

A black and white photograph of an oil field. The foreground shows a flat, open area with some low-lying structures and a dirt path. In the middle ground, there are several large, lattice-structured derricks (oil rigs) of varying heights. In the background, a dense line of smokestacks or smaller derricks stretches across the horizon, with some emitting plumes of smoke or steam. The sky is bright and overcast.

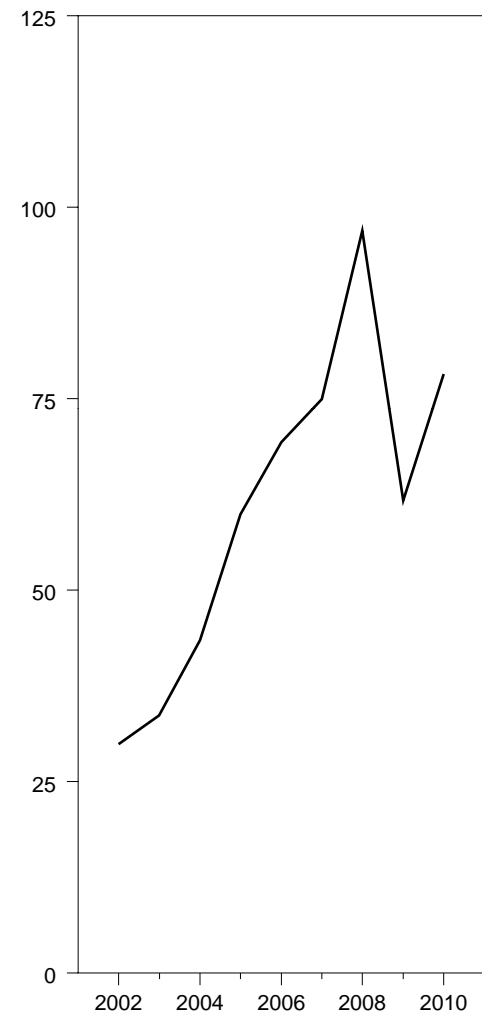
Oil and the Economy

James D. Hamilton

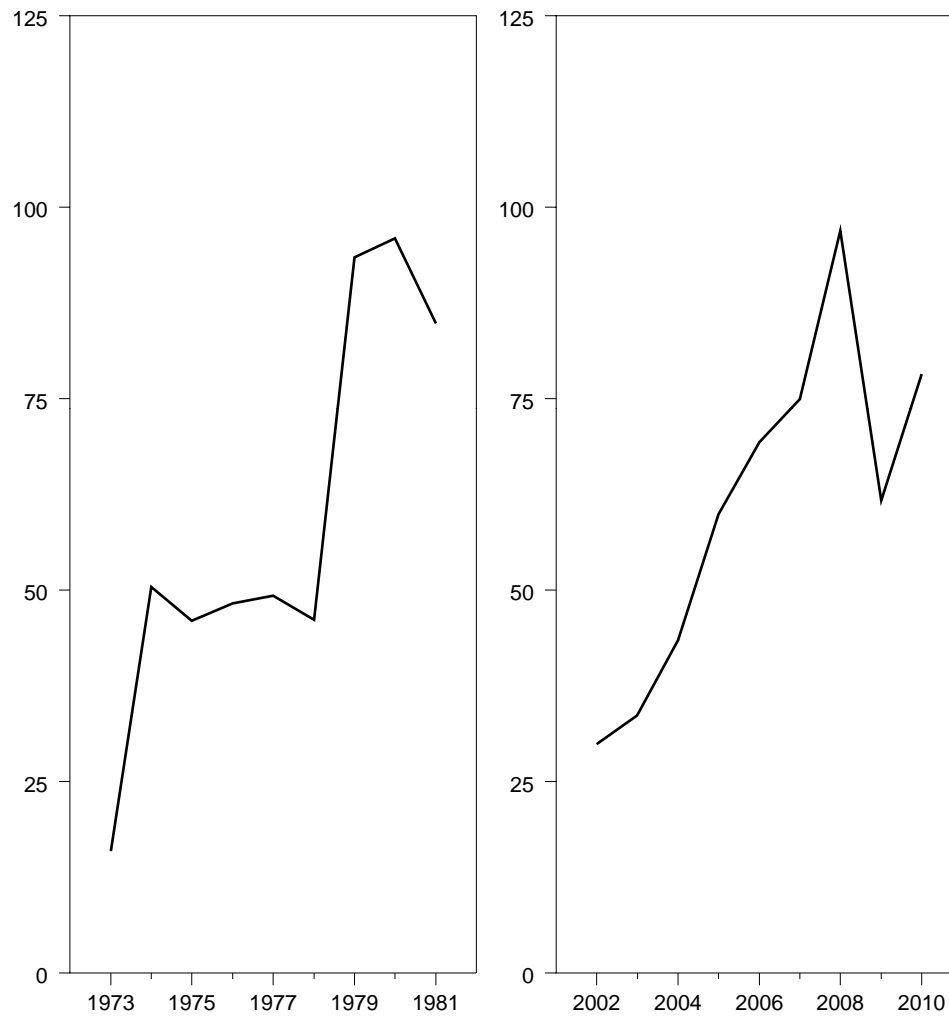
Dept of Economics UCSD

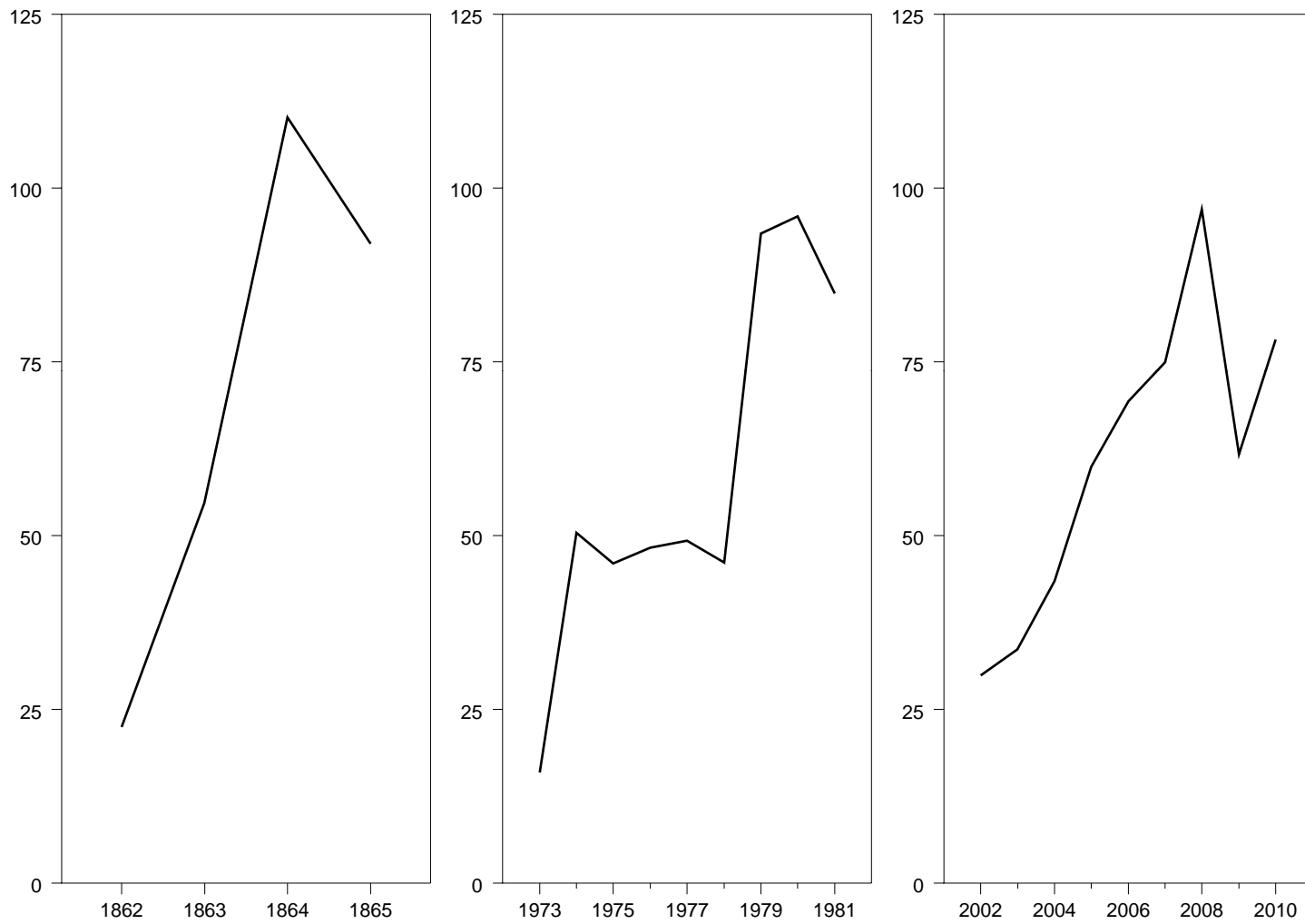
Spindletop, TX 1905

Price of oil in 2009 dollars
(annual averages, 2002-2010)



