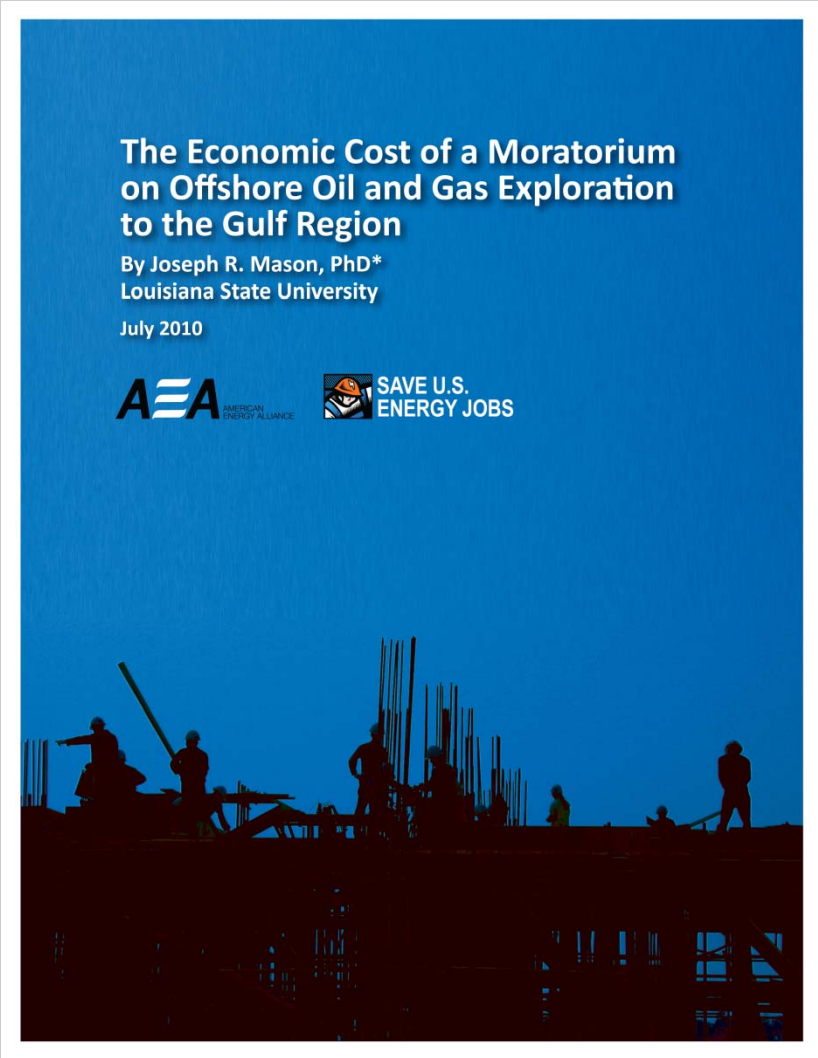
Economics, Policy, and Decision Support Systems

Dr. Joseph R. Mason

Prepared for the Louisiana EPSCoR Gulf Oil Spill Conference, November 1-2, 2010

Hermann Moyse, Jr./Louisiana Bankers Association Professor of Finance at Louisiana State University and Senior Fellow at the Wharton School.

The Gulf Moratorium



Available at : www.americanenergy alliance.org

The Gulf Moratorium is Dead: Long Live the Gulf Moratorium

De jure moratorium (finished)

