



2009 Oklahoma Economic Outlook

Metro Tech Economic Outlook Conference

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Tuesday, November 18, 2008



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Key Questions for 2009

- How serious is the current U.S. downturn?
- How will Oklahoma respond?





Recap of the Damage

- Housing collapse/subprime/bankruptcy
- Commodity price surge – esp. energy
- Exotic derivative markets collapse (pricing)
- Financial institutions collapse
- Stock market sell-off (Dow off 40%+)
- ST corporate debt market freezes
- LT corporate debt market tightens
- Municipal, credit cards, student loans,





Market and Govt. Reactions

- Aggressive Fed interest rate cuts
- Energy market sell-off
- Other commodities sell-off
- Household stimulus payments (\$150 bil)
- Finding a bottom in stock market (?)
- Federal action on financial inst's. (TARP, capital)
- ST debt markets resume functioning
- Likely household stimulus in 2009





Been Here Before – Many Times

- IMF study finds 42 major banking crises in 37 countries since 1970
- Some of the worst outcomes are in heavily regulated countries (e.g. Japan and S. Korea)
- Avg. bill for taxpayers is 15% of GDP
- Japan 25% of GDP, S. Korea 31%
- If this crisis costs \$1 trillion, 6-7% of GDP
- U.S. in Great Depression, 50-75% of GDP



