

Twelve Reasons Why Globalization is a Huge Problem

Posted by Gail the Actuary on March 15, 2013 - 5:52pm

Globalization seems to be looked on as an unmitigated "good" by economists. Unfortunately, economists seem to be guided by their badly flawed models; they miss real-world problems. In particular, they miss the point that the world is finite. We don't have infinite resources, or unlimited ability to handle excess pollution. So we are setting up a "solution" that is at best temporary.

Economists also tend to look at results too narrowly—from the point of view of a business that can expand, or a worker who has plenty of money, even though these users are not typical. In real life, the business are facing increased competition, and the worker may be laid off because of greater competition.

The following is a list of reasons why globalization is not living up to what was promised, and is, in fact, a very major problem.

1. Globalization uses up finite resources more quickly. As an example, China joined the world trade organization in December 2001. In 2002, its coal use began rising rapidly (Figure 1, below).

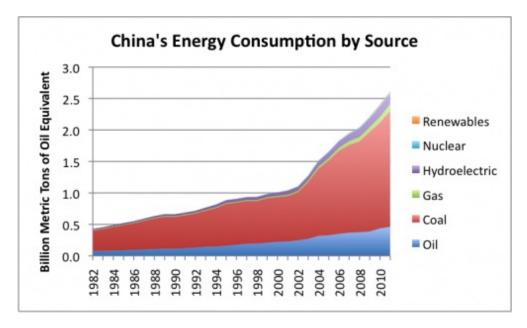


Figure 1. China's energy consumption by source, based on BP's Statistical Review of World Energy data.

In fact, there is also a huge increase in world coal consumption (Figure 2, below). India's consumption is increasing as well, but from a smaller base.

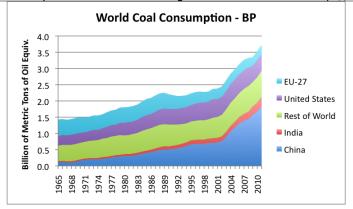


Figure 2. World coal consumption based on BP's 2012 Statistical Review of World Energy

2. Globalization increases world carbon dioxide emissions. If the world burns its coal more quickly, and does not cut back on other fossil fuel use, carbon dioxide emissions increase. Figure 3 shows how carbon dioxide emissions have increased, relative to what might have been expected, based on the trend line for the years prior to when the Kyoto protocol was adopted in 1997.

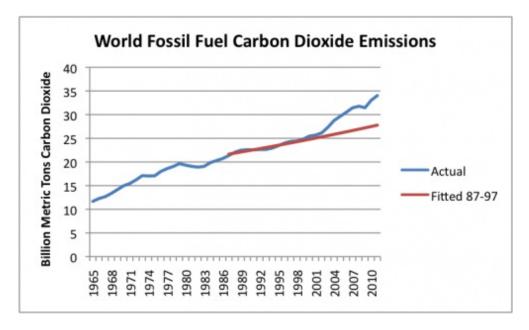


Figure 3. Actual world carbon dioxide emissions from fossil fuels, as shown in BP's 2012 Statistical Review of World Energy. Fitted line is expected trend in emissions, based on actual trend in emissions from 1987-1997, equal to about 1.0% per year.

- **3.** Globalization makes it virtually impossible for regulators in one country to foresee the worldwide implications of their actions. Actions which would seem to reduce emissions for an individual country may indirectly encourage world trade, ramp up manufacturing in coal-producing areas, and increase emissions over all. See my post <u>Climate Change: Why Standard Fixes Don't Work</u>.
- 4. Globalization acts to increase world oil prices.

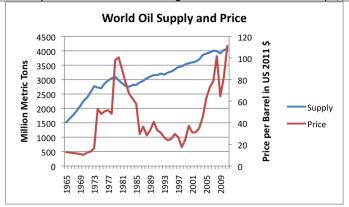


Figure 4. World oil supply and price, both based on BP's 2012 Statistical Review of World Energy data. Updates to 2012\$ added based on EIA price and supply data and BLS CPI urban.

The world has undergone two sets of oil price spikes. The first one, in the 1973 to 1983 period, occurred after US oil supply began to decline in 1970 (Figure 4, above and Figure 5 below).

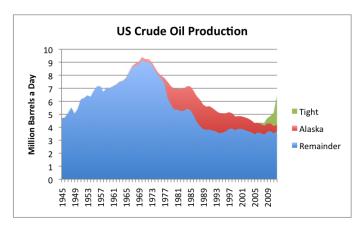


Figure 5. US crude oil production, based on EIA data. 2012 data estimated based on partial year data. Tight oil split is author's estimate based on state distribution of oil supply increases.