Table 1

Summary of Potential Lost Economic Activity

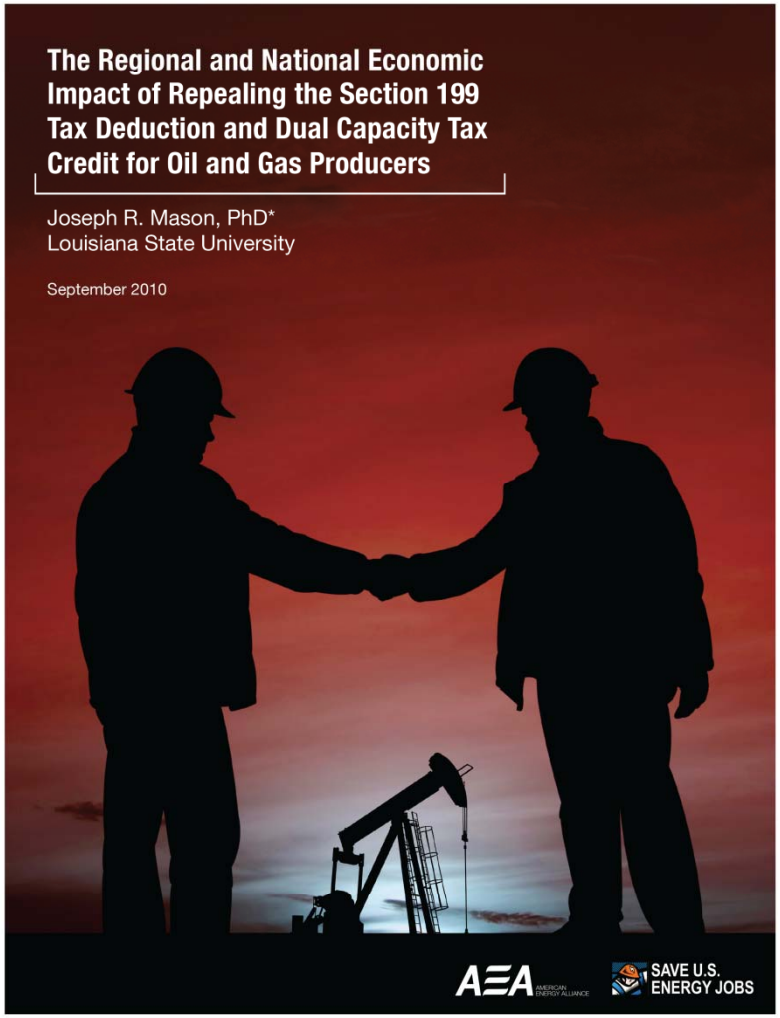
	Total GOM	Total U.S.	Spillover Effects
Output ($ Mil)	-$2,110	-$2,769	-$659
Employment (Jobs)	-8,169	-12,046	-3,877
Wages ($ Mil)	-$487	-$707	-$219
State & Local Tax Revenues ($ Mil)	-$98	N/A	N/A
Federal Tax Revenues ($ Mil)	N/A	-$219	N/A

Note: Production is assumed to be stopped for six months. Losses are expected to accrue over 12 months following the start of the moratorium, on May 30th, 2010.

De facto moratorium (ongoing)