Price of oil in 2009 dollars
right panel: 2002-2010
left panel: 1973-1981

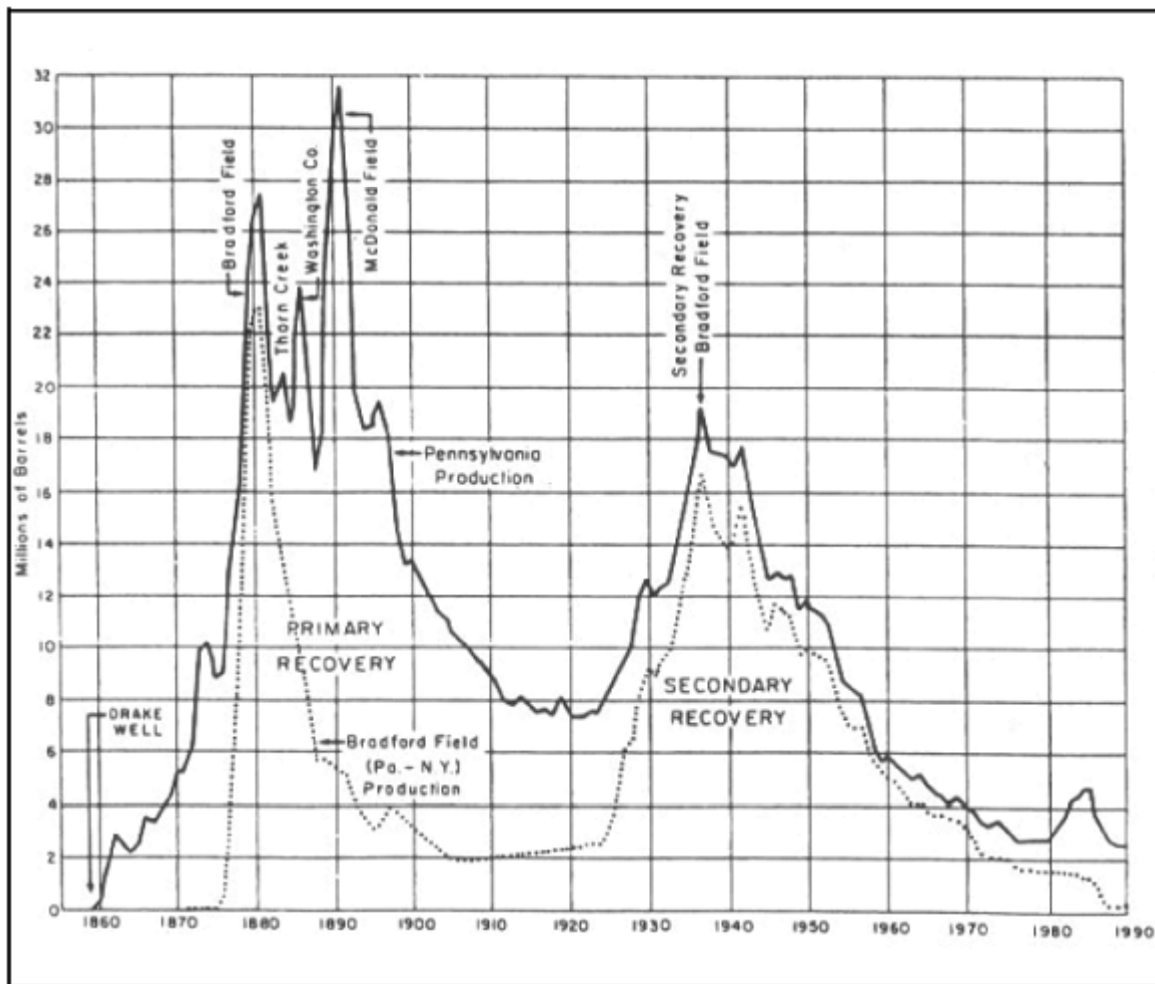




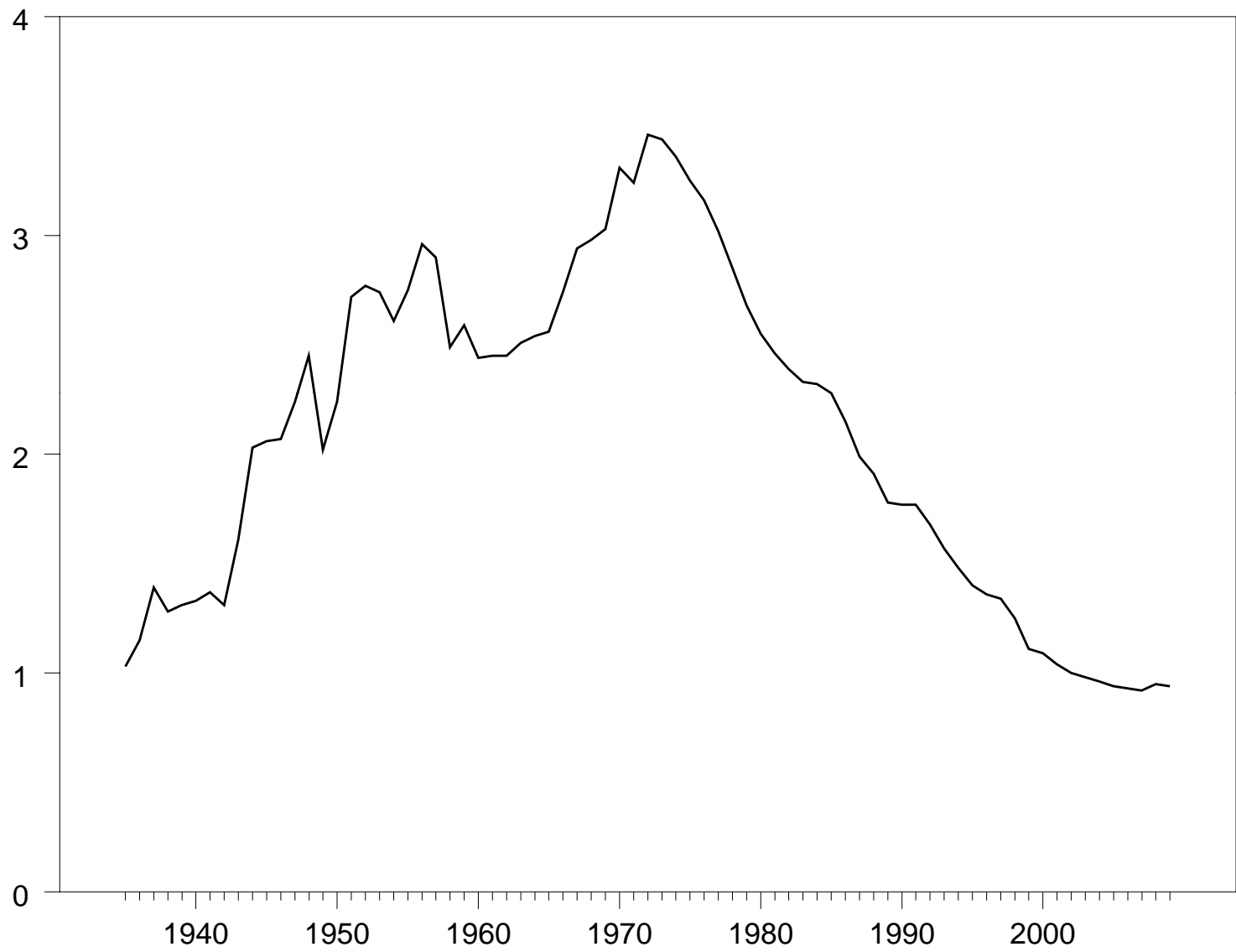
Price of oil in 2009 dollars: left panel: 1862-1865
middle panel: 1973-1981 right panel: 2002-2010