After 1983, it was possible to bring oil prices back to the \$30 to \$40 barrel range (in 2012\$), compared to the \$20 barrel price (in 2012\$) available prior to 1970. This was partly done partly by ramping up oil production in the North Sea, Alaska and Mexico (sources which were already known), and partly by reducing consumption. The reduction in consumption was accomplished by cutting back oil use for electricity, and by encouraging the use of more fuel-efficient cars.

Now, since 2005, we have high oil prices back, but we have a much worse problem. The reason the problem is worse now is partly because oil supply is not growing very much, due to limits we are reaching, and partly because demand is exploding due to globalization.

If we look at world oil supply, it is virtually flat. The United States and Canada together provide the slight increase in world oil supply that has occurred since 2005. Otherwise, supply has been flat since 2005 (Figure 6, below). What looks like a huge increase in US oil production in 2012 in Figure 5 looks much less impressive, when viewed in the context of world oil production in Figure 6.

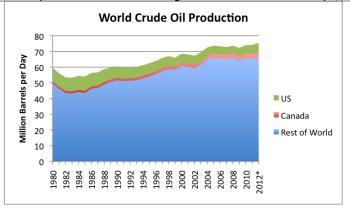


Figure 6. World crude oil production based on EIA data. *2012 estimated based on data through October.

Part of our problem now is that with globalization, world oil demand is rising very rapidly. Chinese buyers <u>purchased more cars in 2012 than did European buyers</u>. Rapidly rising world demand, together with oil supply which is barely rising, pushes world prices upward. This time, there also is no possibility of a dip in world oil demand of the type that occurred in the early 1980s. Even if the West drops its oil consumption greatly, the East has sufficient pent-up demand that it will make use of any oil that is made available to the market.

Adding to our problem is the fact that we have already extracted most of the inexpensive to extract oil because the <u>"easy" (and cheap) to extract oil was extracted first</u>. Because of this, oil prices cannot decrease very much, without world supply dropping off. Instead, because of <u>diminishing returns</u>, needed price keeps ratcheting upward. The new "tight" oil that is acting to increase US supply is an example of *expensive to produce* oil—it can't bring needed price relief.

5. Globalization transfers consumption of limited oil supply from developed countries to developing countries. If world oil supply isn't growing by very much, and demand is growing rapidly in developing countries, oil to meet this rising demand must come from somewhere. The way this transfer takes place is through the mechanism of high oil prices. High oil prices are particularly a problem for major oil importing countries, such as the United States, many European countries, and Japan. Because oil is used in growing food and for commuting, a rise in oil price tends to lead to a cutback in discretionary spending, recession, and lower oil use in these countries. See my academic article, "Oil Supply Limits and the Continuing Financial Crisis," available here or here.

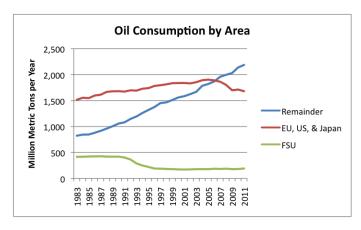


Figure 7. World oil consumption in million metric tons, divided among three areas of the world. (FSU is Former Soviet Union.)

Developing countries are better able to use higher-priced oil than developed countries. In some cases (particularly in oil-producing countries) subsidies play a role. In addition, the shift of manufacturing to less developed countries increases the number of workers who can afford a motorcycle or car. Job loss plays a role in the loss of oil consumption from developed countries—see my post, Why is US Oil Consumption Lower? Better Gasoline Mileage? The real issue isn't better mileage; one major issue is loss of jobs.

6. Globalization transfers jobs from developed countries to less developed countries. Globalization levels the playing field, in a way that makes it hard for developed countries to compete. A country with a lower cost structure (lower wages and benefits for workers, more inexpensive coal in its energy mix, and more lenient rules on pollution) is able to out-compete a typical OECD country. In the United States, the percentage of US citizen with jobs started dropping about the time China joined the World Trade Organization in 2001.