	GOM Region	US
Output	$4.5 billion	$12.5 billion
Employment	NA	50,000

Punitive Tax Policies



Available at : www.americanenergy alliance.org

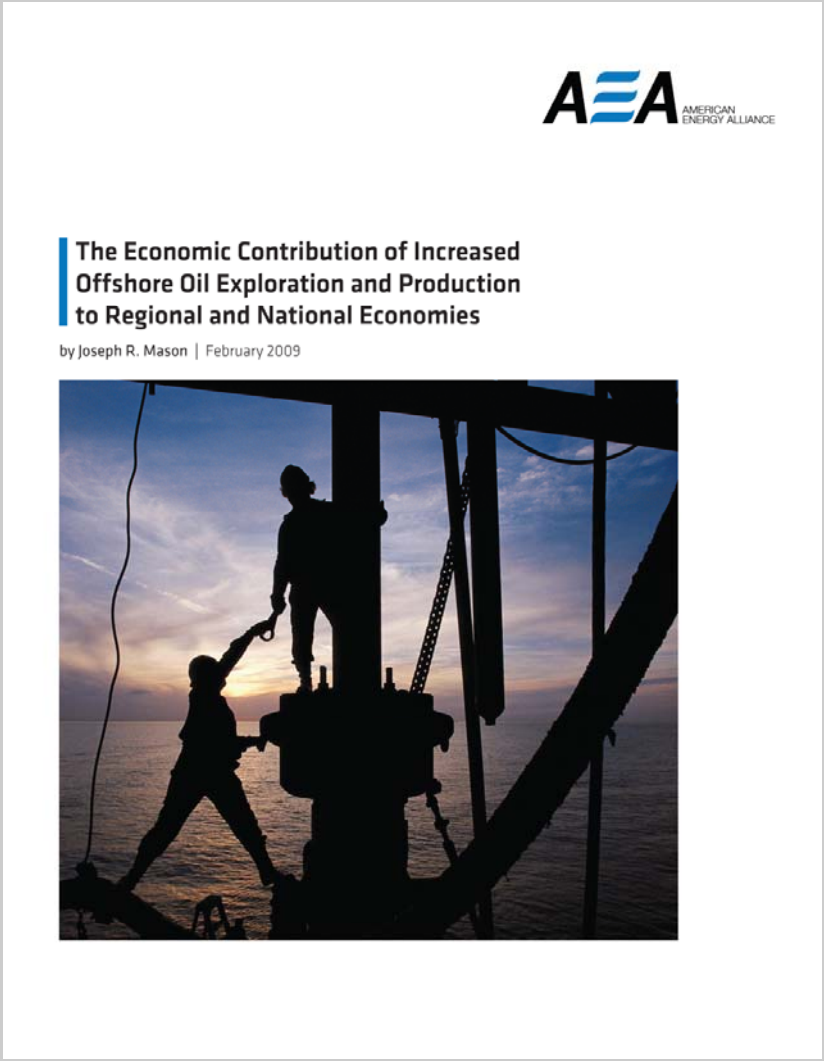
Punitive Tax Policies

Summary of the Lost Economic Activity from Repealing the Section 199 and Dual Capacity Tax Credits, 2011-2020

	Gulf of Mexico	Total U.S.
Output ($ Millions)	$126,507	$341,314
Employment (Jobs, 2011)	56,709	154,901
Wages ($ Millions)	$24,021	$67,800
Tax Revenues ($ Millions)	$600*	$83,500