Annual oil production (millions of barrels per year)
PA and NY, 1859-1865

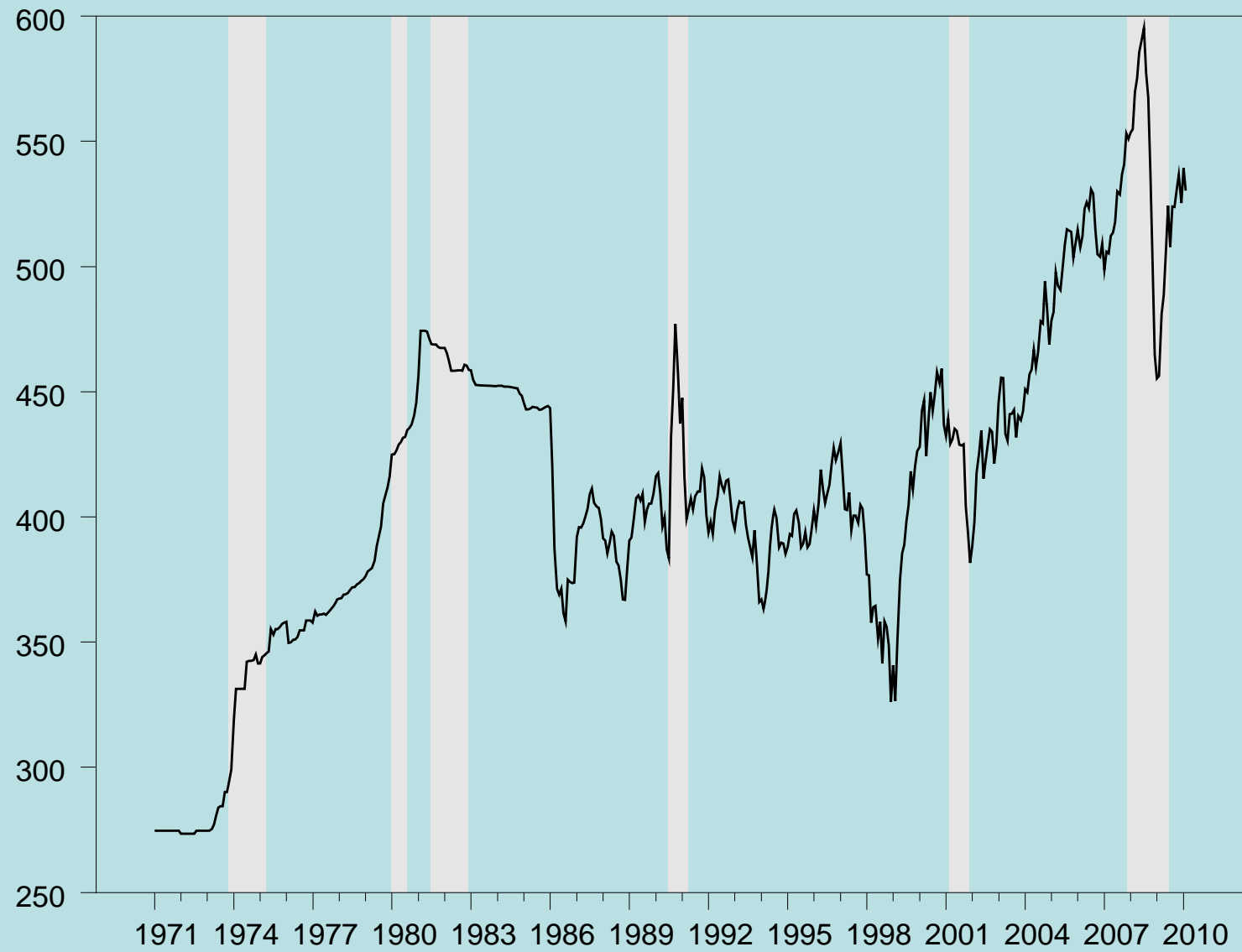


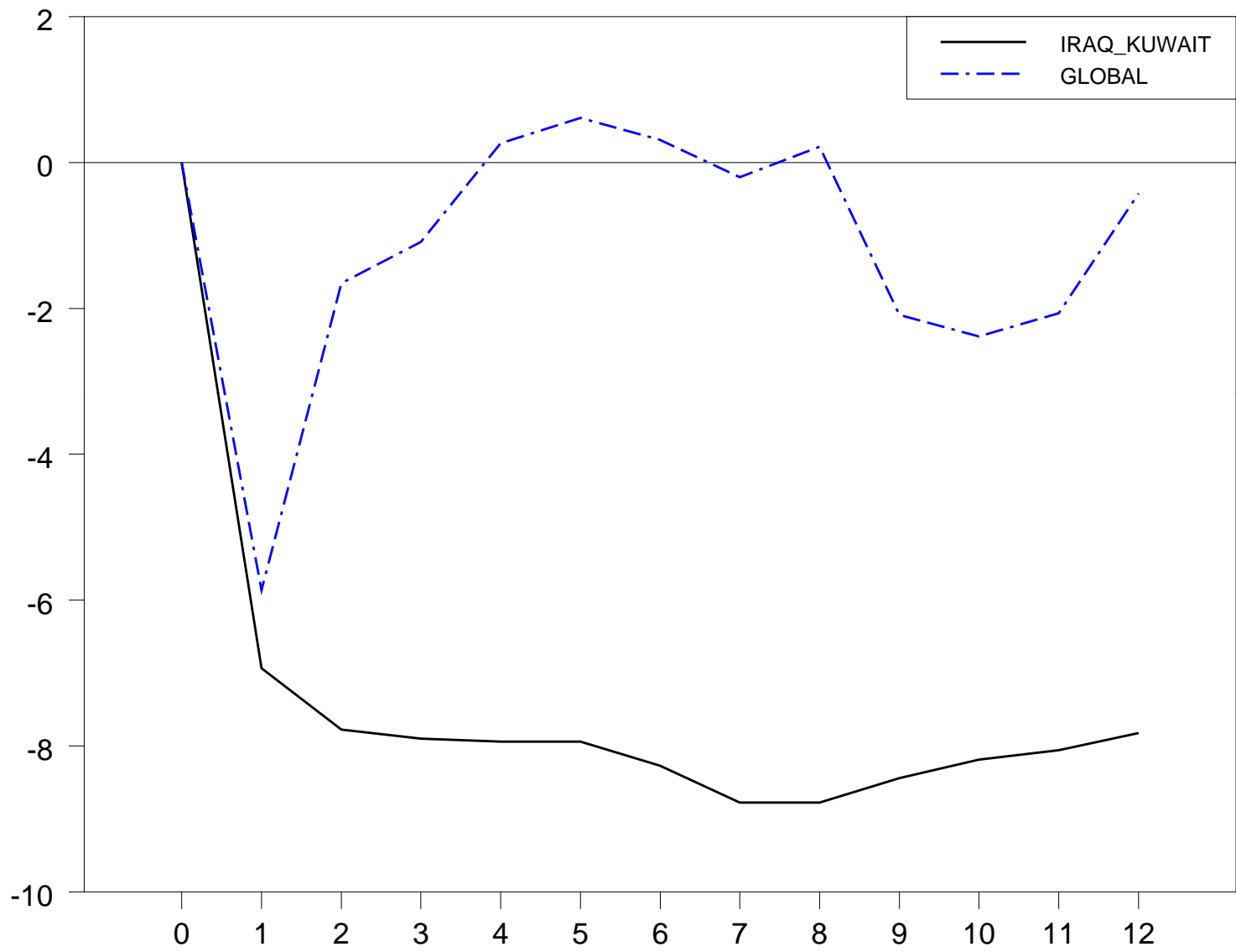
Annual oil production (millions of barrels per year)
PA 1859-1960



Annual Texas production, mb/d, 1935-2009