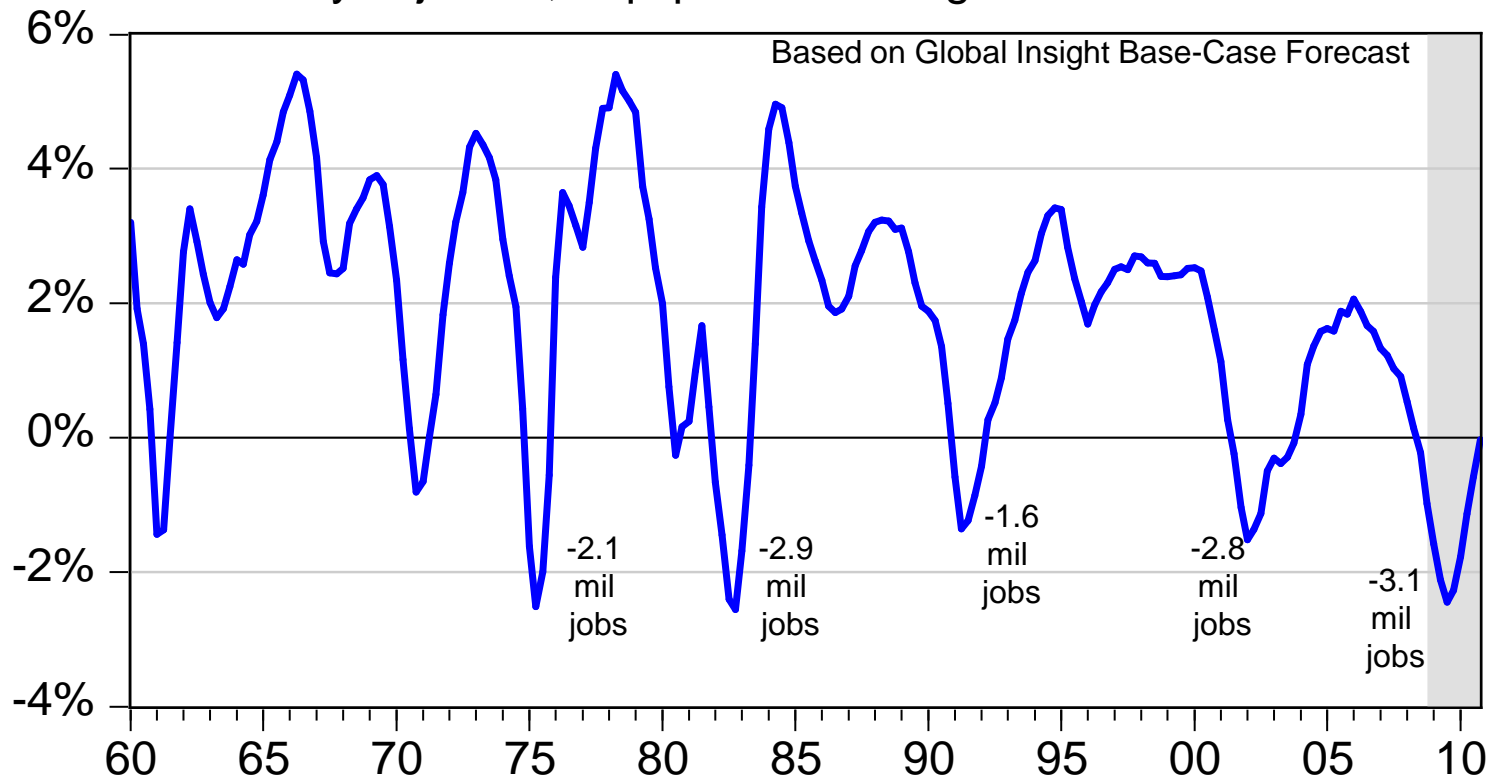


OK Forecast Assumes Severe US Recession



Growth in U.S. Non-Farm Employment

Seasonally adjusted, 4-qr percent change





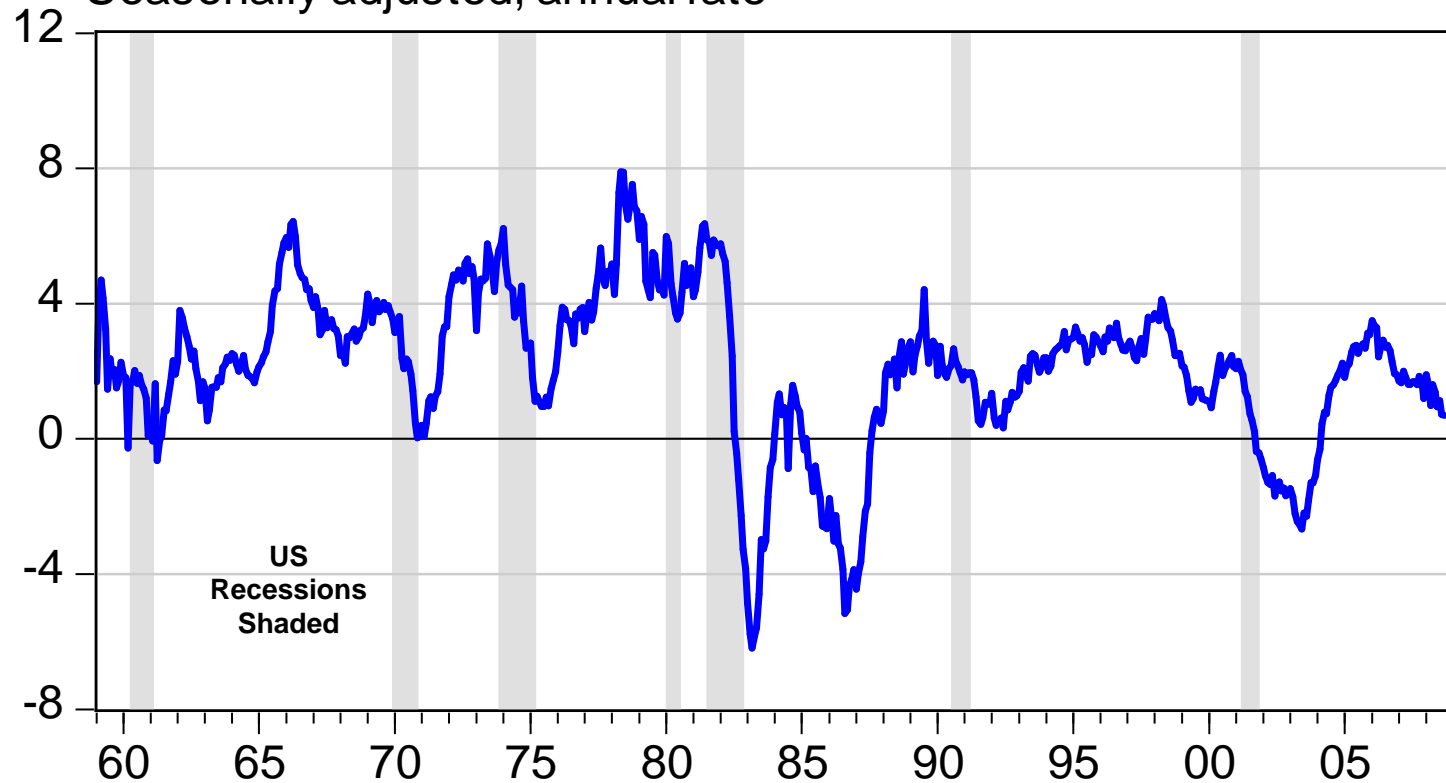
Oklahoma Not Always National-Like

Energy



Growth in OK Non-Farm Employment

Seasonally adjusted, annual rate





Oklahoma Response

Oklahoma's '09 outlook depends upon 2 factors:

Momentum:

- 1% job growth (top 10 in U.S.)
- 5%+ retail sales growth

Energy sector:

- Threshold - \$45-50 oil / \$6 natural gas





Job Gains in Central US / Energy States

Non-Energy States With Housing Issues Lag



Top Job Growth States

State	(Sep) 12-mo % Chg.	Job Growth Rank
Wyoming	2.8%	1
Texas	2.4%	2
S. Dakota	1.6%	3
Nebraska	1.3%	4
N. Dakota	1.2%	5
Maryland	1.1%	6
Colorado	1.1%	7
Montana	1.1%	8
Oklahoma	0.8%	9
U.S.	-0.8%	

