

Headed for a lower standard of living?

The amount of oil that is extracted from the ground each year has been close to flat since 2005, regardless of what has happened to price. Since world population has been growing, this means less and less is available for each person. We use oil in many important ways, including growing food, manufacturing and transporting goods, and in some parts of the world, heating homes. There is a clear tie of oil with standard of living. If we have less oil, the tendency is for people's standard of living to drop.

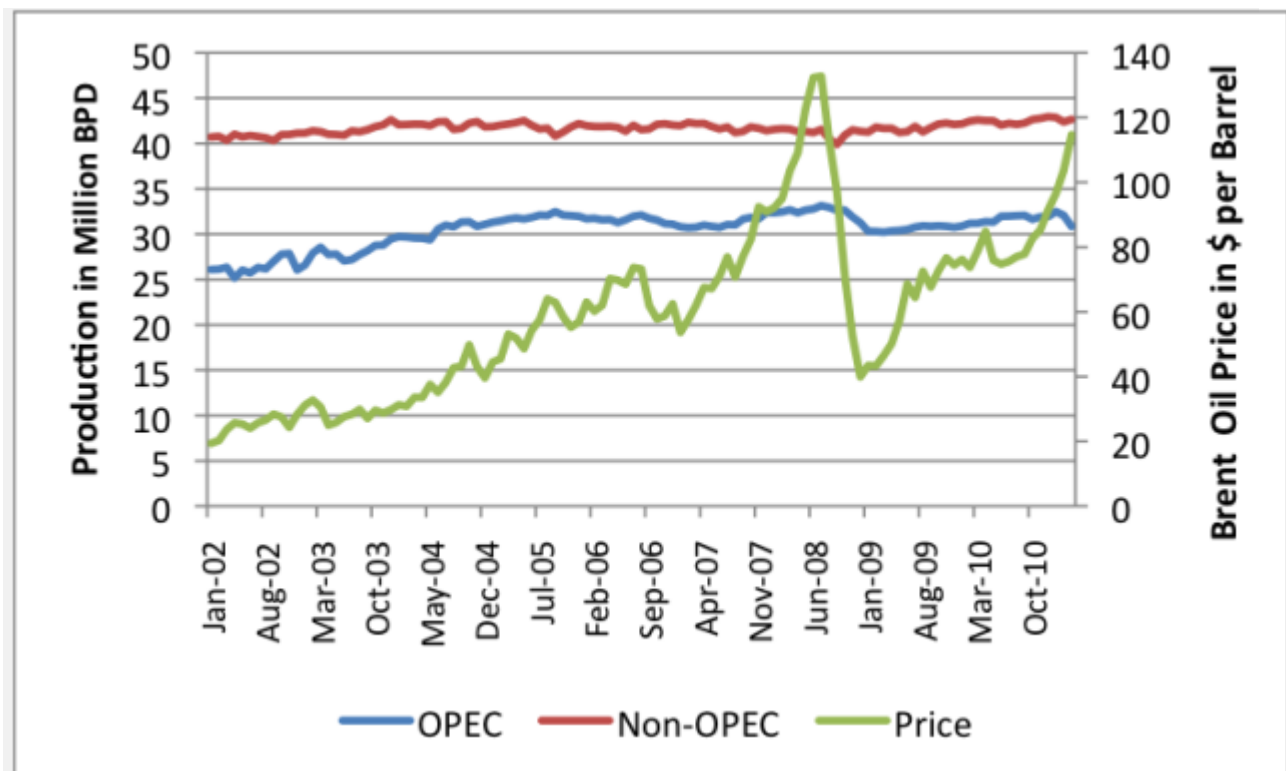


Figure 1. OPEC and Non-OPEC Oil Production, Compared to Oil Price. (Production is Crude and Condensate from EIA.)

The “natural” approach for fixing this problem is recession and debt defaults. With limited oil supply, oil prices rise. As oil prices rise, the higher prices leave less funding for everything else, because oil is important for many necessities—food and commuting expenses particularly. A person who pays more for food and commuting expenses will cut back on discretionary spending. This leads to layoffs in market segments affected by cutbacks in discretionary spending—especially construction of new homes, building of cars, restaurant spending, and donations to charitable organizations. Those laid off

tend to default on loans. Others default as well, especially those who were living “at the edge,” before oil prices rose.

The government tries to fix the problem by “stimulus,” and temporarily “fixes” the situation. This temporarily hides the situation in the governmental sector. What happens, though, is that the government finds itself with increasing debt levels because of its stimulus efforts, and inadequate taxes, because so many have been laid off work, and are not contributing to the tax base.

All of this leads to governmental debt problems, including the United States’ problems with debt limits, and the problems many European countries are having with debt.

How does all of this get fixed? Basically, what the natural system does is push us towards a lower standard of living. This is very uncomfortable. If we need to spend more on food and required energy supplies (as for commuting), we have less to spend on other things. People who are unemployed end up moving in with friends or relatives with jobs. Young adults live with their parents longer. Most of us cut back on discretionary spending.

