output numbers from the UK, US and Germany. That seems to fit my oil price story pretty nicely, though it is too early yet to say anything definite. It cannot be explained by all these countries having high exchange rates. Plus my argument predicts that all the nations of the world will begin to slow shortly. By definition, every country cannot have a high exchange rate together: the exchange rate is just a ratio of currencies.

By the way, I advise my students never to make forecasts, especially about the future [laughs].

Let's get this straight. Are you saying that real energy prices are really all that matters in the world economy?

No. Of course I would not want to go that far. I'd put it more this way: most economic outcomes we see in the world are not produced by politicians, I'm afraid, even though they may think they can bid the tides to do what they wish. Real forces – tastes, technology, energy and other input prices – are what matter. Energy prices are just unusually volatile and unusually influential real forces.

But surely it is right to say that a modern economy is much more fuel-efficient than it was? The ratio of oil to GDP is lower than it used to be. This is what your critics say, anyway.

Well, there is clearly something to that. But it is probably more wrong than right, I think.

First of all, we should be looking at energy itself rather than oil narrowly. The price of oil has a major impact on the prices of other energy sources. We know these prices tend to move together through the years -- even though the other energy prices look like slightly smoothed or 'damped' versions of the time path of oil prices.

Another point to be aware of is that the improvement in energy efficiency is not terribly large over even a couple of decades. It is fractionally more than 1% a year. So the UK economy, for instance, uses about 20-25% less energy per unit of GDP now than it did in 1980.

Hence we are going to be all right now, surely.

No, I am afraid not, even though that is a useful gain in efficiency. First, we are talking about such big movements, -- say a doubling or tripling or even more of petroleum prices -- that a 25% alteration in energy-efficiency changes only the small picture not the big one.

Think of tennis.

Imagine you have to play Pete Sampras at singles. It is true that you would sooner play him when he is 50 years old than when he is 25, because it will be easier for you to cope, but it is not going to make any real difference. He is still going to annihilate you [laughs].

You believe the current trebling of oil prices will annihilate the western economies?

That is putting it too strongly, but the spirit of what you say is right.

Also, this argument, so common among journalists at the moment, that we use less oil relative to GDP, omits to mention something -- that that is true of all inputs. We use less labour per unit of GDP. We also use fewer machines. Probably less nickel and palladium and copper and so on too, though I'd have to check the numbers.

This is just the definition of economic growth. In other words more productivity through the years: higher output coming out of a given stock of inputs. It does not make sense to see this process, which has been going on for hundreds of years, as magically reducing the intrinsic volatility of an economy to all shocks.

Finally, because we are so much richer than we used to be, the idea that energy to GDP ratios are smaller does not help us as much as you would think. We aren't consuming the bundles of goods that our parents did. We consume bigger bundles. That, actually, is why the advanced countries do not use less energy per head now.

Many say that you are too gloomy. They point out that even at the current \$30 a barrel, the real price is still much less than in the early 1980s.

Quite right. However, we are passing through the strongest boom in the world economy for many years. Our problem is that we are coming from here not somewhere hypothetical where there is a gentle boom.

If you are doing 120 miles per hour on a German motorway, and shove your foot on the brake to drop to 70, it will feel like pretty unpleasant deceleration -- even though 70 is still a pretty respectable speed. That's our problem in the economy now. From here, even a modest recession will feel bad.

Very well. What if oil prices collapsed later this month, say after the oil producers' meeting?

Obviously that would help in the long run. Unfortunately I am not sure it would make much difference for a while. The lags from energy prices, and most other things for that matter, are long. The formal statistical work suggests about 18 months is how long it takes for an oil price rise to begin to feed through noticeably to the real side of the economy. That has yet to pass through the world's economic numbers, because December 1998 was the low point for the cost of petroleum. My own view is that some form of slowdown or recession is now inevitable. How long that lasts will depend on how quickly the oil price falls back.

Do you know what the oil producers will do at their meeting?

Sorry, no. You would have to ask a political scientist. I'm just an economic analyst.

Let's go back to this question of how much oil we use now. Everyone argues that heavy industry has gone and that software companies, and so on, don't use any oil to speak of.

True. People do say that. It is a common mistake -- really caused by the fact that a lot of economists and journalists argue from instinct rather than the data.

The fact of the matter is that in a country like Britain it is the Transport sector that uses more energy than any other (most of it oil, by the way). Transport accounts for virtually as much energy consumption as Services and Industry combined. Few people appear to know this.

This argument that you see in all the newspapers at the moment, that software is replacing shipbuilding and so on, is largely a red herring. While true, it misses the real point. Transport has grown so much that it swamps the changing efficiency from call centres and fast food taking over from car plants and ship-building.

As I keep reminding any journalist willing to listen, forget software versus steel ingots. The new economy runs on petrol and aviation fuel.

[More about Andrew Oswald's research can be found on his Warwick web site or web-page www.oswald.co.uk]