Regional/Other States

State	(Sep) 12-mo % Chg.	Job Growth Rank
Kansas	0.5%	11
N. Mexico	0.2%	21
Arkansas	0.1%	22
Missouri	-0.5%	39
Florida	-1.4%	46
Georgia	-1.5%	47
Michigan	-1.8%	48
Arizona	-2.2%	49
Rhode Island	-2.6%	50





2009 U.S. Base Forecast Assumptions*

Weakness in 2008Q4, 2009Q1-Q2

- Recession extends through 2nd Qtr of 2009
- Job losses through 4th Qtr of 2009 (-1.5% in '09)
- Oil: \$50/bbl. in 2009, \$60 in 2010
- Nat. gas: \$6.50/mcf in 2009, \$7.50 in 2010
- Very weak manufacturing sector (Int'l trade)
- Unemployment rate from 6.5% to 8.25%

*Global Insight



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Key State Assumptions for '09

Positive

momentum

energy boost

state tax cuts

manufacturing

state banking

real estate

in-migration

rural strength

Neutral

agriculture

Negative

US economy

Int'l trade





2009 Oklahoma Economic Outlook

Small Job Losses Arrive in '09

Selected Oklahoma Indicators	2008e	2009f	2010f
Non-Farm Employment (Thou)	1582.6	1,580.5	1598.1
(% Change)	1.1%	-0.1%	1.1%
Personal Income (\$Mil)	133,557.4	137,763.0	142,602.3
	5.8%	3.1%	3.5%
Per Capita Personal Income (\$)	36,561	37,428	38,519
	4.7%	2.4%	2.9%
Ratio OK/US Per Capita Personal Income	91.9%	92.9%	94.2%
	1.4%	1.1%	1.4%
OK Population (Thou)	3,621.9	3,656.3	3,682.8
	1.2%	0.9%	0.7%
Unemployment Rate	3.7%	4.9%	5.2%
	-13.0%	31.4%	5.3%
Taxable Retail Sales (\$Mil)	45,148	46,874	48,355
	6.5%	3.8%	3.2%
OFHEO Oklahoma Housing Price Index	214.02	225.19	238.71
	4.2%	5.2%	6.0%





Metro Job Gains Reflect State Pattern

Wage & Salary Employment Forecast (Thousands)

Region	2007	2008e	2009f	2010f
Oklahoma	1565.9	1582.6	1,580.5	1598.1
	1.7%	1.1%	-0.1%	1.1%
OKC MSA	566.94	574.48	575.85	582.74
	1.2%	1.3%	0.2%	1.2%
Tulsa MSA	425.83	427.72	427.06	430.0
	1.6%	0.4%	-0.2%	0.7%





Pessimistic Case Assumptions

- U.S. GDP growth negative thru 4th Qtr 2009
- 10 Quarters of U.S. job losses thru 2nd Qtr 2010
- Oil: \$35/bbl. in 2009, \$50 in 2010
- Nat. gas: \$5.75/mcf in 2009, \$6.75 in 2010
- Unemployment rate from 6.5% to 9.3% in 2010

