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Inflation Begets Inflation

Greg's Note: Russian real estate developers…Australian railroads…the wedding at Cana…Mexican Tortilla protests…beef eating gold miners…indoor ski slopes in Dubai…spinning diamonds and centripetal force. Fred Sheehan finds a way to connect all of these things in this essay about inflation's unintended -- and generally unseen -- global consequences. Please enjoy and send any comments my way: greg@whiskeyandgunpowder.com

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Reaping the Whirlwind

The aspects of inflation are as varied as those of a diamond rotated in the sunlight. Each is illuminating, once one has the ability to distinguish between gemstones. To the untutored, higher oil prices cause inflation. This is similar to rotating a rhinestone, instead of a diamond. The connoisseur understands that too much money-cum-credit causes inflation.

The cost of energy is rising in dollars. Dollar production does not require exploration. The additional increment of energy is hard to find, difficult to evaluate, and susceptible to daily reevaluation upon further investigation (shale oil versus ethanol). Federal Reserve Chairman Ben Bernanke made the market call of the decade in 2002, when oil cost $25 a barrel: "Like gold, U.S. dollars have value only to the extent that they are strictly limited in supply. But the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost. By increasing the number of U.S. dollars in circulation…the U.S. government can also reduce the value of a dollar in terms of goods and services, which is equivalent to raising the prices in dollars of those goods and services. We conclude that, under a paper money system, a determined government can always generate higher spending, and, hence, positive inflation."

Now to rotate the diamond. Bernanke did not address the printing presses in China, Russia, and Brazil. Americans spend more dollars buying goods shipped into the United States than foreigners pay for American goods that are sold abroad. The result is a mountain of dollars piling up in foreign countries. These extra dollars flow into those local economies. This causes an acceleration of production and consumption -- inflation. An example might be posed as a question: If Americans had spent a trillion dollars less on goods from China et al. over the past decade, would China

now be a net importer of coal or India a net importer of grains? China would probably not be increasing its consumption of beef by 20% a year. The base off of which that growth rate is compounding would certainly be at a much lower level.

This elevated base and rate of consumption has accelerated at a much faster pace than the ability to ship and produce the structural material. For instance, one half of urban homes in China now own air conditioners; the power grid cannot compete with such indulgences.

The situation is a bit like the wedding feast at Cana. The caterer badly underestimated the amount of wine required to lubricate the happy glands and bonhomie of the gathered guests. The guests' teeth were grinding to a halt. It was at this moment that Jesus arrived and produced wine for the multitudes.

We might pray for a miracle, but among other considerations, there is little money to be made from an instant solution. The early stages of discovery are chock-full of moneymaking (and capital-destroying) opportunities. Energy, dollar, and physical construction are inseparable from global hyperactivity.

An integrated specimen is the worldwide housing boom, any component of which involves energy. This pushes energy prices north. A facet of the integration: Russian housing starts have risen 70% over the past year. Russian central bank holdings of U.S. dollars have increased 50% over the past year. The two growth rates are very much related: The Russian central bank converts U.S. dollars received for Russian oil that was exported to the United States. In converting, the central bank prints rubles in exchange for the dollars. These rubles -- that had not and would not exist if not for American energy demands -- then make their way into the Russian economy. Real estate developers are mighty pleased.

We can turn the diamond slightly and see how higher energy costs have increased prices for milk and tortillas. The U.S. government's solution to limited oil resources includes a vast commitment to ethanol. According to the game plan, the energy used to run cars will, in effect, replace gasoline with corn. The effort may be flawed, but government subsidies, once in motion, rarely come to a screeching halt.

The U.S. produces 11 billion bushels of corn a year. In 2005, 1.5 billion bushels were sequestered for ethanol production. This leapt to 2.3 billion bushels in 2006 and an estimated 3.3 billion bushels in 2007. The price of corn has risen. The Mexican diet is heavily tortilla-ized, especially at the lower income stratum. Riots scarred the early months of President Felipe Calderon's term of office. He slapped price controls on tortillas. Borrowing from the book of Castro, Calderon warned, "We won't tolerate monopolists and speculators." His Cuban counterpart made more sense when he declaimed the "sinister idea of converting food into fuel."