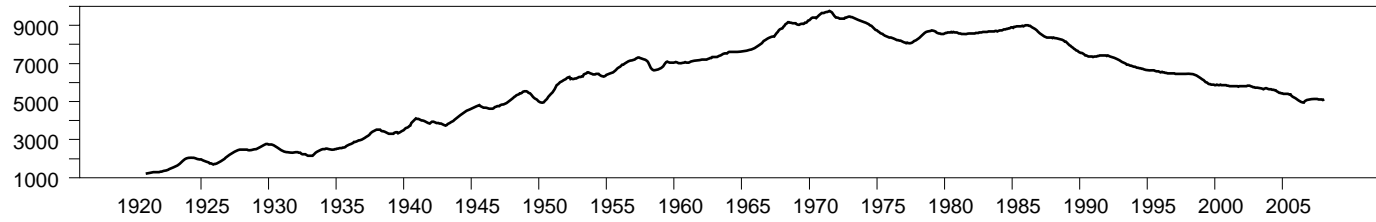
Crude oil producer price index and U.S. recessions



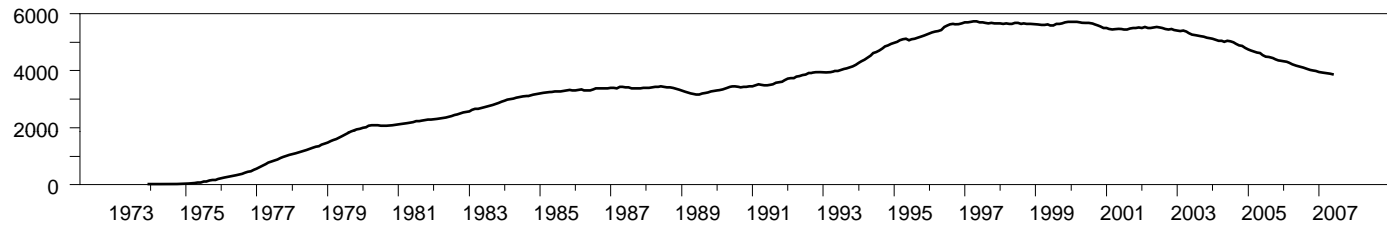


First Persian Gulf War: production after Aug 1990.

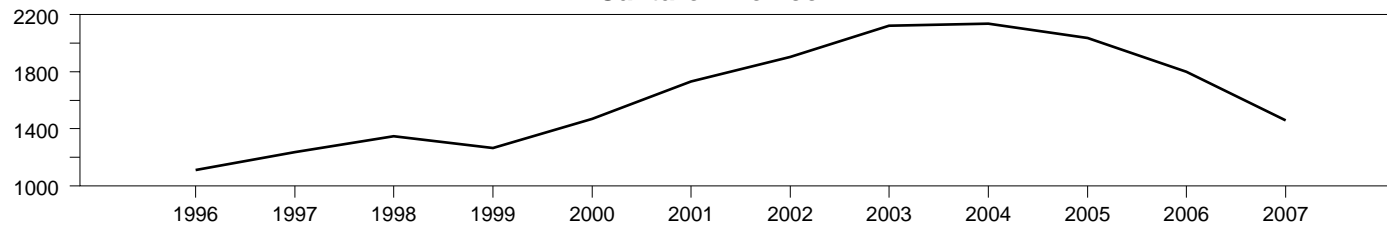
U.S.