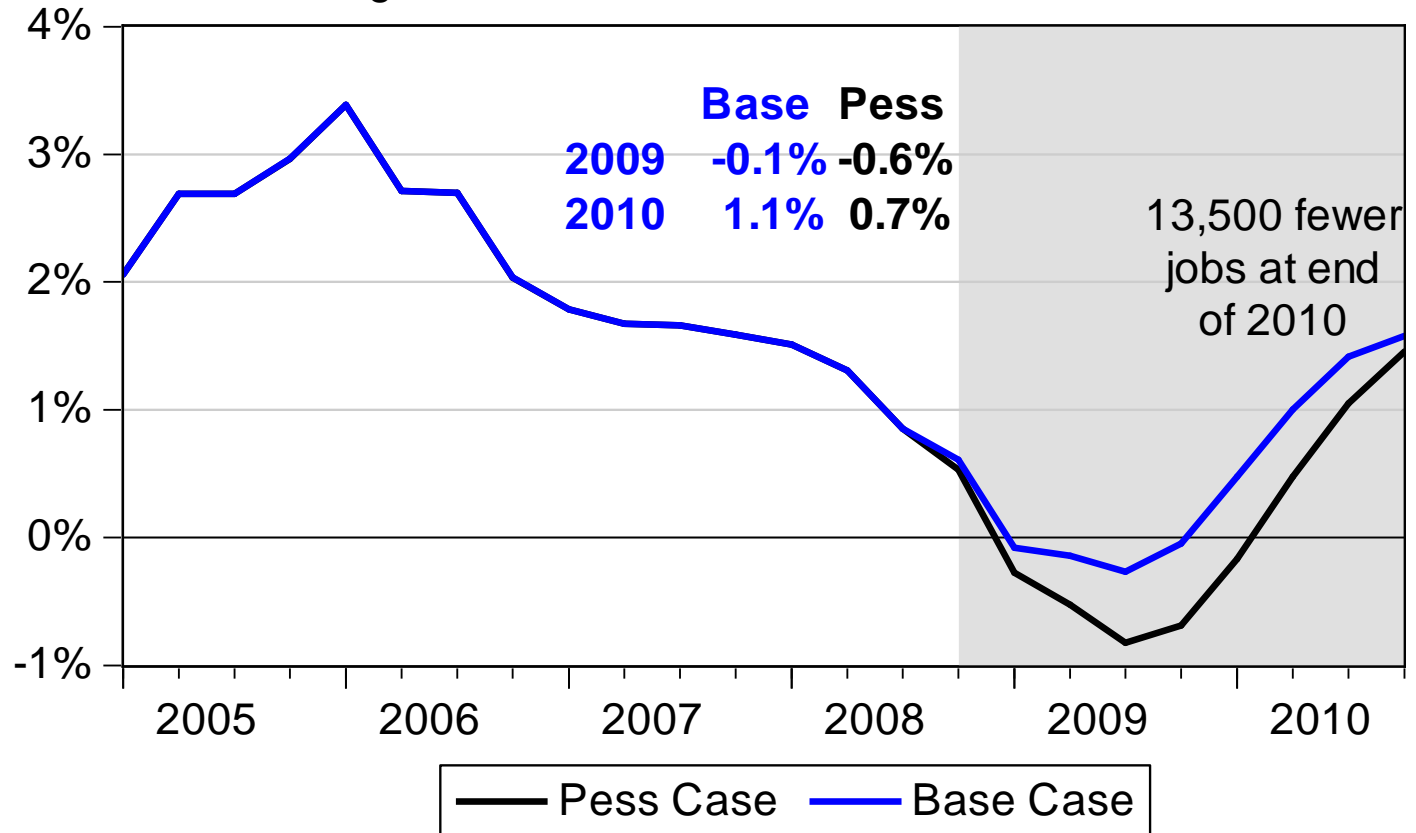




Pessimistic Case – Job Growth

Change in OK Wage & Salary Employment Scenarios

Percent change, annual rate

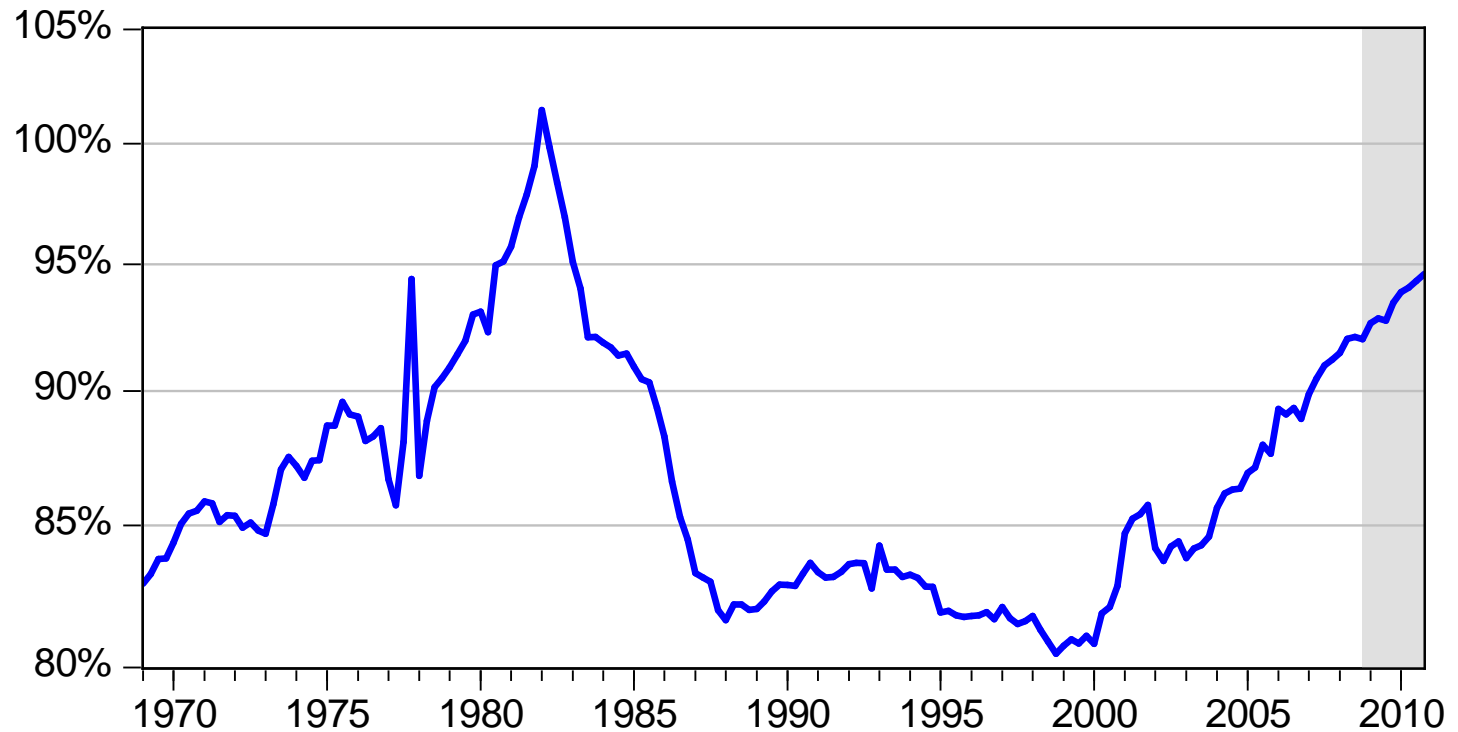




State Income Gains Continue

State at Highest Ratio Since Oil Bust

Ratio OK to US Per Capita Personal Income





Oklahoma Energy Model

- Link Energy Model to State Economic Model
- Energy Supply – Oil and gas activity, electricity production, drilling, royalties, tax revenue, etc...
- Energy Demand – Use by type and fuel residential, industrial, commercial, transportation coal, petroleum, natural gas, electricity, other