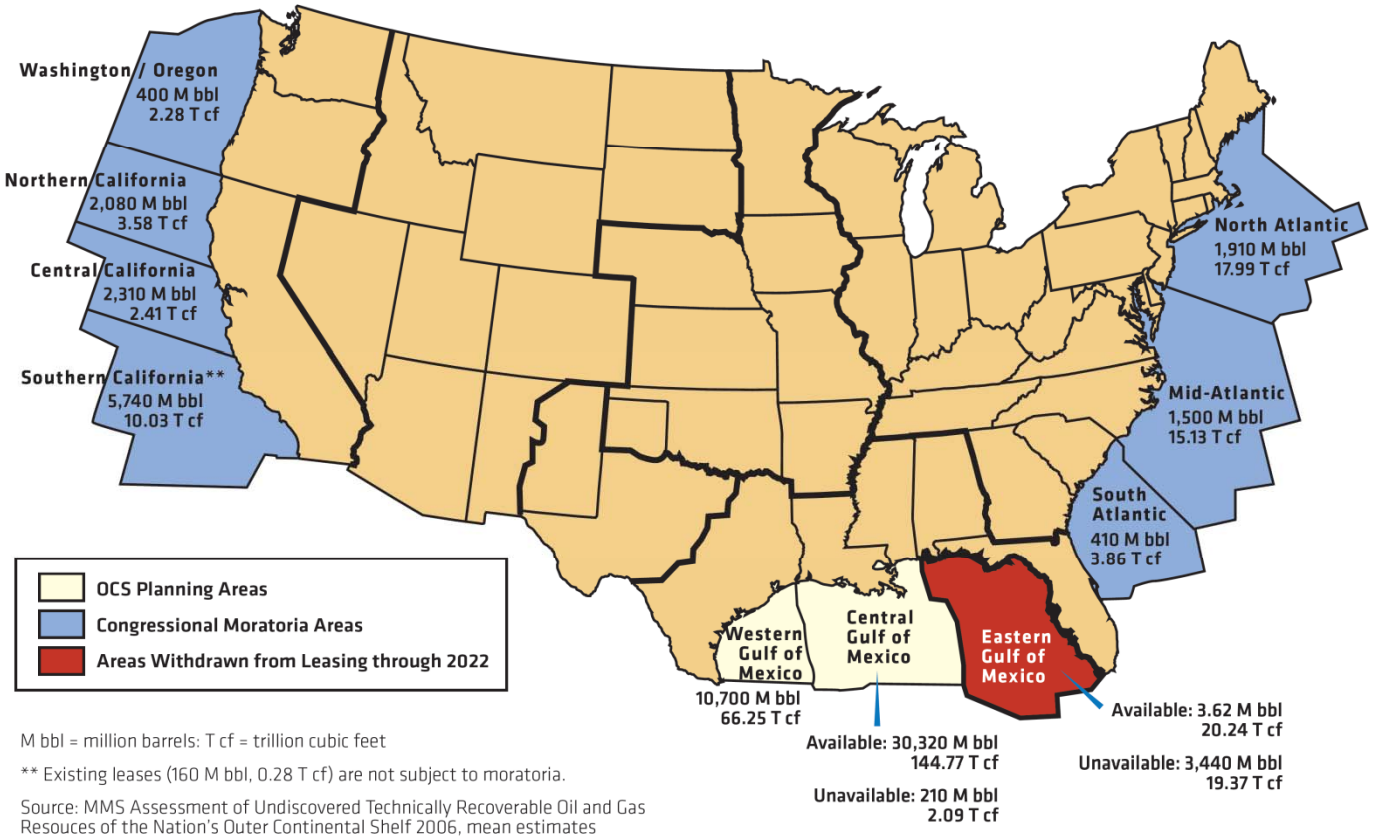
** State and local tax revenues only.*

Still Need Fossil Fuels



Available at : www.americanenergy alliance.org

Figure 2: OCS Planning Areas and Estimated Resources, 2006



M bbl = million barrels; T cf = trillion cubic feet

** Existing leases (160 M bbl, 0.28 T cf) are not subject to moratoria.

Source: MMS Assessment of Undiscovered Technically Recoverable Oil and Gas Resouces of the Nation's Outer Continental Shelf 2006, mean estimates

Source: Phyllis Martin, Unpublished U.S. Energy Information Administration memorandum (based on MMS Assessment of Undiscovered Technically Recoverable Oil and Gas Resources Of the Nation's Outer Continental Shelf, 2006), on file with the author.

Note: Alaska OCS Planning Areas not shown here. Only one Alaska OCS Planning Area (Northern Aleutians) was subject to an exploration and production moratorium.

Economic Value to the U.S.

Table 1: Summary of Estimated Annual Effects

	Short-Run	Long-Run
Output (GDP)	$73 billion	$273 billion
Employment	0.27 million	1.2 million
Wages	$15.7 billion	$70 billion
Federal Tax Revenue	$11.1 billion	$54.7 billion
State and Local Tax Revenue	$4.8 billion	$18.7 billion
Royalty Revenue	–	$14.3 billion

Note: Short-run effects are provided annually during the first years of the investment (pre-production) phase; Long-run effects are provided annually during the production phase.