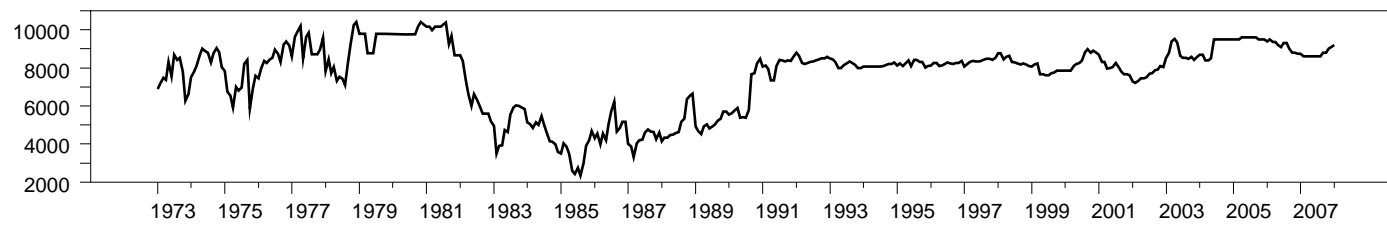
North Sea

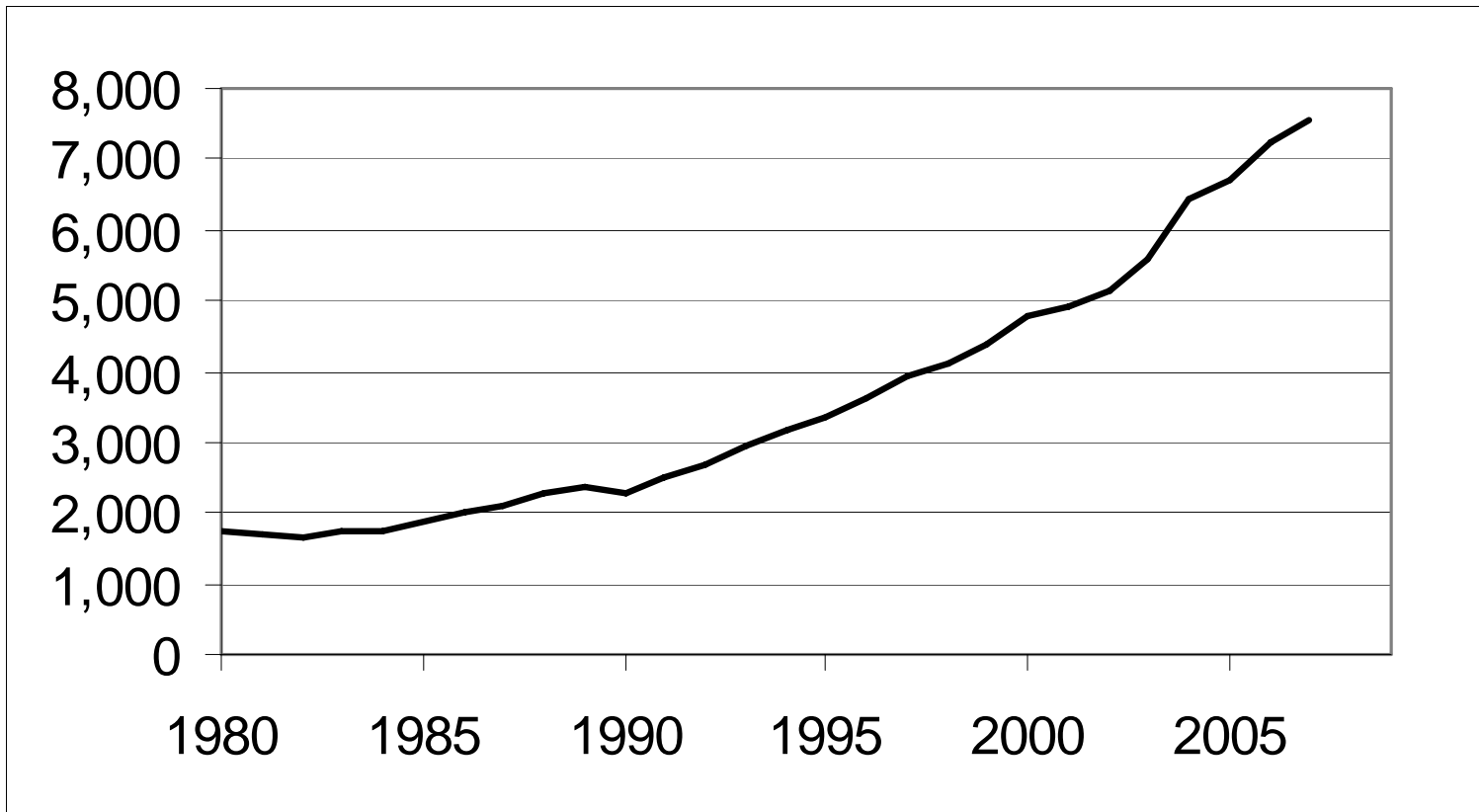


Cantarell Mexico



Saudi Arabia





Chinese oil consumption, thousands of barrels per day

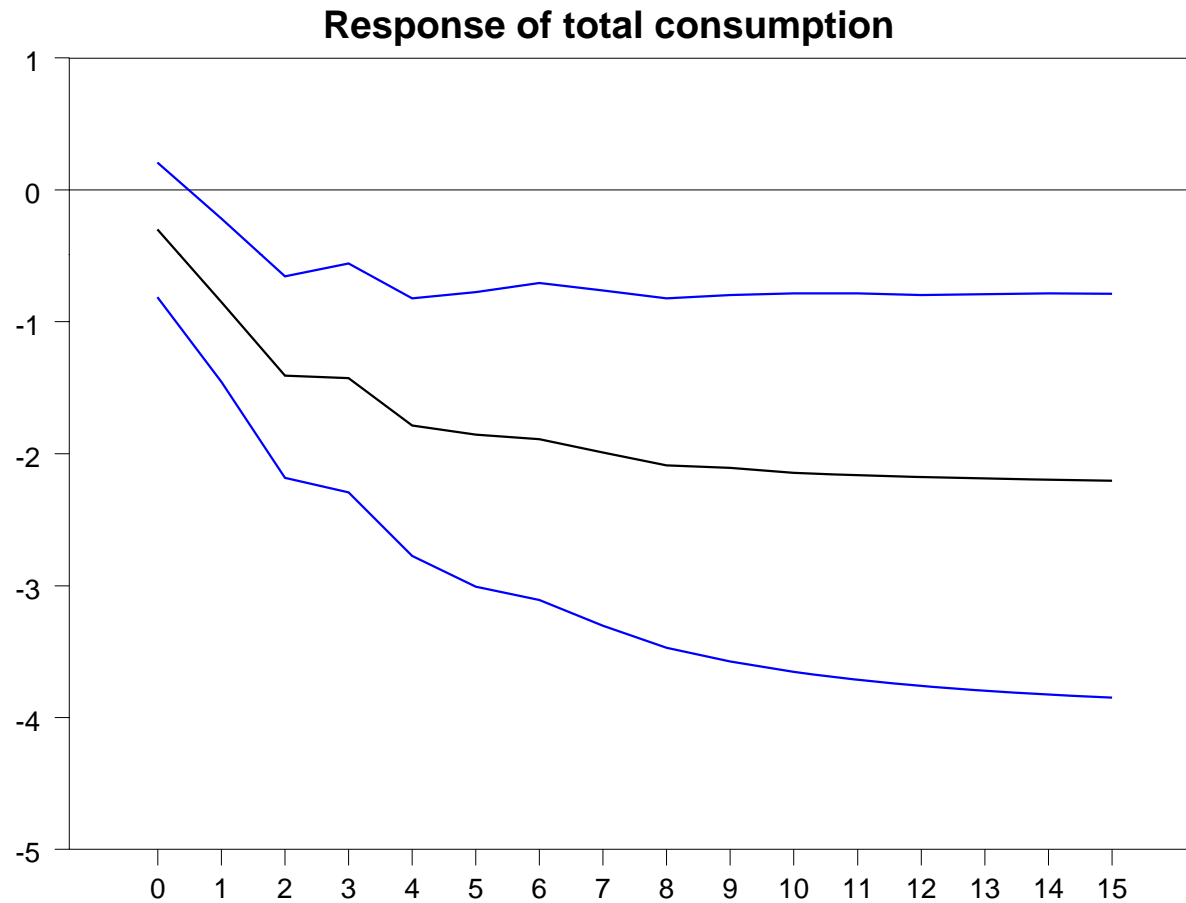
October 2010 production numbers

country	production (1000 b/d)	production (% of world total)
Tunisia	80	0.1%
Egypt		
production	662	0.8%
Suez Canal	1000	1.2%
SUMED	1100	1.3%
Libya	1789	2.1%
Algeria	2157	2.5%
Iran	4237	4.9%
Saudi Arabia	10,187	11.7%