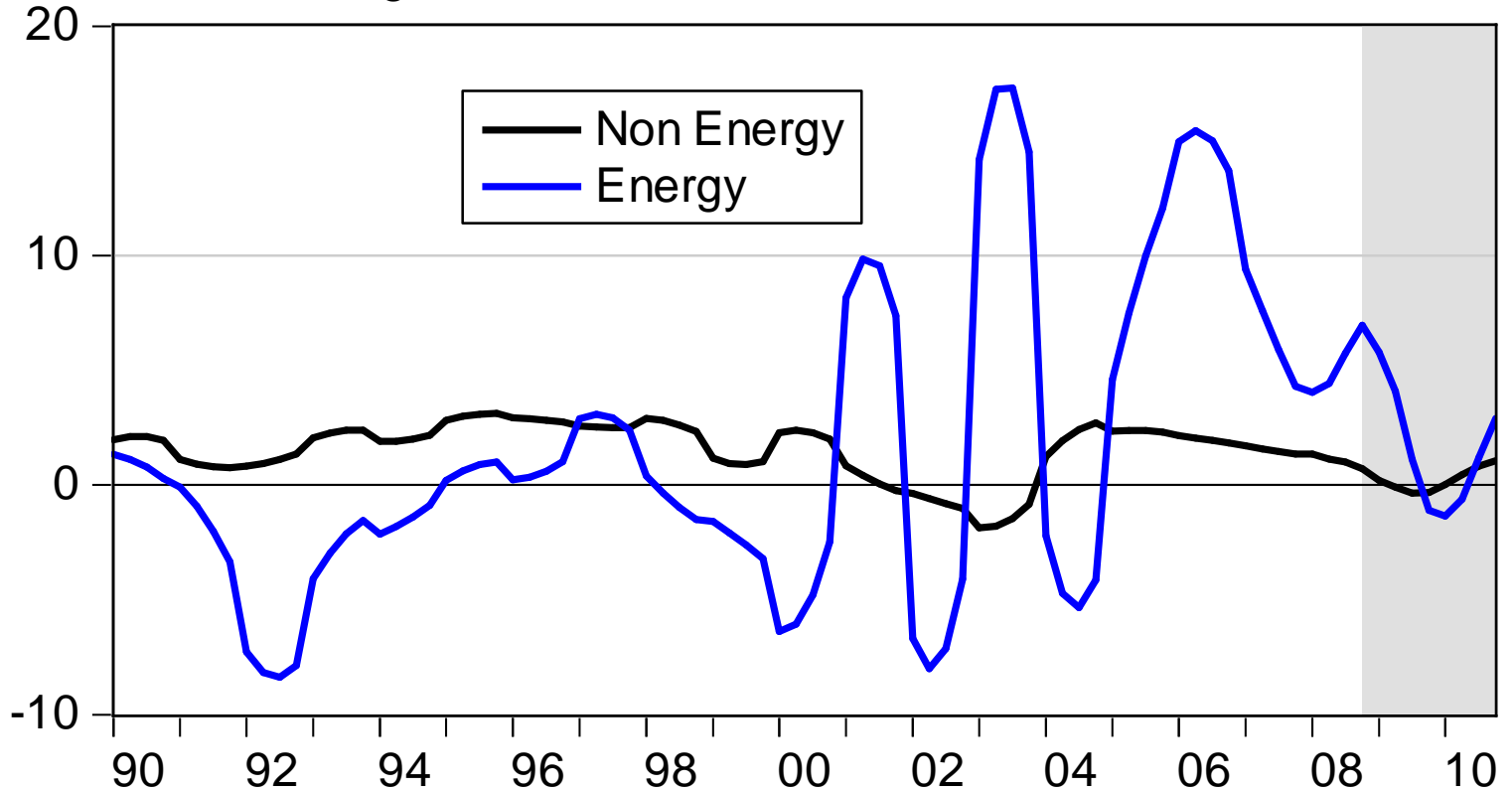
OERB and OG+E





Energy vs. Non Energy Job Impacts

Growth in Total Employment - Energy vs Non Energy
Percent change, annual rate



Net Energy Impact

Can now model:

- the net impact of changing energy prices
- changes in fuel use mix
- price, BTUs, and expenditures





