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How Economic Freedom Can Increase Oil Supplies

by H. Sterling Burnett, Ph.D.

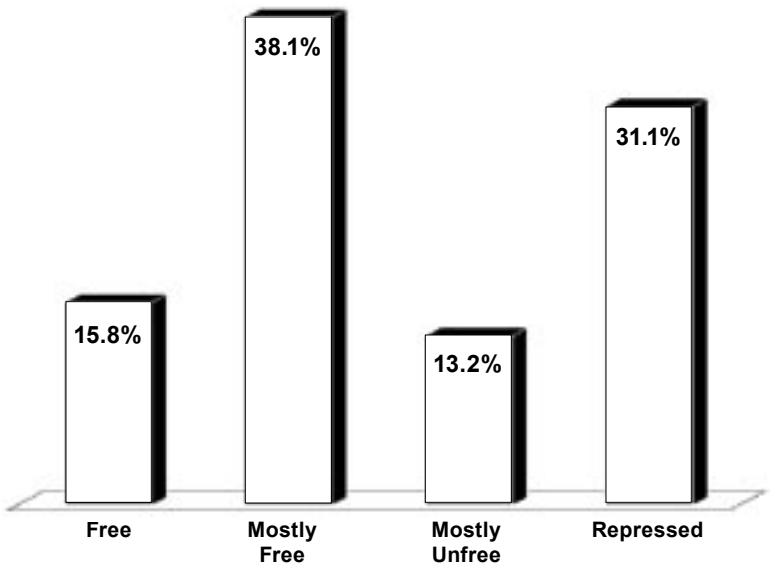
Surging demand for oil in rapidly developing countries like China and India and sustained demand in the United States and the rest of the world has outstripped growth in global production, reducing excess capacity to near zero and pushing oil prices to an all-time high of more than $75 a barrel in April 2006.

In response to driver complaints about high prices, U.S. legislators are seriously debating legislation to allow drilling in the Arctic National Wildlife Refuge — which could increase U.S. reserves by more than 50 percent. Congress is also considering opening parts of the U.S. outer continental shelf, where exploration is prevented by federal and state moratoria. In 2006, the Minerals Management Service, a U.S. Interior Department agency, estimated there were more than 85 billion barrels to be found there, which would approximately quadruple U.S. reserves.

There Is Plenty of Oil. Both the U.S. Energy Information Administration and the International Energy Agency estimate there are sufficient global oil resources to supply generations to come. The global economy uses approximately 85 million barrels of oil per day. However, there are a total of 1.3 trillion barrels of proven reserves — known resources extractable at current prices with current technology. The U.S. Geological Survey places the world's remaining conventional oil resources, including unproven resources, at 2.6 trillion barrels. Oil from tar sands in Canada and South America, and other unconventional sources like shale rocks or gasoline produced from coal would further extend oil resources by trillions of barrels. As a result, even if oil use continues to rise at an average rate of 1.4 percent to 1.7 percent per year, the world should have enough oil for more than 100 years.

Unfortunately, much of the world's oil lies under countries with economies that do not provide market incentives to encourage production. Accordingly, those who are concerned about energy security should support policies that would allow the development of untapped resources in countries with free economies. Much of that oil and gas is in the United States and Canada.

World Oil Reserves in Countries Grouped by Economic Freedom



Source: Stephen P. A. Brown and Richard Alm, "Running on Empty? How Economic Freedom Affects Oil Supplies," Federal Reserve Bank of Dallas, *Economic Letter*, Vol. 1, No. 4, April 2006, Table 2; data from *2006 Index of Economic Freedom*, Heritage Foundation.

Where the Oil Is Matters. "Having oil is one thing. Delivering it to a growing market is another," say economists Stephen Brown and Richard Alm. In an article recently published by the Federal Reserve Bank of Dallas, they link the availability of oil to world markets with the level of economic freedom and private control of oil resources in countries with major oil deposits. They point out that free enterprise systems provide incentives that better direct resources to meet consumer needs. In market economies, oil producers respond to higher prices by expanding capacity and output.