Economic Value: Output

Table 7: Increase in Annual Coastal State Output from Initial Investments in Previously Unavailable OCS Planning Areas and Additional Refining Capacity

State	Increased Output (GSP)
Alabama	$20,873,419
Alaska	$3,287,291,886
California	$11,589,928,285
Connecticut	$213,207,691
Delaware	$79,451,918
Florida	$2,522,030,426
Georgia*	$79,429,171
Illinois	$2,612,085,664
Louisiana	$9,858,045,031
Maine*	$522,869,535
Maryland	$94,456,274
Massachusetts	$412,991,091
Mississippi	$17,621,395
New Hampshire*	$29,812,737
New Jersey	$2,008,269,450
New York	$265,892,918
North Carolina	$872,999,845
Oregon	$174,912,788
Pennsylvania	$2,209,429,182
Rhode Island*	$91,731,497
South Carolina	$138,596,073
Texas	$16,300,728,058
Virginia	$334,674,003
Washington*	$1,725,347,789
Total	$55,462,676,125

Table 8: Increase in Annual Coastal State Output from Production in Previously Unavailable OCS Planning Areas and Ongoing Refining

State	Total Value of Additional Output (GSP)
Alabama	$201,888,099
Alaska	$48,930,259,033
California	$76,298,162,454
Connecticut	$2,092,216,554
Delaware	$765,760,968
Florida	$27,753,900,791
Georgia*	$779,533,644
Louisiana	$1,802,204,893
Maine*	$5,130,941,998
Maryland	$910,373,595
Massachusetts	$4,052,699,947
Mississippi	$170,434,464
New Hampshire*	$292,553,710
New Jersey	$3,013,441,432
New York	$2,609,219,031
North Carolina	$8,414,009,695
Oregon	$1,953,535,784
Rhode Island*	$900,165,263
South Carolina	$1,360,209,361
Texas	$0
Virginia	$3,225,602,299
Washington*	$1,097,413,723
Total	$191,754,526,737

Economic Value: Employment

Table 9: Direct Increase in Annual State Employment from Initial Investments in Previously Unavailable OCS Planning Areas and Additional Refining Capacity

State	Increase in Employment (for seven years)
Alabama	80
Alaska	11,242
California	37,312
Connecticut	812
Delaware	245
Florida	20,454
Georgia*	375
Illinois	7,251
Louisiana	29,332
Maine*	2,467
Maryland	751
Massachusetts	1,296
Mississippi	65
New Hampshire*	141
New Jersey	5,098
New York	691
North Carolina	3,214
Oregon	1,444
Pennsylvania	6,248
Rhode Island*	433
South Carolina	1,259
Texas	49,152
Virginia	1,582
Washington*	4,596
Total	185,320

Table 10: Increase in Annual Coastal State Employment from Production in Previously Unavailable OCS Planning Areas and Ongoing Refining

State	Increase in Employment (for thirty years)
Alabama	770
Alaska	167,338
California	293,185
Connecticut	7,970
Delaware	2,357
Florida	225,093
Georgia*	3,678
Illinois	1,053
Louisiana	11,054
Maine*	24,207
Maryland	7,236
Massachusetts	12,715
Mississippi	631
New Hampshire*	1,380
New Jersey	12,204
New York	6,776
North Carolina	30,979
Oregon	16,130
Pennsylvania	908
Rhode Island*	4,247
South Carolina	12,360
Texas	7,140
Virginia	15,244
Washington*	5,778
Total	870,432

Economic Value: Wages

Table 13: Increase in Annual Wages from Initial Investments in Previously Unavailable OCS Planning Areas and Additional Refining Capacity

State	Wage Increase (Annual)
Alabama	$4,447,410
Alaska	$747,536,982
California	$2,465,191,125
Connecticut	$52,532,245
Delaware	$18,750,807
Florida	$605,466,700
Georgia*	$18,307,486
Illinois	$429,431,222
Louisiana	$1,701,573,555
Maine*	$120,515,252
Maryland	$22,387,324
Massachusetts	$92,056,241
Mississippi	$3,757,834
New Hampshire*	$6,871,484
New Jersey	$322,787,493
New York	$49,498,316
North Carolina	$198,719,597
Oregon	$40,819,597
Pennsylvania	$350,062,159
Rhode Island*	$21,143,027
South Carolina	$34,730,886
Texas	$3,006,003,178
Virginia	$76,904,284
Washington*	$280,493,413
Total	$10,669,987,617

