

Entitlement, Oil Depletion, Fiscal Crisis

by John Attarian

Federal Reserve Chairman Alan Greenspan's call for cutting future Social Security and Medicare benefits is a jolting reminder of a reality which politicians would rather forget: the soaring burdens which our aging population will put on the Treasury and the economy.

The fiscal problem, however, has two sides: demand and supply. The latter – the economy's capacity for carrying these burdens – is equally important. We must ask not only how will federal government demands on the economy change, but also what changes will occur in the economy which will affect its ability to meet them. Unfortunately, a supply-side trend is operating which may be even more ruinous than demand-side demographics: the worldwide depletion of oil and natural gas.

Oil and gas are crucial for modern economies. Cheap energy – largely oil – made possible America's phenomenal output and productivity growth. Our transportation depends almost entirely on oil. No other energy source matches oil for energy density (energy yield per unit of fuel), portability, storability, and versatility of use. Oil, fueling farm machinery, and natural gas, an input for nitrogen fertilizers, underwrite America's industrialized agriculture.

In 1949, geophysicist M. King Hubbert argued that since these fuels were created in prehistoric times, their quantity is fixed and finite, therefore their annual output

must rise initially, peak once or more, and then decline. Applying this to estimates of America's oil resources, he predicted in 1956 that U.S. output would peak in 1970. It did.

The Association for the Study of Peak Oil and Gas (ASPO), an organization of veteran geologists, foresees this happening worldwide. In the *Essence of Oil & Gas Depletion*, Colin Campbell, a prominent ASPO member and longtime depletion Jeremiah, presents annual production plots for all oil-producing countries. Every plot shows the pattern Hubbert postulated. Almost all producers outside the Persian Gulf have already gone into decline. Moreover, as recently reported [*New York Times*, February 24, A1, C2], even Saudi Arabia's giant oil fields are declining. Depletion isn't a scare scenario – it's a reality.

ASPO projects world oil output peaking in about 2012, and oil plus gas peaking in about 2015, then declining every year. Wind and solar are decades away from being major energy sources.

Now, the oldest baby boomers can start collecting Social Security early retirement benefits in 2007 and start getting Medicare in 2010. At about the same time, the boomers will start flooding Social Security and Medicare, and oil and gas extraction will peak and begin irreversible decline. So just as Social Security and Medicare costs begin exploding, the cheap oil and gas bottom will start dropping out of the economy which will have to support them – a gruesome coincidence.

The implications for America's ability to finance old-age entitlements are grim. Oil and gas depletion will inflict an energy drought. Recall that a painful inflationary recession followed the 1973-74 OPEC oil embargo. Irreversible declines in oil and gas will mean prolonged economic contraction. Since all goods and services require energy, rising energy prices will raise all other prices, driving up inflation-adjusted benefit outlays. Meanwhile, real wages will shrink and unemployment will rise, with obvious consequences for the Social Security and Medicare tax base.

The late John Attarian, Ph.D., with a doctorate in economics from the University of Michigan, has been a freelance writer living in Ann Arbor. A frequent contributor to The Social Contract, he is the author of Economism and the National Prospect (American Immigration Control Foundation) and Social Security: False Consciousness and Crisis (Transaction) and Immigration: Wrong Answer for Social Security (American Immigration Control Press).

The stagflation largely caused by the 1973-74 oil crisis helped precipitate the first financial crisis in Social Security's history. Higher-than-anticipated inflation drove benefit outlays up rapidly while unemployment showed revenue growth. The trust fund ran a deficit in 1975 and, despite a massive Social Security tax increase enacted in 1977, continued doing so through 1981, thanks to another inflationary recession in which oil also figured. This time, the oil shock and stagflation will be permanent. Connect the dots.

Deficit hawks such as the Committee for Economic Development have projected Social Security, Medicare, and Medicaid spending rising from 7.6 percent of Gross Domestic Product in 2002 to roughly 14 percent of GDP by 2030. Assuming budget policy remains unchanged, the federal deficit would explode from roughly 1.6 percent of GDP in 2002 to about 10 percent of GDP by 2030.

These frightening figures incorporate only demographics and don't take depletion into account. Moreover, all forecasts by Social Security and Medicare actuaries, including the pessimistic ones, assume long-

term growth in real wages, productivity, and GDP. But an economy crippled by depletion will see declines in all three.

Oil and gas depletion, then, will disastrously worsen the coming fiscal crisis, as rising demand for revenues collides with declining supply. Moreover, this will constrain policymakers' options. A contracting economy cannot support massive tax increases. The economic consequences of depletion mean bearish financial markets – killing Social Security privatization stone dead. Depletion may leave us no choice but rigorous cost cutting, e.g., means testing, to reduce charges on the economy to affordable levels. Unwelcome as Mr. Greenspan's recommendations are, they are probably inadequate.