Economic effects on U.S. GDP of current developments

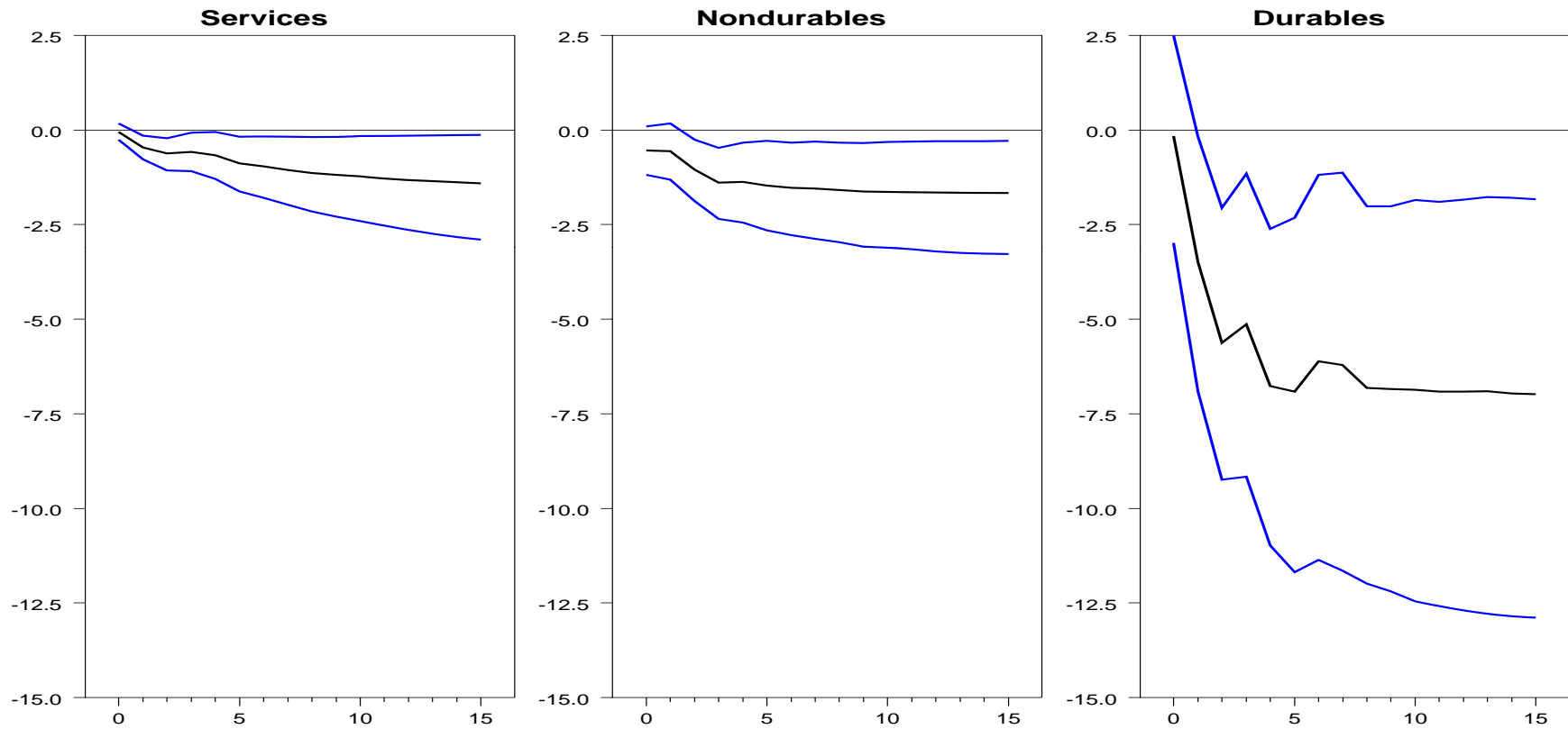
- Gasoline has increased 70¢/gal since Jan
- Americans consume 140 B gal/year
- If tried to buy same amount of gasoline, must cut other spending by \$100 B/year
- 0.67% slowdown in GDP

Pre-2007 estimated impulse-response function (and 95% confidence intervals) relating 100 times log of real consumption spending to x



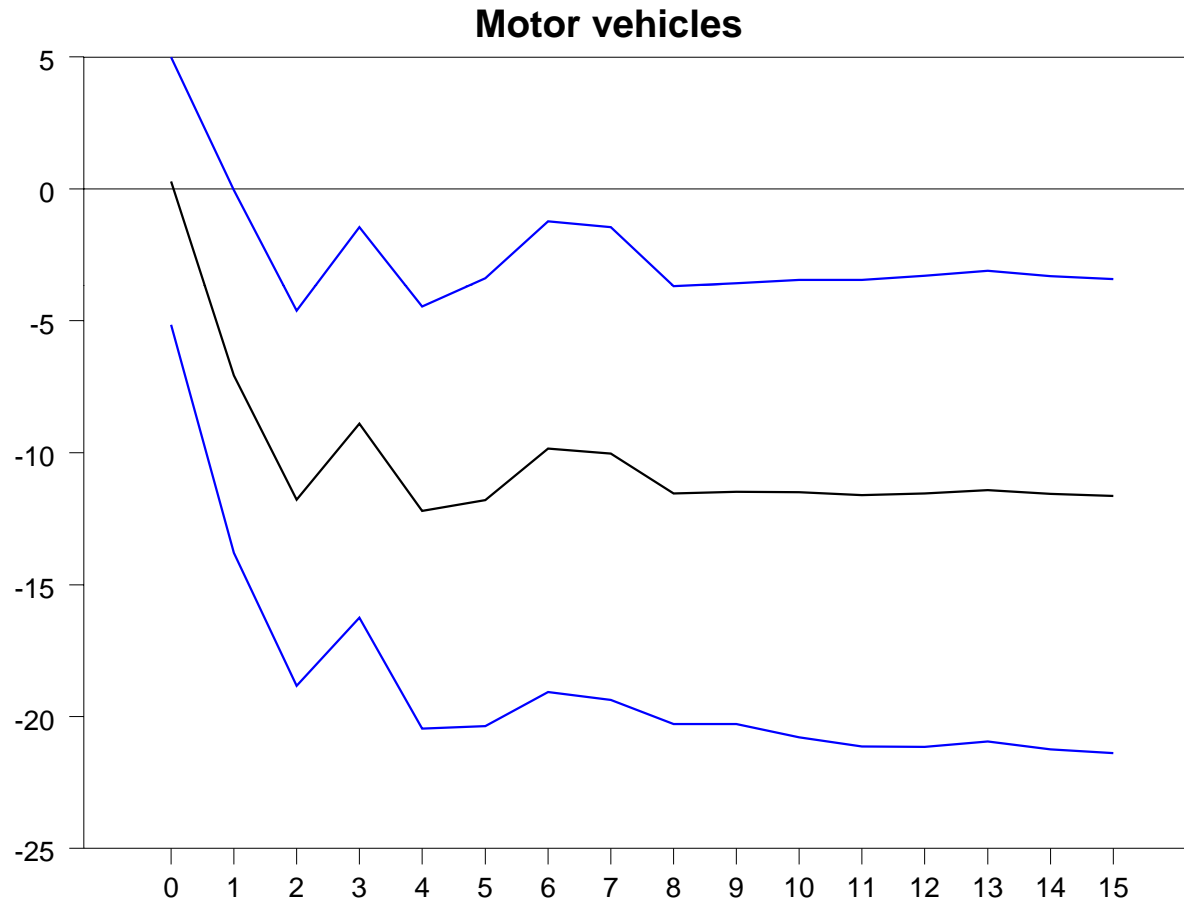
Reproduces Figure 8a in Edelstein and Kilian (2007)

Pre-2007 estimated impulse-response functions.