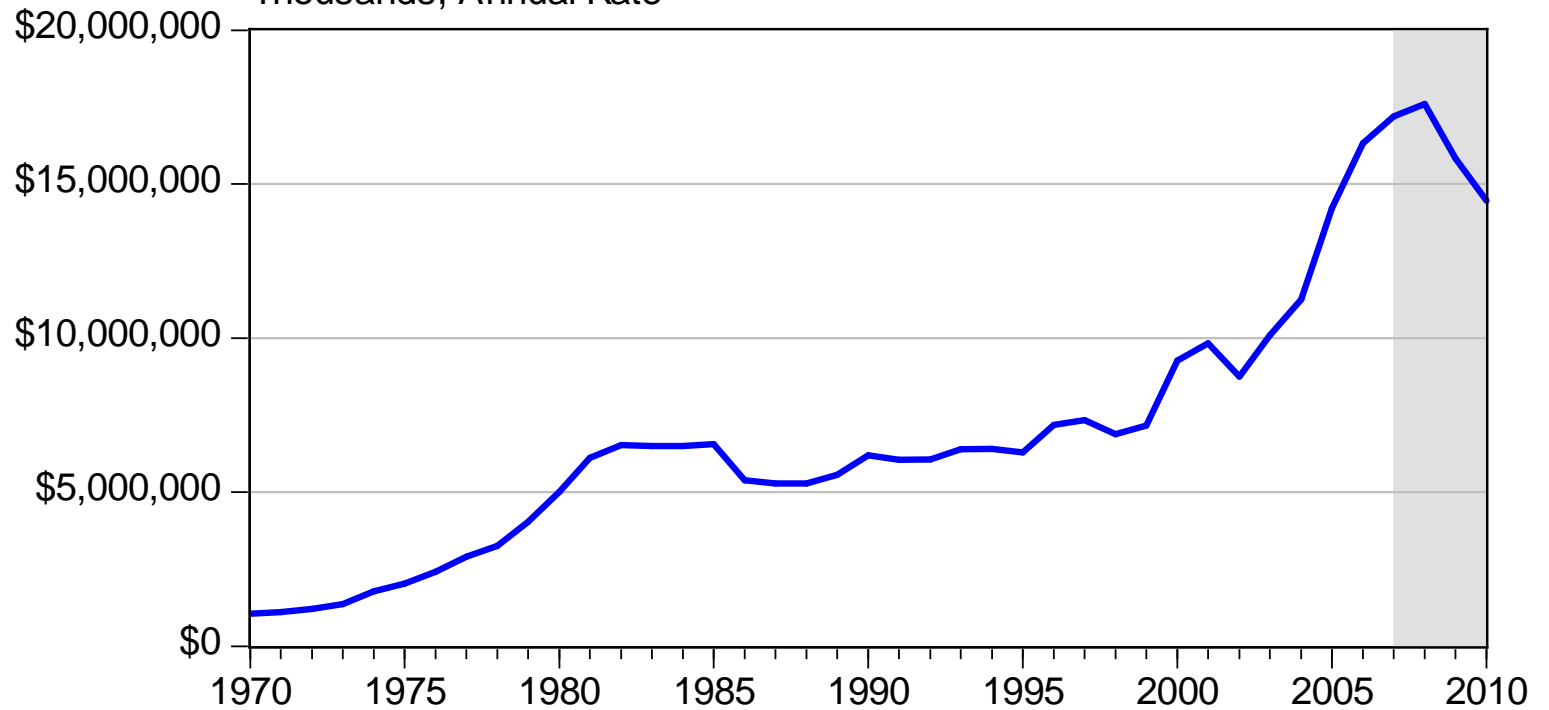
The \$18 Billion Question

OK Energy Expenditures Have Doubled Since 2001



OK Total Energy Expenditures

Thousands, Annual Rate

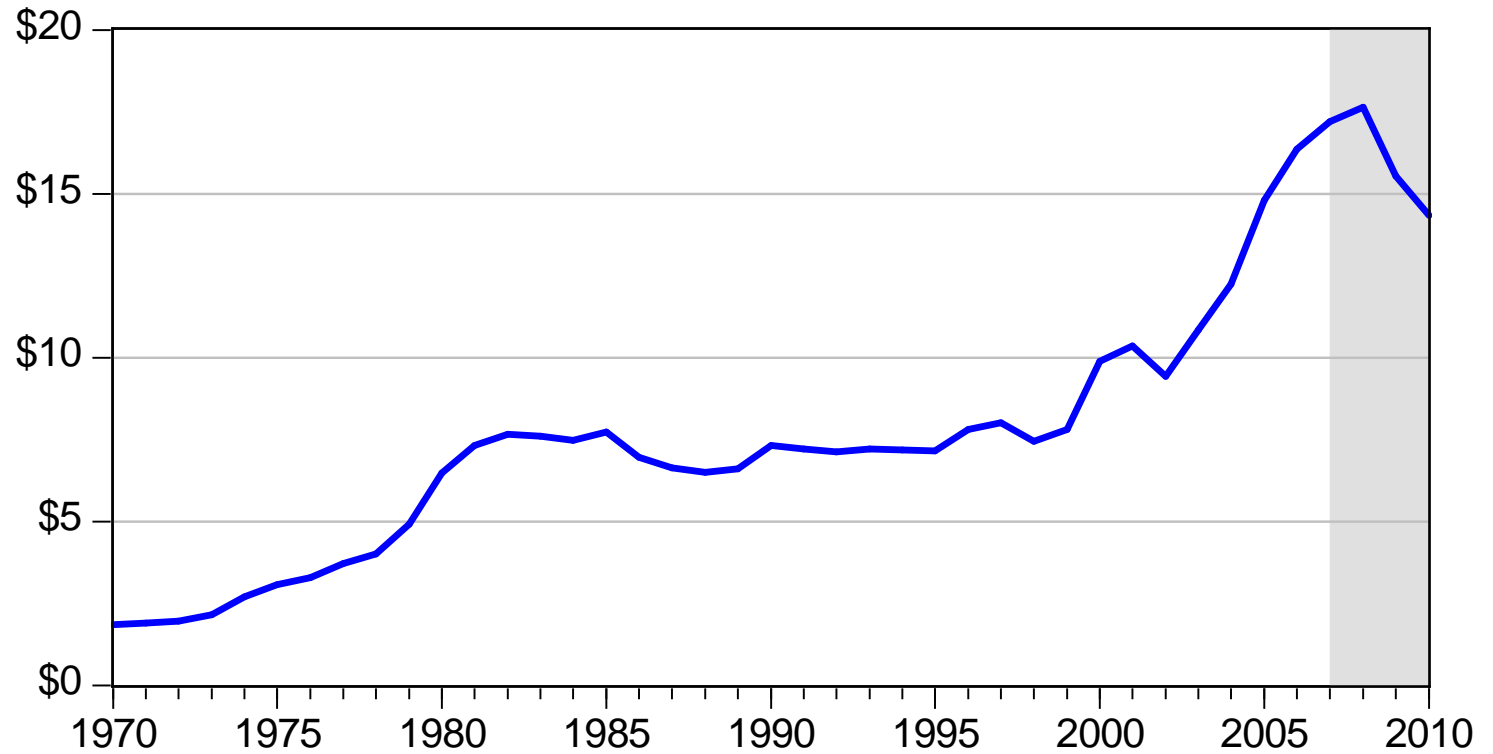




Costs Driven by Price, Not Quantity



OK Energy Price per Million BTUs

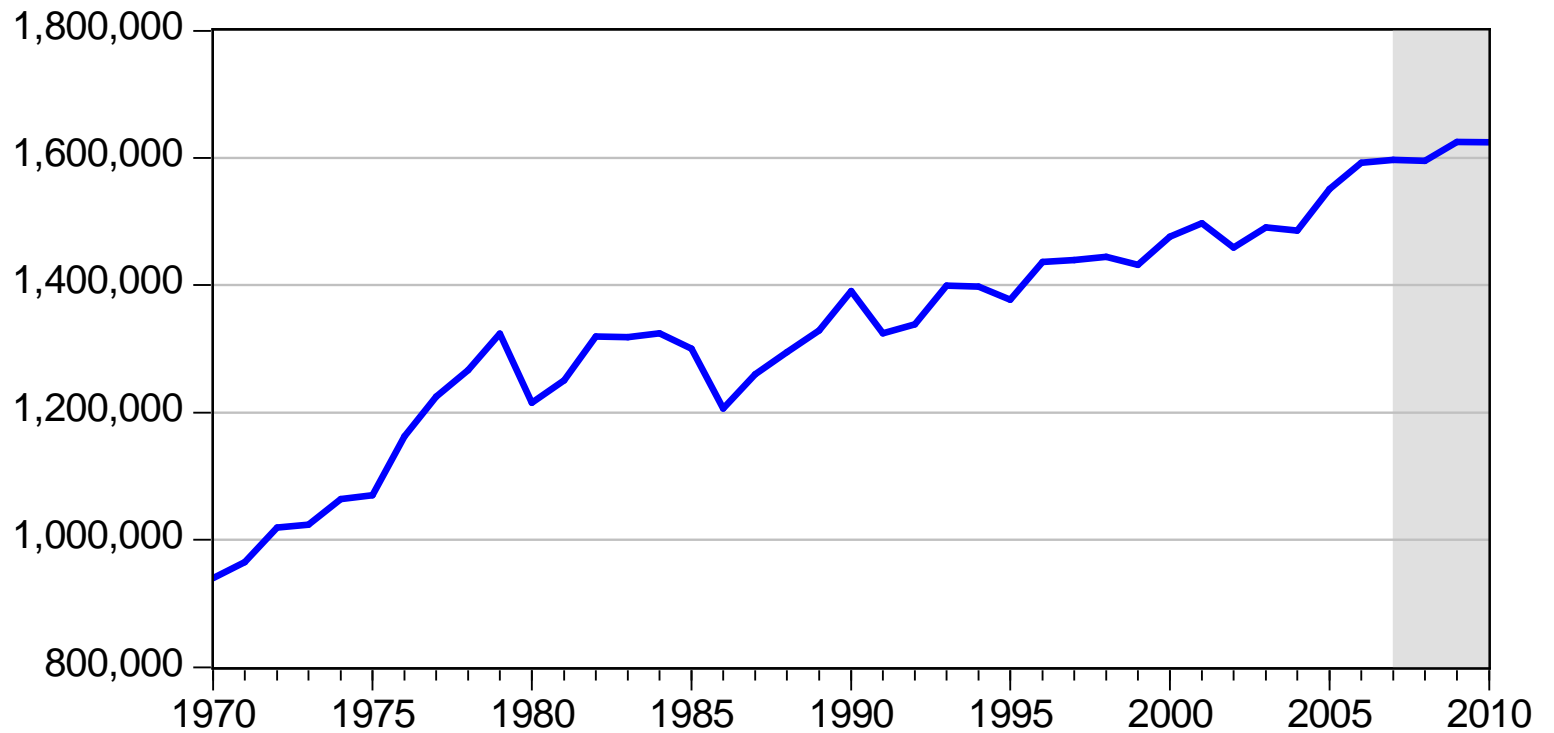




No Reduction in Energy Use in OK Through 2010

OK Total Energy Consumption

Billion BTUs





2008 Energy Costs – Who and What



2008 OK Final Energy Expenditures by Fuel and Use Type (\$Millions)

Fuel Type	Use Type				Total
	Residential	Industrial	Commercial	Transportation	
Coal	0.0	34.7	0.0	-	\$34.7
