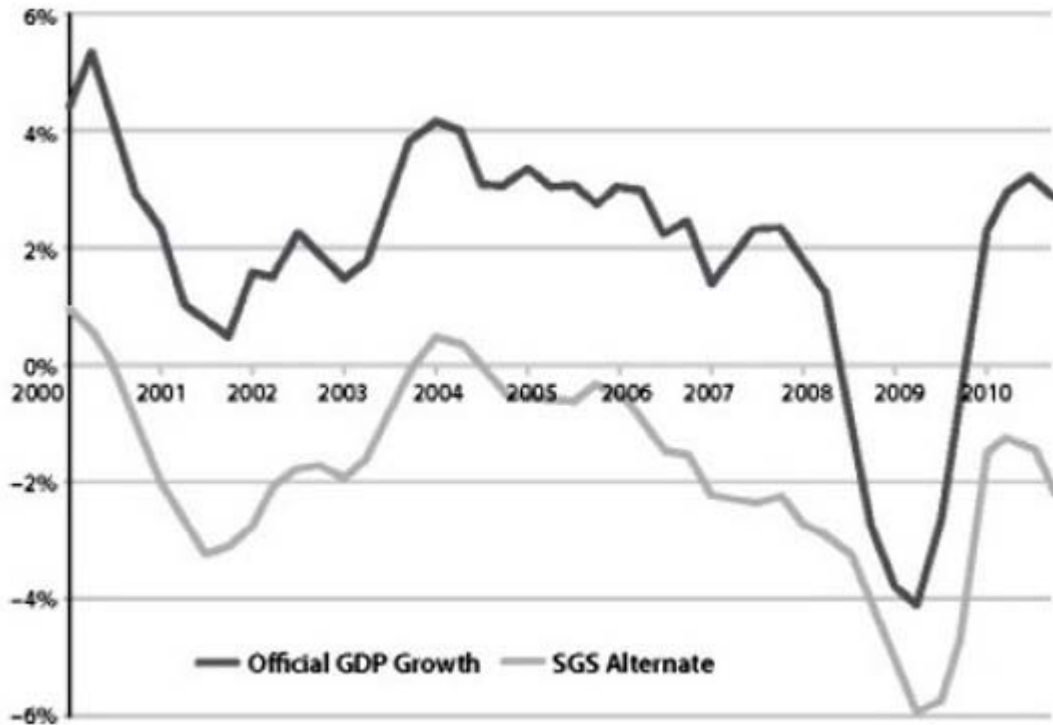


THE END OF GROWTH:
ADAPTING TO OUR NEW ECONOMIC REALITY

BY RICHARD HEINBERG

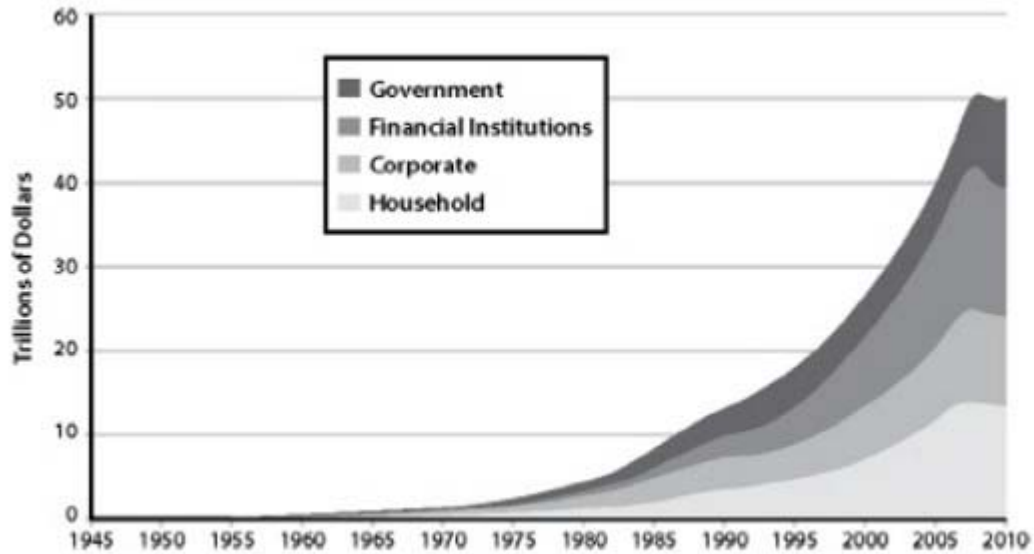
Figure 1. US GDP Growth, Official vs. Shadowstats, 2000–2010



Official GDP data comes from the Bureau of Economic Analysis. The SGS Alternate comes from Shadow Government Statistics. Both datasets are adjusted for inflation.