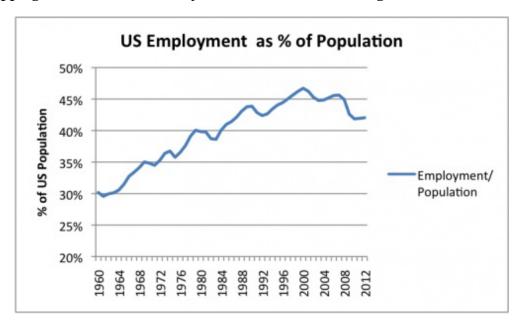


Figure 8. US Number Employed / Population, where US Number Employed is Total Non_Farm Workers from Current Employment Statistics of the Bureau of Labor Statistics and Population is US Resident Population from the <u>US Census</u>. 2012 is partial year estimate.

7. Globalization transfers investment spending from developed countries to less developed countries. If an investor has a chance to choose between a country with a competitive advantage and a country with a competitive disadvantage, which will the investor choose? A shift in investment shouldn't be too surprising.

In the US, domestic investment was fairly steady as a percentage of National Income until the mid-1980s (Figure 9). In recent years, it has dropped off and is now close to consumption of assets (similar to depreciation, but includes other removal from service). The assets in question include all types of capital assets, including government-owned assets (schools, roads), business owned assets (factories, stores), and individual homes. A similar pattern applies to business investment viewed separately.

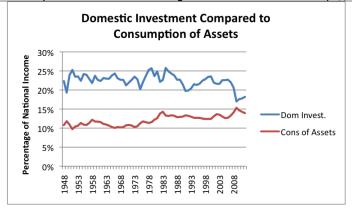


Figure 9. United States domestic investment compared to consumption of assets, as percentage of National Income. Based on US Bureau of Economic Analysis data from Table 5.1, Savings and Investment by Sector.

Part of the shift in the balance between investment and consumption of assets is rising consumption of assets. This would include early retirement of factories, among other things.

Even very low interest rates in recent years have not brought US investment back to earlier levels.

8. With the dollar as the world's reserve currency, globalization leads to huge US balance of trade deficits and other imbalances.

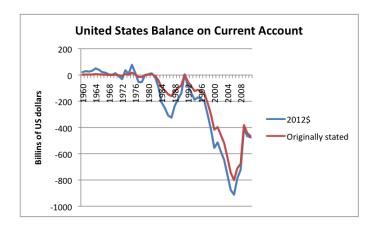


Figure 10. US Balance on Current Account, based on data of US Bureau of Economic Analysis. Amounts in 2012\$ calculated based on US CPI-Urban of the Bureau of Labor Statistics.

With increased globalization and the rising price of oil since 2002, the US trade deficit has soared (Figure 10). Adding together amounts from Figure 10, the cumulative US deficit for the period 1980 through 2011 is \$8.6 trillion. By the end of 2012, the cumulative deficit since 1980 is probably a little over 9 trillion.

A major reason for the large US trade deficit is the fact that the US dollar is the world's "reserve currency." While the mechanism is too complicated to explain here, the result is that the US can run deficits year after year, and the rest of the world will take their surpluses, and use it to buy US debt. With this arrangement, the rest of the world funds the United States' continued overspending. It is fairly clear the system was not put together with the thought that it would work in a fully globalized world—it simply leads to too great an advantage for the United States relative to other countries. Erik Townsend recently wrote an article called Why Peak Oil Threatens the International Monetary System, in which he talks about the possibility of high oil

prices bringing an end to the current arrangement.

At this point, high oil prices together with globalization have led to huge US deficit spending since 2008. This has occurred partly because a smaller portion of the population is working (and thus paying taxes), and partly because US spending for unemployment benefits and stimulus has risen. The result is a mismatch between government income and spending (Figure 11, below).

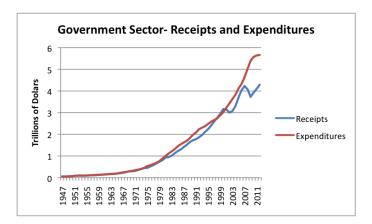


Figure 11. Receipts and Expenditures for all US government entities combined (including state and local) based on BEA data. 2012 estimated based on partial year data.

Thanks to the mismatch described in the last paragraph, the federal deficit in recent years has been far greater than the balance of payment deficit. As a result, some other source of funding for the additional US debt has been needed, in addition to what is provided by the reserve currency arrangement. The Federal Reserve has been using <u>Quantitative Easing</u> to buy up federal debt since late 2008. This has provided a buyer for additional debt and also keeps US interest rates low (hoping to attract some investment back to the US, and keeping US debt payments affordable). The current situation is unsustainable, however. Continued overspending and printing money to pay debt is not a long-term solution to huge imbalances among countries and lack of cheap oil—situations that do not "go away" by themselves.