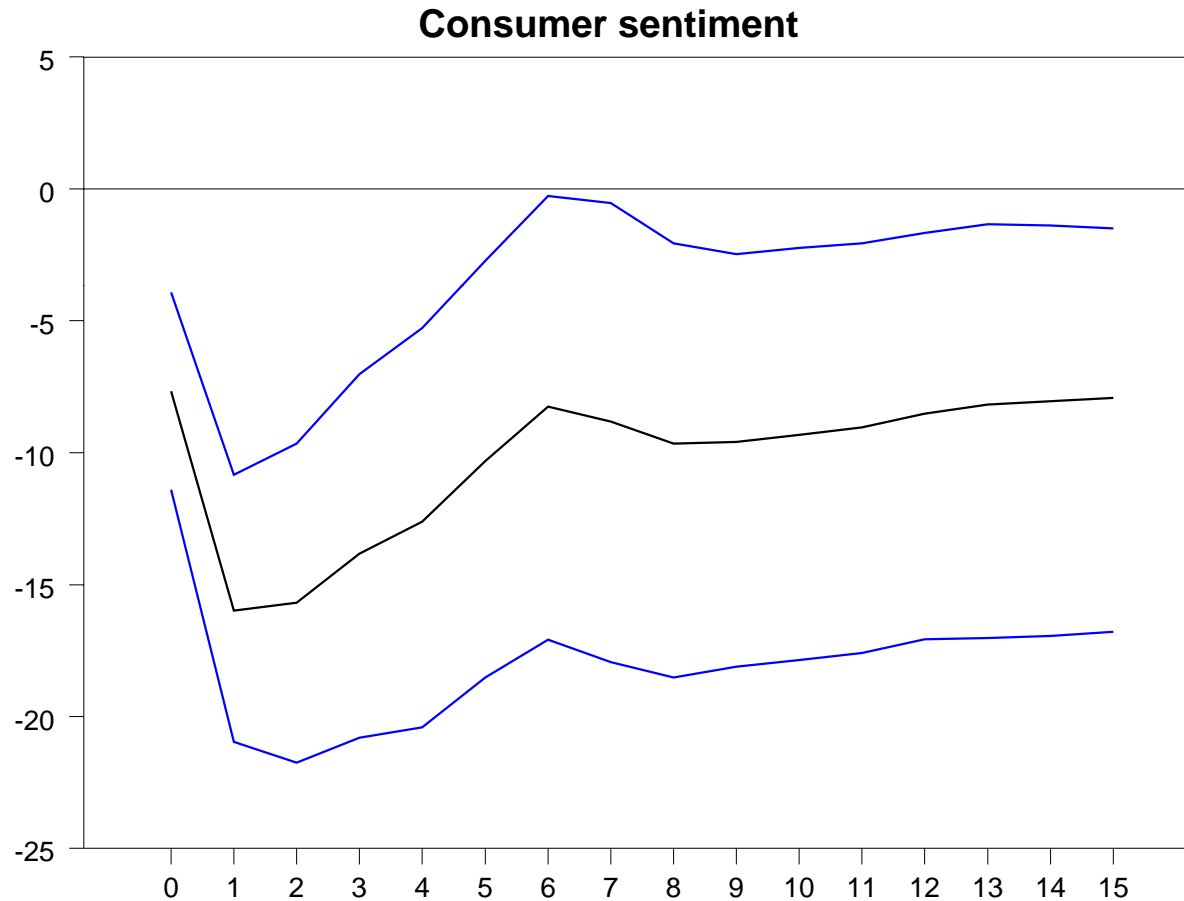
Reproduces Figure 8b-d in Edelstein and Kilian (2007)

Pre-2007 estimated impulse-response functions.



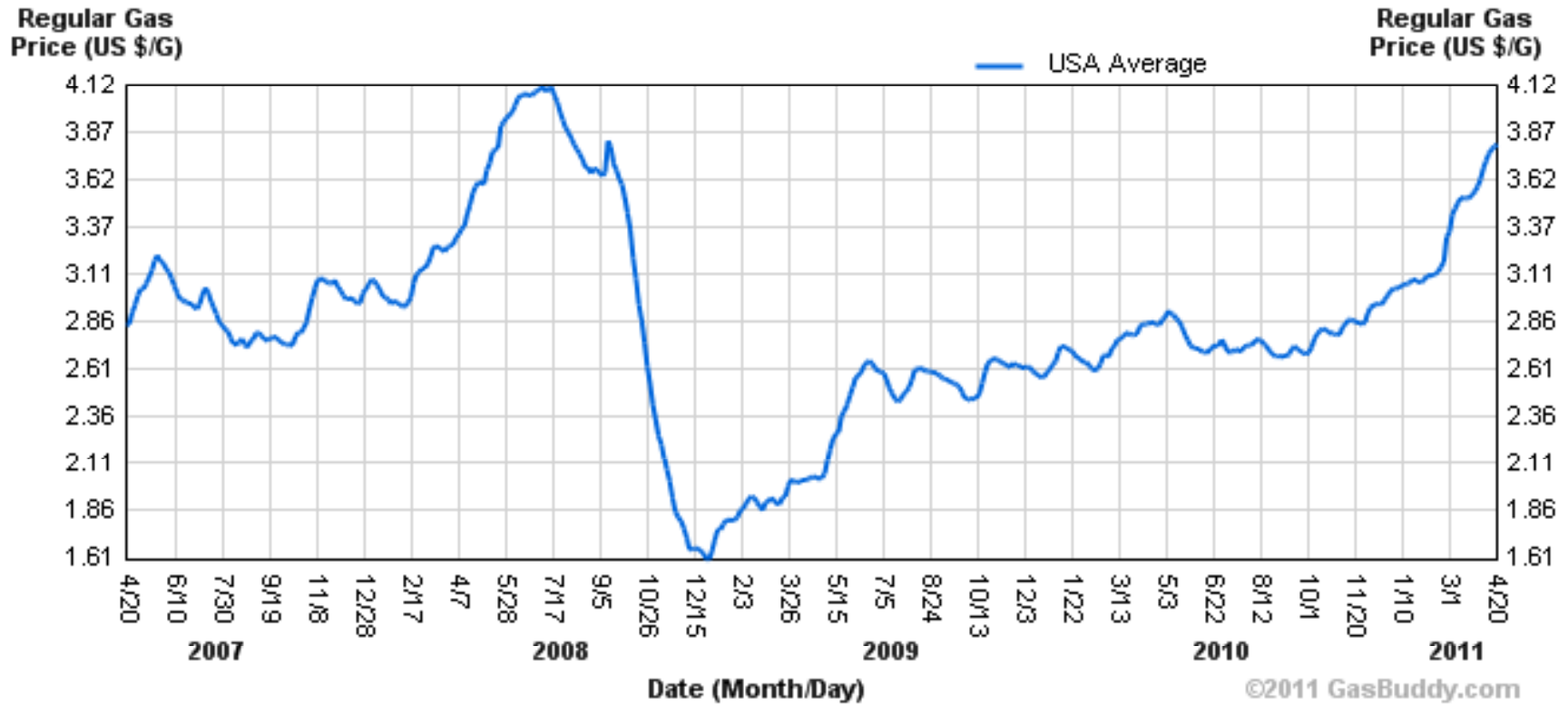
Reproduces Figure 8e in Edelstein and Kilian (2007)

Pre-2007 estimated impulse-response functions.

