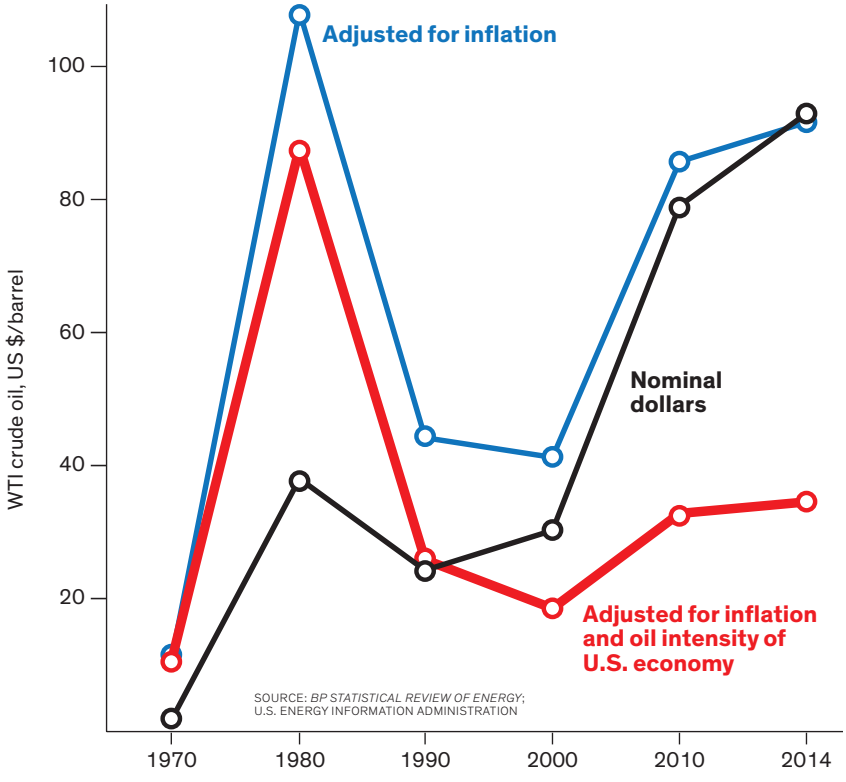
THE REAL PRICE OF OIL



ON FRIDAY, 20 JUNE 2014, WEST TEXAS INTERMEDIATE (WTI) crude oil traded in Cushing, Okla., at US $107.95 a barrel; by the end of the year it was selling for $53.45, almost half the summer peak. For the first time, people wondered whether the price of oil might actually be *too* low. • Average prices of WTI rose roughly 52-fold between 1970 and 2014, in current dollars—an enormous jump. How could the economies of oil-importing countries have kept on growing? The answer is simple: That 52-fold multiple is based on a doubly misleading metric. Though prices did soar in the 1970s, their fluctuations have been relatively restrained since then. • The first adjustment we must make—for inflation—is trivially obvious, because currency values do not remain constant. Low inflation rates of recent years (and actual deflation in some countries) have resulted in only minor annual devaluations (or even in marginally higher value) of currencies, while back in the 1970s and 1980s, inflation rates were in the double digits. In 1970, a dollar was worth about $6 in today's money; in 1980, it was worth $2.87 and in 2000, $1.37. Expressed in today's dollars, average oil prices rose more than eightfold, from $10.90 in 1970 to $92.10 in 2014, virtually all of which took place between 1974 and 1980. In 1980, oil averaged $108.20 per barrel in 2015 monies, and its value has fluctuated ever since. • The next adjustment is more subtle and thus often neglected. We must account for crude oil's declining importance in all Western economies. This measure, usually called the oil intensity of the economy, traces oil used per unit of gross domestic product, and it is calculated by dividing the total national oil consumption by GDP expressed in constant monies. Before the first oil price rise of 1973–74, oil intensity had been diminishing rather slowly; afterward, its decline accelerated.

We have done many things to lower oil intensity. We've stopped burning liquid fuels to generate electricity, injected powdered coal instead of fuel oil into blast furnaces, raised the corporate average fuel efficiency (CAFE), lowered the kerosene consumption of jet engines, and improved the efficiency of thousands of industrial processes. The results have been impressive: By 1985 the U.S. economy needed 37 percent less oil to produce a dollar of GDP than it had in 1970. By 2000 the rate was down 53 percent, and by 2014 it was 62 percent lower.

If you doubly adjust the WTI oil price—once for inflation and a second time for the declining oil intensity of the economy—you'll find it rose from $10.90 per barrel in 1970 to about $88 per barrel in 1980, then dropped to just $19 per barrel in 2000. Then it rose again, hitting $33 per barrel in 2010 and $34.50 per barrel in 2014. The multiple for the entire 1970–2014 period is only 3.2-fold.

When seen in a proper perspective, there is no doubt that the 1970s and the early 1980s brought us a historically unprecedented price rise and widely felt economic consequences. But in the past 30 years, the doubly adjusted crude oil price fluctuations have been rather subdued. No wonder the United States has coped with those ups and downs surprisingly well—even if it did, unpardonably, halt the improvement of CAFE for the two decades ending in 2005.

That, however, is a matter for another column. ■