9. Globalization tends to move taxation away from corporations, and onto individual citizens. Corporations have the ability to move to locations where the tax rate is lowest. Individual citizens have much less ability to make such a change. Also, with today's lack of jobs, each community competes with other communities with respect to how many tax breaks it can give to prospective employers. When we look at the breakdown of US tax receipts (federal, state, and local combined) this is what we find:

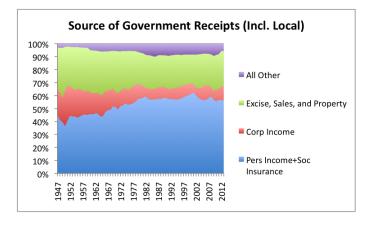


Figure 12. Source of US Government revenue, by year, based on US Bureau of Economic Analysis Data.

The only portion that is entirely from corporations is corporate income taxes, shown in red. This has clearly shrunk by more than half. Part of the green layer (excise, sales, and property tax) is also from corporations, since truckers also pay excise tax on fuel they purchase, and businesses usually pay property taxes. It is clear, though, that the portion of revenue coming from personal income taxes and Social Security and Medicare funding (blue) has been rising.

I showed that high oil prices seem to lead to depressed US wages in my post, <u>The Connection of Depressed Wages to High Oil Prices and Limits to Growth</u>. If wages are low at the same time that wage-earners are being asked to shoulder an increasing share of rising government costs, this creates a mismatch that wage-earners are not really able to handle.

10. Globalization sets up a currency "race to the bottom," with each country trying to get an export advantage by dropping the value of its currency.

Because of the competitive nature of the world economy, each country needs to sell its goods and services at as low a price as possible. This can be done in various ways—pay its workers lower wages; allow more pollution; use cheaper more polluting fuels; or debase the currency by Quantitative Easing (also known as "printing money,") in the hope that this will produce inflation and lower the value of the currency relative to other currencies.

There is no way this race to the bottom can end well. Prices of imports become very high in a debased currency—this becomes a problem. In addition, the supply of money is increasingly out of balance with real goods and services. This produces asset bubbles, such as artificially high stock market prices, and artificially high bond prices (because the interest rates on bonds are so low). These assets bubbles lead to investment crashes. Also, if the printing ever stops (and perhaps even if it doesn't), interest rates will rise, greatly raising cost to governments, corporations, and individual citizens.

11. Globalization encourages dependence on other countries for essential goods and services. With globalization, goods can often be obtained cheaply from elsewhere. A country may come to believe that there is no point in producing its own food or clothing. It becomes easy to depend on imports and specialize in something like financial services or high-priced medical care—services that are not as oil-dependent.

As long as the system stays together, this arrangement works, more or less. However, if the built-in instabilities in the system become too great, and the system stops working, there is suddenly a very large problem. Even if the dependence is not on food, but is instead on computers and replacement parts for machinery, there can still be a big problem if imports are interrupted.

12. Globalization ties countries together, so that if one country collapses, the collapse is likely to ripple through the system, pulling many other countries with it.

History includes many examples of civilizations that started from a small base, gradually grew to over-utilize their resource base, and then collapsed. We are now dealing with a world situation which is not too different. The big difference this time is that a large number of countries is involved, and these countries are increasingly interdependent. In my post 2013: Beginning of Long-Term Recession, I showed that there are significant parallels between financial dislocations now happening in the United States and the types of changes which happened in other societies, prior to collapse. My analysis was based on the model of collapse developed in the book Secular Cycles by Peter Turchin and Sergey Nefedov.

It is not just the United States that is in perilous financial condition. Many European countries and Japan are in similarly poor condition. The failure of one country has the potential to pull many

others down, and with it much of the system. The only countries that remain safe are the ones that have not grown to depend on globalization—which is probably not many today—perhaps landlocked countries of Africa.

In the past, when one area collapsed, there was less interdependence. When one area collapsed, it was possible to let cropland "rest" and deforested areas regrow. With regeneration, and perhaps new technology, it was possible for a new civilization to grow in the same area later. If we are dealing with a world-wide collapse, it will be much more difficult to follow this model.

This post originally appeared on <u>Our Finite World</u>.

This work is licensed under a <u>Creative Commons Attribution-Share Alike</u> 3.0 United States License.