The little man is also exposed in the United States. Farmland and grazing land are being rotated to the highest-priced crop. Cows are no longer fashionable. Thus, domestic milk prices have risen 63% over the past year. According to Andy Lees at UBS in London, world milk prices have risen 60% over the past six months (measured by the price of skim milk powder, commonly used as the benchmark). The U.S. has no surplus milk powder. It had 2.7 billion pounds in storage in 1983; the last 27 million pounds were sold last year. European warehouses are empty. Other food prices are rising by double digits. (Most everyone knows the government trumpets a consumer price index that does not include food and energy. Less well known is the absence of commodities such as milk, eggs, butter, and cheese from the seasonally adjusted CPI number that does -- purportedly -- include food and energy.)

The pace of energy production required to catch up with energy demands leads to possibly regrettable decisions. Again, from Andy Lees: "Growing plants for fuel will accelerate the already unacceptable levels of topsoil erosion. By using crops for biofuels, we would effectively be 'mining' the topsoil, and there is only about six inches of this around the world, on average. Even the best places in North America have seen the topsoil erode from 18 to 10 inches over the past 50 years, but it would have been dramatically more had it not been for replacing it with fertilizer (fossil fuel based)…Fertilizers provide 28% of the energy crops need…" Topsoil erosion due to topsoil mining reduces yield

levels. Thus, more fertilizer is needed at the cost of ever more energy just to remain static.

The production of fertilizers consumes energy. Since the cost of energy is rising, the cost of fertilizer production follows. PotashCorp of Canada thinks the cost of producing potash fertilizer in Brazil will rise by nearly 70% this year, due to increased demand for food and fuel. The ethanol binge thus consumes more energy in an effort to produce more energy. The cost of farming is rising, as is the cost of buying a farm: Over the past year, farm prices have risen 10% in Australia and 15% in the U.S.

Unintended consequences surround us. Cambridge Energy Research Associates estimates the worldwide cost to produce oil and natural gas (labor and equipment) has risen 53% since 2004. In some cases, the rising costs have led producers to scrap exploration. Exxon estimated the cost of building a gas-to-liquids plant in Qatar at $3 billion in 2004. Current estimates have risen to $18 billion. The joint project of Exxon and Qatar has been dropped. This foregone production is an aspect of higher energy costs that is invisible, so not widely appreciated. The increased energy, labor, and materials costs of mining have postponed or eliminated many projects. Copper production is no higher than a year ago, despite rising prices. Those staring into the rhinestone declare, "Higher prices increase production, which will reduce the price." Yes, but at what price is it worth exploring?

It is not only the investment, but also diminished profits that cause exploration to lag. Profits of South African gold miners have suffered because the cost of the miners' diet -- heavily weighted toward beef -- has risen. Beef prices have risen (around the world) as grazing land is turned into ethanol incubators (corn, sugar, palm oil, and so on).

Ethanol cannot be transported through pipelines (the water and chemicals prevent it); trucking is expensive, so the most economic solution is railroad transportation. Rails are constructed from steel. Steel prices are rising as demand increases. The metals used to construct steel are not mined fast enough. Skyscrapers are constructed from steel. Economist David Hale calculates that between 1900-1970, when America's urban population increased from 30 million to 154 million, per capita steel consumption rose 600%. The current Chinese migration to the cities has received wide publicity, but the trek to the cities -- and apartment buildings -- is global.

Nickel is an essential ingredient of stainless steel. Stainless steel is essential to marine construction (which is at a record book order). Nickel has risen from $7 a pound in early 2006 to over $20 a pound. Besides nickel, the other key ingredient, ferrochrome, has been rising in price since the beginning of the year. Posco, the Korean steel manufacturer, is "emphasizing" nickel-free, ferritic stainless steel. Sean Corrigan of Diapason Commodities Management describes one of the inevitable consequences of inflation: "One can't help feeling that sometime in the next decade an awful lot of bottoms are going to fall out of ships that were…built in Guangzhou and Shanghai…"

Steel craves iron ore. A much-traveled route is from Australian iron ore mines to Chinese steel plants. Ships now wait 30 days at Australian coal and iron ore terminals. Iron ore producers must pay for the ships to sit. The queue is caused by Australian rail deficiencies. In Andy Lees' estimation, "This bottleneck is likely to last for several years." Thus, iron ore needs to be mined at a faster pace to build the tracks to more economically export the iron ore. New railroad track is delayed by another bottleneck in most every locale associated with frantic digging and drilling: The Australian jobless rate is the lowest in 31 years.