Table 14: Increase in Annual Wages from Production in Previously Unavailable OCS Planning Areas and Additional Refining Capacity

State	Wage Increase (Annual)
Alabama	$43,015,435
Alaska	$11,126,842,219
California	$19,449,312,938
Connecticut	$515,501,256
Delaware	$180,721,080
Florida	$6,662,910,385
Georgia*	$179,673,298
Illinois	$62,378,919
Louisiana	$650,961,074
Maine*	$1,182,621,529
Maryland	$215,769,982
Massachusetts	$903,351,990
Mississippi	$36,345,837
New Hampshire*	$67,430,175
New Jersey	$697,228,233
New York	$485,729,176
North Carolina	$1,915,267,944
Oregon	$455,898,871
Pennsylvania	$50,849,817
Rhode Island*	$207,477,461
South Carolina	$340,855,812
Texas	$436,650,201
Virginia	$741,206,763
Washington*	$290,395,450
Total	$46,898,395,845

Economic Value: Public Revenues

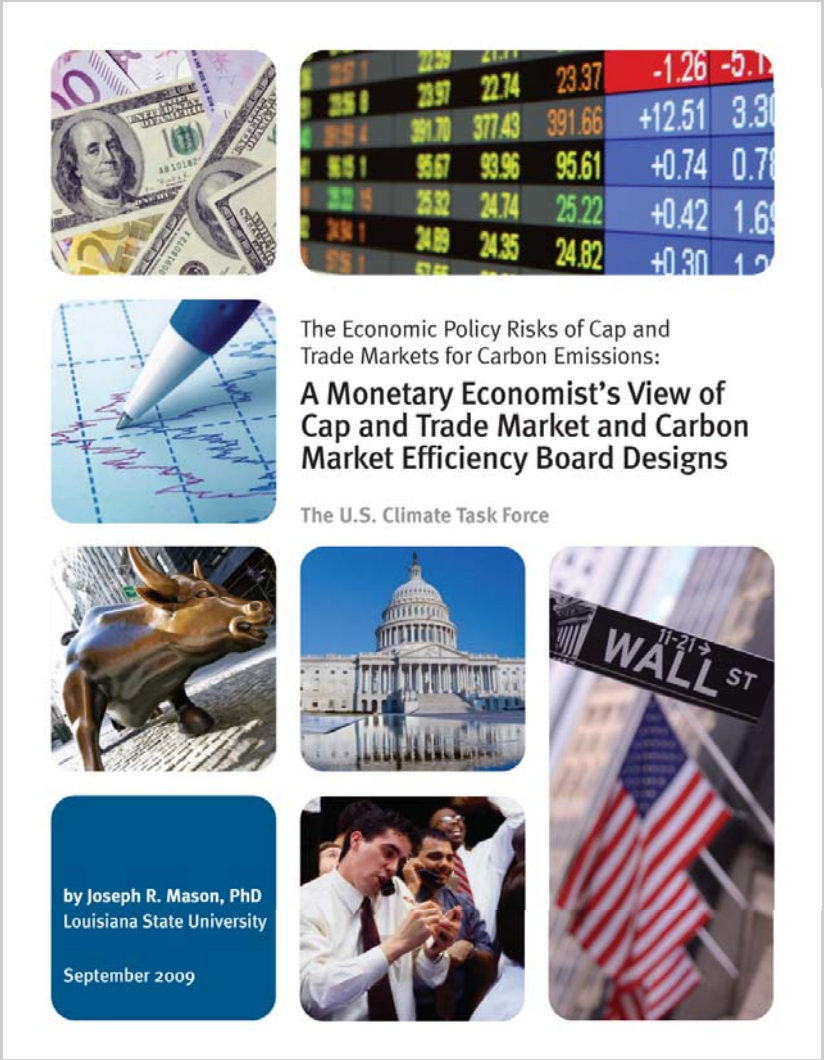
Table 17: Increase in Annual State and Local Tax Revenues from Initial Investments in Previously Unavailable OCS Planning Areas and Additional Refining Capacity