Natural Gas	928.3	1070.2	572.0	9.2	\$2,579.7
Petroleum	149.7	1881.0	77.1	8,644.6	\$10,752.4
Other Fuels	9.4	26.6	1.4	-	\$37.4
Retail Electric	1930.6	680.6	1421.9	0.0	\$4,033.1
Total	\$3,018.0	\$3,693.1	\$2,072.4	\$8,653.8	\$17,437.3





Energy Costs - Primary Use

2008 OK Primary Energy Expenditures by Fuel and Use Type (\$Millions)

Fuel Type	Use Type					Total
	Residential	Industrial	Commercial	Transportation	Electric Utility	
Coal	0.0	34.7	0.0	-	416.7	\$451.0
Natural Gas	928.3	1,070.2	572.0	9.2	2,191.2	\$4,939.1
Petroleum	149.7	1,881.0	77.1	8,644.6	7.9	\$10,760.3
Other Fuels	9.4	26.6	1.4	-	-	\$37.4
Total	\$1,087.4	\$3,012.5	\$650.6	\$8,822.0	\$2,615.8	\$16,188.3





Large Price Differentials Across Major Fuels

OK Energy Prices by Fuel and Use Type (\$ per million BTUs)						
Fuel Type	Use Type					
	Residential	Industrial	Commercial	Transportation	Electric Utility	Total
Coal	2.45	1.61	1.61	-	1.01	\$1.04
Natural Gas	11.16	9.00	10.53	11.11	8.04	\$8.92
Petroleum	18.11	13.33	15.54	16.46	11.85	\$15.91
Other Fuels	6.83	2.24	6.83	-	0.00	\$2.92
Retail Electric	23.31	14.97	20.51	0.00		\$20.12
Total	\$17.64	\$10.73	\$16.39	\$16.46	\$3.79	\$14.80





**Full forecast release will be available
online at:**

<http://economy.okstate.edu>

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