There are a few ways we can theoretically solve our problem:

1. All of the world could cut back on their standard of living, and reduce their demand for oil products this way. It is hard to see this happening voluntarily. If oil supply should actually decline in the future, multiple cuts in standard of living will be needed.
2. Some parts of the world could cut back on their standard of living, and let the rest of the world live better. Government leaders may push for this, but it is hard to see the population of countries voluntarily accepting this result.
3. Cut back on some parts of the economy that are not critical, so as to try to save the standard of living with respect to the rest of the economy. One that comes to mind is military spending. Another that is often targeted is personal auto use, but if more efficient cars are sold, this change phases in slowly, so is not very effective in the short term. If only few countries cut back, the result is similar to (2) above, however, with the slightly lower oil prices because of the cutbacks benefitting those who choose not to cut back.
4. Ramp up alternative energy supplies to try to offset the shortfall. This approach has been most successful in China and India, where coal supplies have been ramped up greatly, but with negative environmental consequences. When alternative forms of

energy are expensive (most energy sources that need subsidies), it is doubtful that the economy benefits at all—the result is just more recession and debt defaults.

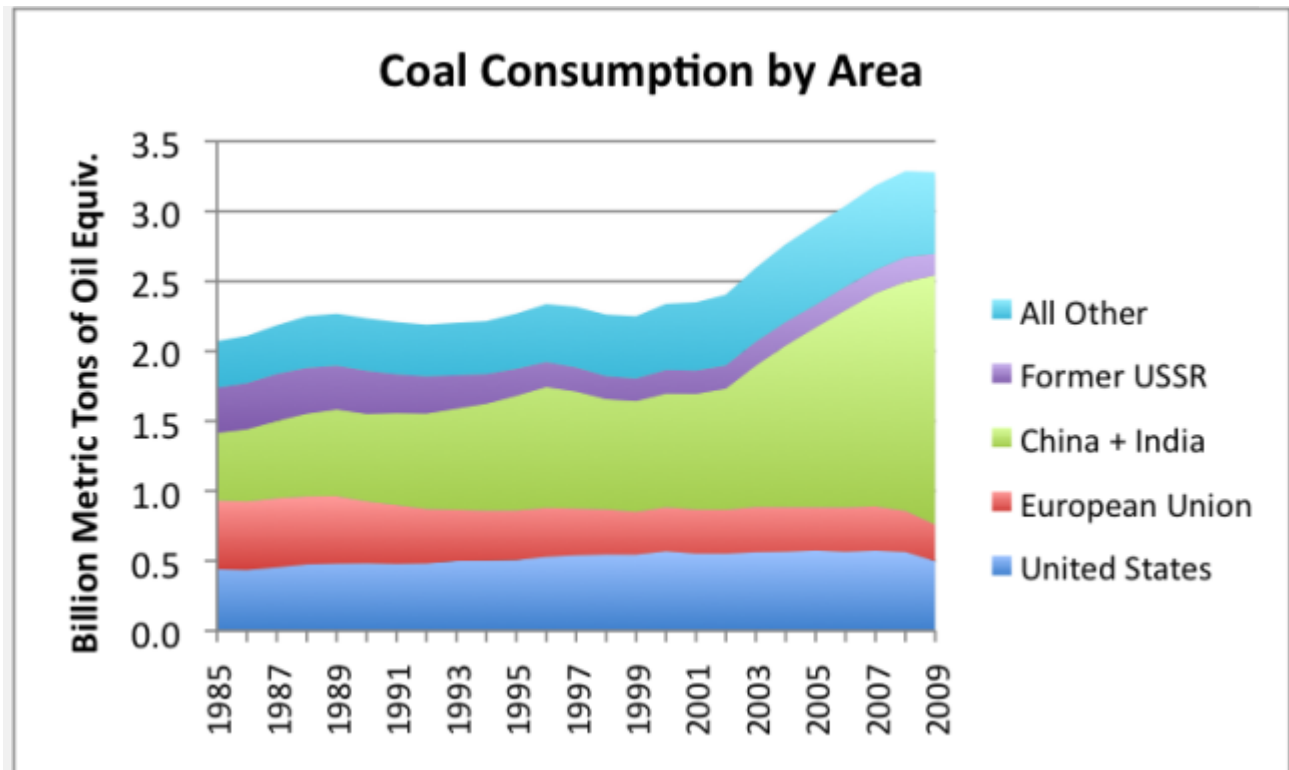


Figure 2. World coal consumption by area, based on BP data.

5. Drill for more oil in the US. This doesn't do very much, very quickly, unfortunately, because of long lead times, and because the most promising areas have already been drilled.

6. Start fighting with each other over the resources that are available, so that declining standard of living is less of an issue for the "winner." Wars are likely to use up a lot of resources, and don't really solve the underlying problem.

7. Encourage limited family sizes (one child per family (?)), so that resources will stretch better in the future. It is hard to get agreement on this, however, and the change is very slow to have an effect on total population.

It is hard to see that any of these approaches will lead to very satisfactory outcomes, in short enough time frames. Ultimately, we are all likely to find ourselves with lower standards of living. This is something governments find it very difficult to talk about

and plan for. Perhaps if we could start facing up to the real issues we are dealing with, it would be easier to find mitigations for our problems.

Source: <http://ourfiniteworld.com/2011/07/20/headed-for-a-lower-standard-of-living/>