Unfortunately, most of the world's oil reserves lie under nations that don't fully embrace free markets. Some exercise extensive state control over their economies, including oil resources. Others face political instability and/or corruption. In those countries, Brown and Alm argue that oil exploration and production decisions are skewed by garbled economic signals, bureaucratic red tape, higher costs, widespread inefficiency and distorted incentives.

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Oil and Economic Freedom. The Heritage Foundation publishes an annual index of economic freedom that ranks countries based on their policies in the areas of trade, investment, finance, government spending, money supplies, labor market flexibility, state intervention and property rights. Heritage's index measures the relative economic freedom of countries, and groups them as free, mostly free, mostly unfree or repressed. [See the figure.]

Using the index, Brown and Alm point out that the world's oil wealth is concentrated in a relatively few countries, and of those countries even fewer have free or mostly free economies.

- Of the 30 countries that control nearly all of the world's oil, just three rank as free — the United Kingdom, the United States and Canada. Private companies explore, produce and deliver oil in these countries, but they have only 16 percent of world reserves.
- Six of the top producers— including Saudi Arabia, Kuwait and the United Arab Emirates — have economies that are mostly free and account for 38 percent of the world's reserves, with Saudi Arabia leading the pack with 267 billion barrels of proven reserves and Kuwait with 104 billion barrels. Although these countries have relatively stable economies, their governments control the oil industry.
- The 21 remaining countries with significant oil reserves, accounting for 44 percent of proven reserves, rate as either mostly unfree or repressed.

For example, economically repressed countries hold many barrels of proven oil reserves, such as Iran (133 billion), Iraq (115 billion), Venezuela (79.7 billion), Libya (39.1 billion) and Nigeria (35.9 billion). There are also large reserves in mostly unfree Russia (60 billion).

These countries are not good candidates for increasing oil production because of extensive state intervention in their economies and control over their energy sector —which is quite often managed for political purposes beyond economic gain. For instance, Venezuelan oil production has declined since President Hugo Chavez sacked many key people in the government-run oil company, and forced private companies to pay higher royalties and renegotiate their production agreements. In Nigeria, civil unrest regularly disrupts production and discourages further investment.

The economic freedom index also includes a measure of government intervention, based in part on the share of revenues derived from state-owned enterprises. In petroleum-rich countries, this almost always means oil. By this measure, over half of the world's oil lies in countries where the state makes almost all oil exploration and production decisions. Middle Eastern governments, for example, either fully own the oil industry or allow private companies to operate only as minority partners.

Although today's prices give private companies an incentive to drill, Brown and Alm note that government ministries often treat the oil industry as a cash cow, choosing to rake in revenue while forgoing investments in new capacity. Or they may simply prefer to gain from artificial, politically-induced high prices. For example, Saudi Arabia maintained relatively constant production capacity from 1994 to 2001 — and increased capacity only a little over the past five years. And even in the face of high prices, government-owned Pemex, which controls Mexico's oil, has done little to expand capacity.

Implications for Oil Prices. It is highly significant that the bulk of oil reserves are in countries where market incentives do not work fully or are in the hands of monopolists who may exercise their power by restraining investment. Today's oil prices are higher than they would be in a world of free markets, and Brown and Alm conclude they are likely to remain high — and rise higher — because without market incentives, many producers are likely to underinvest in new capacity.

Rising oil prices are mostly self-limiting in economies where the market is allowed to function. Higher prices encourage conservation and development of unconventional oil resources and alternative fuels. With respect to natural resources, history shows scarcity and higher prices have provided ample incentives for innovation.

Conclusion. Higher oil prices could help overcome some political obstacles to developing the vast conventional reserves believed to exist in certain environmentally sensitive areas. The fact that much of today's production comes from regions that are politically unstable or economically unfree should encourage expanded production in regions of the world that are economically free.

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