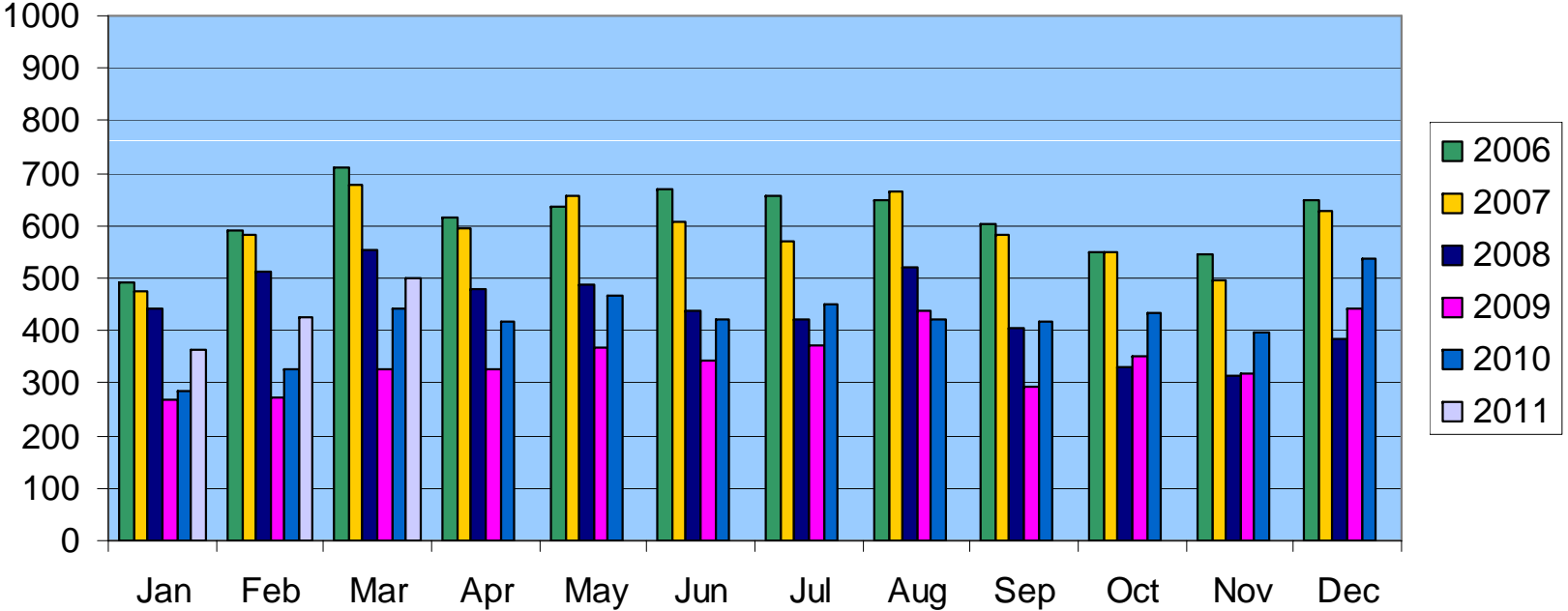


Reproduces Figure 11a in Edelstein and Kilian (2007)

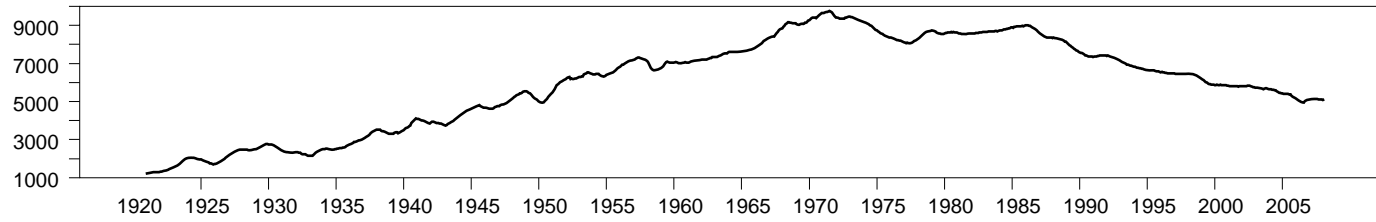
48 Month Average Retail Price Chart



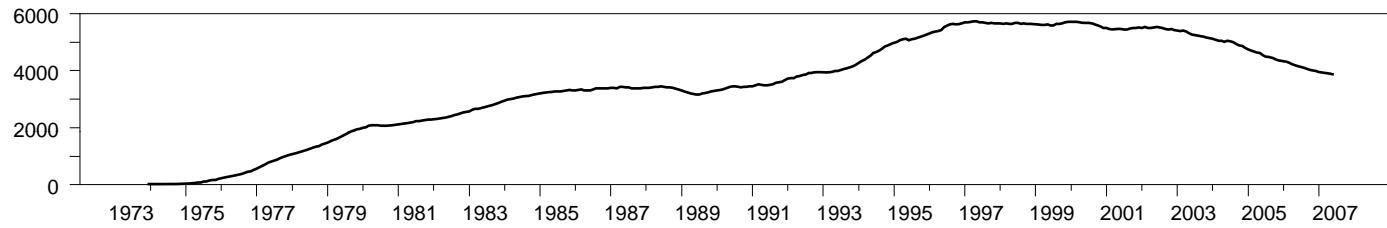
U.S. domestic light truck sales (thousands of units)



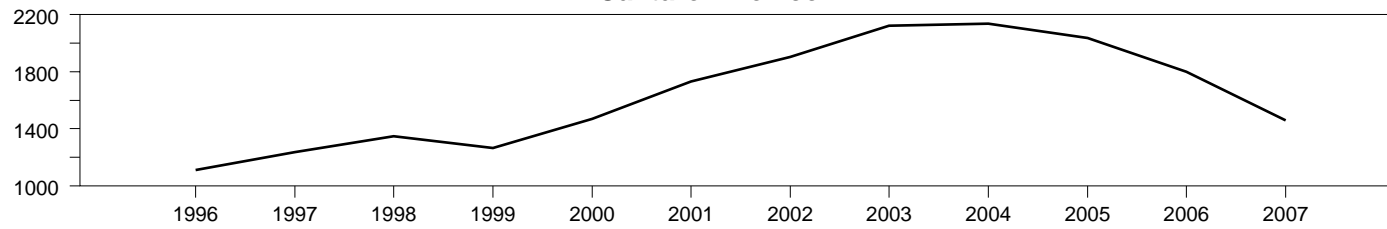
U.S.



North Sea



Cantarell Mexico



Saudi Arabia

