

INTRODUCTION

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FORMER PRESIDENT THE GEOLOGICAL SOCIETY

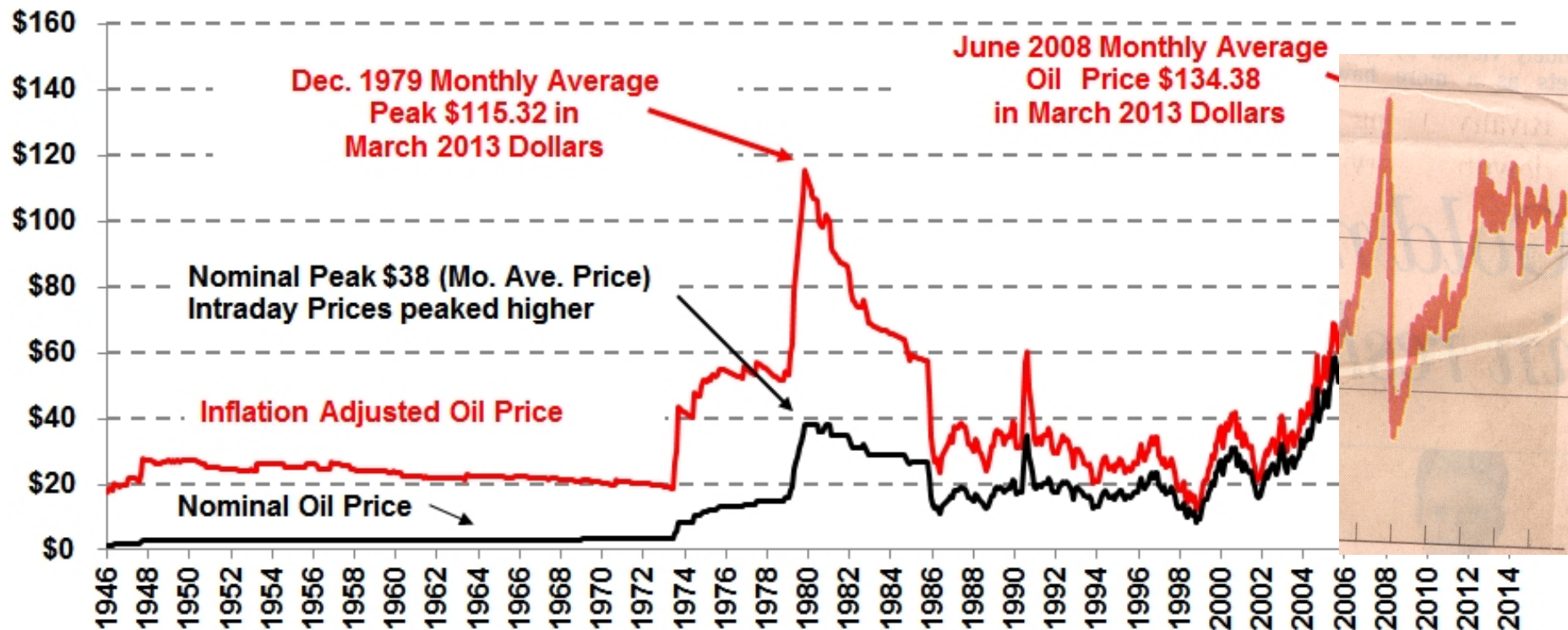


Coal – Energy at high cost in human terms

Miners	1913 Senghenydd Pit	439 died (above)
	1910 Pretoria Pit	344 died
	1894 Albion Colliery	290 died
	1934 Gresford, Wrexham	266 died
Users	1952 Great Smog	about 12,000 died

Inflation Adjusted Monthly CRUDE OIL PRICES (1946-Present) In March 2013 Dollars

© www.InflationData.com
Updated 4/16/2013



Source of Data:

Oil Prices- www.PlainsAllAmerican.com -- illinois Crude
CPI-U Inflation index- www.bls.gov

Oil price and GDP calculator

Reset values

Choose where you think the oil price is going and the sensitivity of the global economy to oil

Brent crude price - \$ per barrel



Brent crude oil price

\$ per barrel - average monthly price

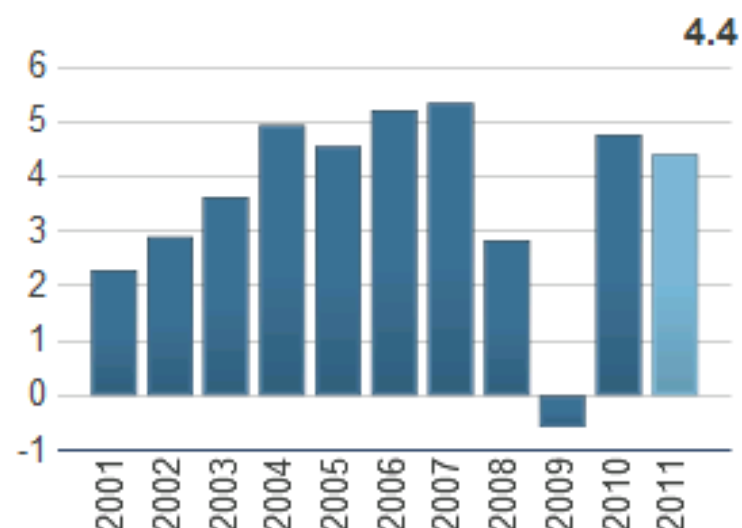


Percent of GDP lost from \$10 rise in oil price*



Global GDP growth

YoY % change - 2011 base estimate IMF



Source: IMF, Thomson Reuters

*Most forecasters estimate that every \$10 increase trims global growth by around 0.5% over the next 12 months



REUTERS

The benefits of fracking

Gas price Dollars per mbtu (approx)

USA \$3.60

UK \$10.80

Japan \$15.00

USA is enjoying an industrial renaissance based on cheap energy. The industry employs 1.7 million people in a safe efficient manner