All producers and consumers pay more, since idle ships reduce those available at any one time. Hence, Baltic freight rates for bulk carriers have more than doubled in 2007. Brazil is the most efficient soybean producer in the world, but shipping costs (to Asia) are pricing the Brazilian crop out of the market. (The fact that China is importing soybeans from South America also shrinks the number of available ships available for world cargo trade. China has recently become a net importer of coal for the first time. This adds pressure to shipping, steel, and iron ore prices.)

All of this activity means energy discovery and production works harder just to stay in place. Consider: The China trade into Los Angeles and Long Beach exceeds capacity -- ships are rerouted to Mexico and Canada, while trucks carry freight 60 miles east to San Bernardino, where a warehouse the size of eight Manhattan blocks is being built. In a three-

day period, port expansions were announced in Dalian (China's largest crude oil terminal), DP World's port in Dubai (a 67% expansion), and Qinhuangdao (China's largest coal port). China plans to build 25,000 miles of rail track by 2010 "in an effort to ease bottlenecks in the transport of everything from coal to soybeans to people"; 86 subway systems are under construction in Chinese cities; 85 biodiesel plants are under construction in the U.S. Gas rigs in the U.S. rose from 17,000 in 2000 to 28,000 wells in 2005, yet produced 5% less gas. The Ghawar oil field in Saudi Arabia employs 8,700 wells -- from 800 in 1978. The May 25 issue of Compass Maritime Services' Weekly Market Report could barely control its excitement: "Newbuilding prices [for ships] are also firming as 2010 berths are disappearing and it was reported that 70 [bulk carriers] were ordered this week!...Shipbuilding capital markets remain hot, hot, hot, as close to $2 billion in capital was raised in the past month."

We'll finish by dropping the diamond on the floor to see the world through Bernanke's myopic view -- that is, from the United States, which is all he is permitted to consider. The amount of steel for apartment construction in Shanghai and Istanbul or the growing appetite for power and power plants around the world escapes his blinders. (Iran's power plants cannot keep pace with demand; a good part of the increment is produced by consumer electronics imported from China.)

Forget about SUVs. The Toll Brothers (both of them), who manufacture the highest-cost houses in the U.S. (average price for new sale is $675,000 -- and falling), note that buyers opted for ceilings of eight feet in the 1980s. Then it was nine feet and now it is 10 feet. The basic house includes optional equipment. Toll house buyers are drawn to visual trinkets on the facade (e.g., Ionic columns in front of the doghouse), rather than additional insulation. The best-selling box is now "the Hampton," a 4,800 square-foot pile. The best-seller five years ago was 4,000 square feet. These figures do not reflect the additional two feet of air to be heated and air-conditioned. Nationally -- with or without the Toll Brothers -- the fastest-growing house configuration between 1990-2005 was the five- (or more) bedroom model.

Energy output needs to work hard to keep up with such production, but even the Hampton falls short of rising consumption. Houses are bursting at the seams: The amount of self-storage used by Americans has grown 50% since 1995. There are now 1.89 billion square feet of self-storage space -- six square feet for every man, woman, and child. Much of it is climate controlled.

Many of the fastest-growing real estate markets are full of hot air (California, Las Vegas, Arizona, Florida) or cold air (New England to Washington). The Phoenix-Scottsdale, Ariz., population has risen from 2 million in 1990 to 4 million. Landowners and developers have staked out a rough plan for 8 million sun seekers in 2016. (The betting here is they will be sorely disappointed.) On hot days now, Phoenix uses more energy than New York City. SUVs can be traded for a Cooper; house consumption is here to stay (or rot). Looking abroad, the United Arab Emirates, now rolling in $850 billion of foreign currency reserves, will not be quick to delay construction of new aluminum plants, fertilizer plants, or refineries, not to mention Dubai's 25-story, air-conditioned ski slope inside a glass bubble.

Naysayers will identify the ski slope as the ultimate bubble. They will also note the weak straw is of centrifugal dollar claims turning centripetal. Fair enough. However, there is probably less than $1 invested in commodities (inventory, common stocks, derivatives) for every $100 of claims on fancy derivatives. Some unfortunate investors are finding the world is not interested in buying CDOs supported by shrinking asset values, but the world needs another 10 million tons of fertilizer -- now.

Regards,
Fred Sheehan