Source: Shadow Government Statistics, American Business Analytics and Research LLC, shadowstats.com

Figure 2. Total US Debt, 1945–2010



US debt by sector in nominal values (not inflation adjusted). We see the rapid expansion of both household and financial sector debt beginning in 2000, spurred by low interest rates and rising home values. Starting in 2008, household and financial debt contract, while government debt expands.

Source: The Federal Reserve, Z.1 Flow of Funds Accounts of the United States.

Figure 3. Balloon diagram of US energy supplies, including EROEI.

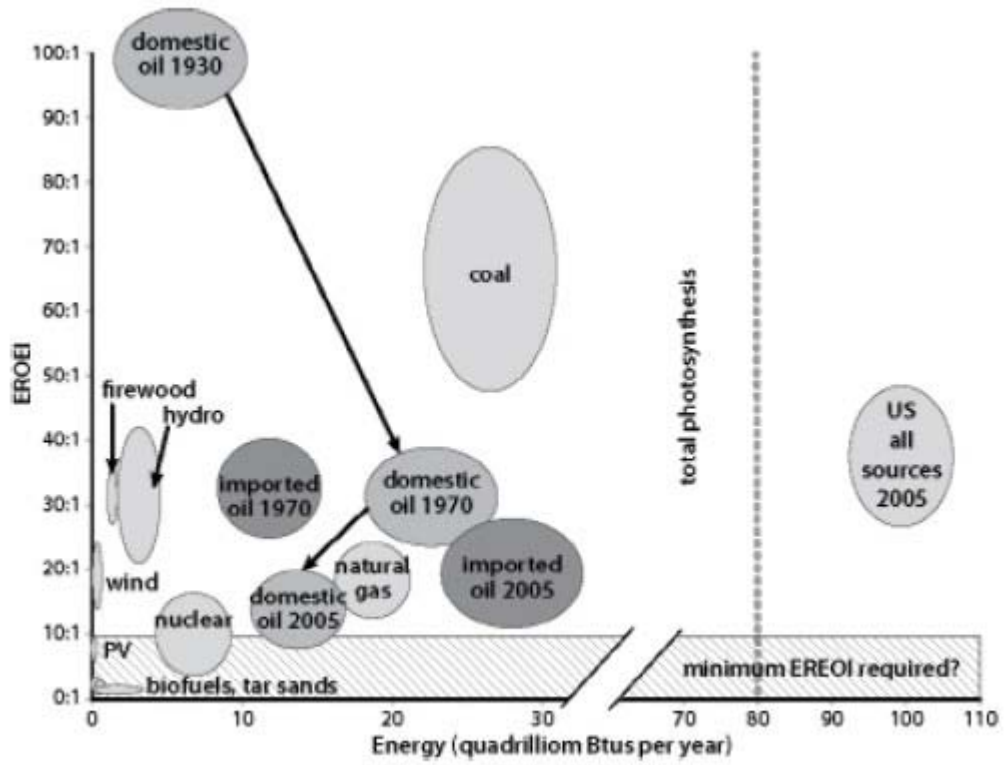
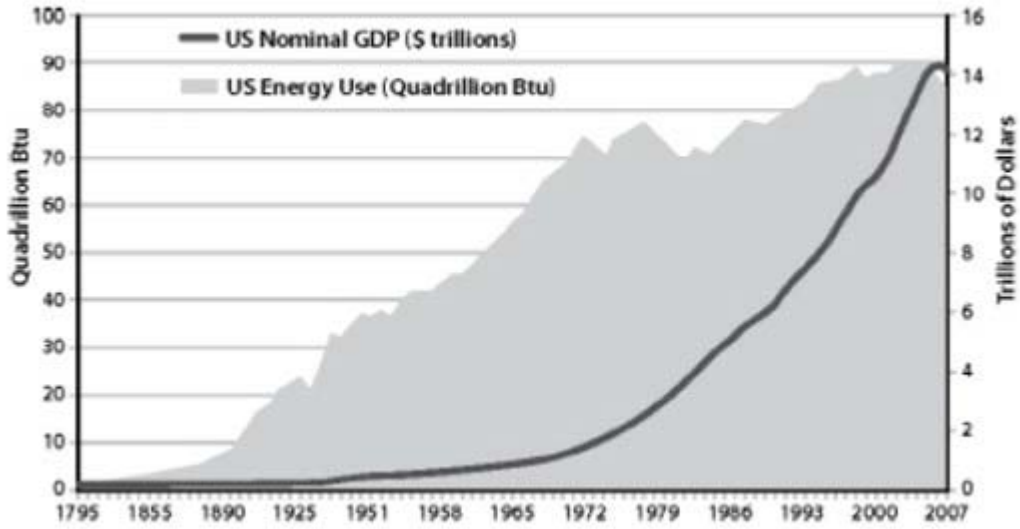