We need a more comprehensive picture of our situation. The economy's future condition will govern what we can do about entitlements. Factors overlooked today, such as oil and gas depletion, may mean unpleasant surprises tomorrow. •

Ten Oil Supply Basics

On being aware of 'peak oil' and sudden shortage

by Jan Lundberg

Daily world demand for oil is over 80 million barrels a day, and approximately one-quarter of this is in and by the U.S.

Half of the oil refined in the U.S. is made into gasoline, the main product a refinery is concerned with. Other products such as asphalt, pesticides and plastics are minor parts of the barrel of crude oil to be disposed of (profitably only, if possible).

World oil supplies are at the approximate historic peak of maximum production, due to depletion setting in.

Jan Lundberg is an oil analyst who founded the website culturechange.org. She can be reached at P.O. Box 4347, Arcata, CA 95518. Phone: 215-243-3144.

Oil production in 18 producer countries has passed its peak and is declining faster than previously thought – at about 1.14 million barrels a day.

“Those 18 countries between them are now producing 1.14 mbpd less than they were at their height.” (Source: Adam Porter, *AlJazeera.net*.)

The maximum possible production-capacity utilization is the order of the day among the petroleum exporting countries:

“The planet is operating at anywhere from 95-99 percent capacity. There is no margin for error. The only way the system can respond is continued price increases” (Source: Stephen Leeb, Wall Street investment advisor and author).

At a time of no spare refinery capacity, demand has outstripped all expectations (*AlJazeera.net*).

Regarding rising world demand, “China and India

use the energy-equivalent of 5.5 barrels of oil per person per year, while rich nations use 39. No matter how rosy your thinking is as to the global supply of oil, there is no way there is going to be enough to satisfy the demands of an extra 2.3 billion people coming on line” (*Forbes Magazine*).

U.S. oil demand is rising as well: “U.S. petroleum demand in 2004 grew at its strongest rate in five years.” The system is straining: “Refinery utilization rate last year was the highest annual rate in six years at 92.8 percent of capacity” (American Petroleum Institute).

The world trend in declining oil extraction has been relentless for the past four decades. The approximate bell curve of petroleum extraction cannot be changed by any one big new discovery (Association for the Study of Peak Oil and Gas [ASPO]; *Culturechange.org*).

An International Energy Agency report from August 2004 indicates Saudi Arabia needs up to 800,000 barrels per day of newly discovered oil each year just to offset declining fields and maintain its current production level. This can't happen (Jan Lundberg).

What about renewable energy and other

alternatives? They are not ready, and will never be as long as oil is king. (This is something not acknowledged by the boosters of the technofix.) The price of oil is kept under the price of most alternatives. When oil abdicates because great quantities are no longer available at affordable prices, no other fuel/material can fill oil's shoes (Jan Lundberg, from a prediction originally published in the *National Petroleum News* in 1988).

The next shortage could be soon and could be the last one – that lasts and lasts – as the watershed event of passing the peak of global oil extraction could be right around the corner. The “market factor” in paralyzing the supply/distribution system, through panic-buying of crude and refined products, will usher in virtual but extreme shortage, bringing much economic activity to a halt in a matter of days. History taught us:

“What the U.S. went through in 1979's oil crisis, based on the Lundberg Letter's projection of a nine percent shortfall in gasoline deliveries, can happen again. The difference will be that global production of oil will be falling instead of increasing” (Jan Lundberg, at The Institute of Petroleum, London, February 17, 2003.) •

Workshop Proceedings Available on the Internet

The Association for the Study of Peak Oil and Gas held its Fourth International Workshop on Oil and Gas Depletion in Lisbon, Portugal, May 19-20, 2005. Abstracts and some of the papers are available at www.cge.uevora.pt/aspo2005/abstracts.php.

The Association for the Study of Peak Oil and Gas (ASPO) began in 2000 following a lecture at Clausthal University. In 2001, C. J. Campbell started writing a monthly newsletter on the subject which was distributed to a small group of specialists. A workshop at Uppsala in 2002 attracted 65 participants and a website (www.peakoil.net) followed. Scientists in other universities and government departments in Europe added representatives and further workshops were held in Paris (2003) and Berlin (2004). This year in Lisbon saw an increasing number of participants and much media coverage.

The ASPO newsletter is now directly distributed to more than 1500 readers and is reproduced in several languages on various websites.

One of the papers delivered at Lisbon is by Richard Heinberg of the New College of California at

Santa Rosa on the topic: “The Likely Impact of Global Peak Oil on the United States.” In part he writes:

While each nation will be impacted differently by global peak oil, the types of effects that are likely to be seen in the U.S. can be extrapolated elsewhere; however, effects in this instance will be more pronounced because of America's extreme and arguably unmatched economic dependence on petroleum....

Petroleum dependency has been systematically encouraged through suburban design and the lack of public transportation alternatives to the private automobile....

The consequences of America's lack of vigor and thoroughness in pursuing energy efficiency and conservation domestically over the past two decades will hamper its ability to adapt to a low-energy future....

If the 20th century saw America's economic and geopolitical ascendancy, the 21st will almost certainly see its decline. The problems created for the U.S. by peak oil will no doubt eventually be