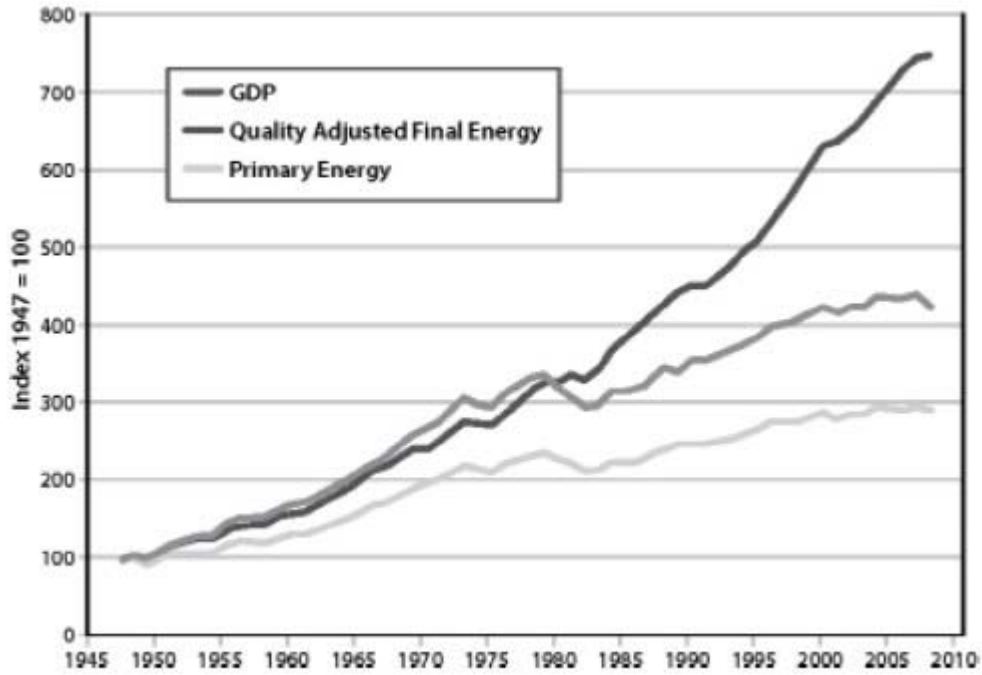


Figure 4A. Energy Use and Economic Growth in the United States, 1795–2009



Sources: US Energy Information Agency, US Bureau of Economic Analysis, Louis Johnston and Samuel H. Williamson, "What Was the US GDP Then?" MeasuringWorth, 2010.

Figure 4B. Decoupling GDP and Energy Use in the US



Changes in energy quality account for much of the divergence between energy consumption and GDP since 1980. Other factors include outsourcing of production and financialization of the economy.

Sources: US Energy Information Administration and Bureau of Economic Analysis;
Cutler Cleveland, Encyclopedia of Earth.