State	Change in Total State and Local Taxes
Alabama	$1,724,602
Alaska	$292,350,437
California	$1,124,647,452
Connecticut	$21,277,637
Delaware	$4,917,624
Florida	$242,593,625
Georgia	$6,695,593
Illinois	$239,358,200
Louisiana	$800,640,249
Maine	$66,933,111
Maryland	$9,715,833
Massachusetts	$38,754,772
Mississippi	$1,757,434
New Hampshire	$2,458,707
New Jersey	$217,425,477
New York	$33,179,832
North Carolina	$71,769,390
Oregon	$15,011,301
Pennsylvania	$9,081,256
Rhode Island	$14,606,903
South Carolina	$193,058,825
Texas	$1,205,889,874
Virginia	$27,987,252
Washington	$153,837,786
Total	$4,795,673,172

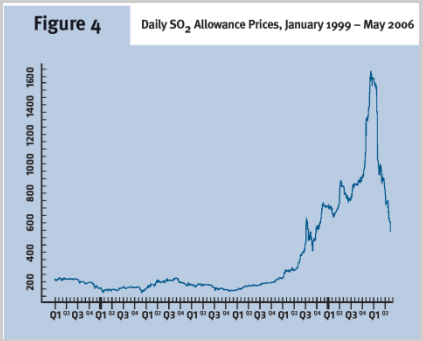
Table 18: Increase in Annual State and Local Tax Revenues from Production in Previously Unavailable OCS Planning Areas and Additional Refining Capacity

State	Average Increase in Tax Revenues (30 Years)
Alabama	$16,680,387
Alaska	$4,351,540,140
California	$7,492,016,775
Connecticut	$208,798,395
Delaware	$47,396,270
Florida	$2,669,642,414
Georgia	$65,711,876
Illinois	$34,769,027
Louisiana	$260,471,830
Maine	$656,817,596
Maryland	$93,641,613
Massachusetts	$380,302,298
Mississippi	$16,997,939
New Hampshire	$24,127,406
New Jersey	$353,004,224
New York	$325,595,168
North Carolina	$691,716,439
Oregon	$167,655,627
Pennsylvania	$89,114,774
Rhode Island	$143,355,048
South Carolina	$28,043,608
Texas	$175,166,833
Virginia	$269,742,323
Washington	$118,922,838
Total	$18,681,230,849

Energy Policy is Still Confused

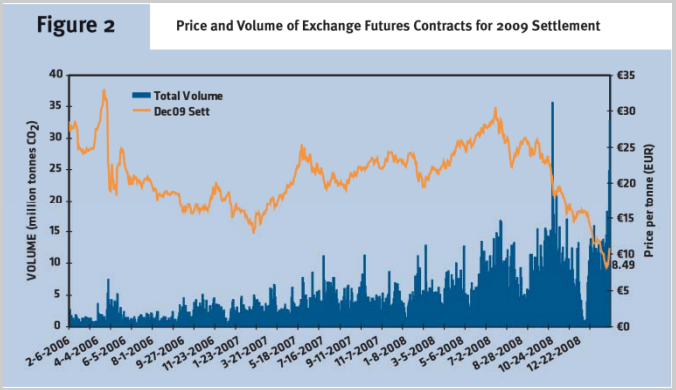


Cap and Trade(?)



...it is quite unreasonable to expect to efficiently manage innovative financially engineered markets of financial instruments with a long-term objective of decreasing supply and maintain reasonable economic efficiency in the short-term without substantial and sometimes repeated economic disruption.

...in adopting a cap and trade system we are hinging economic growth on a complex contract and a convoluted market design, both of which have yet to be tested in the real world.



Hence, managing a carbon permit market will be far more complex than managing the money supply, which — indeed — is already tremendously complex, leading to cyclical booms and busts that remain the focus of an entire body of economic research.

FT.com FINANCIAL TIMES
COMMENT
LETTERS

Cap and trade is a palatable way to implement high taxes

Print

Published: December 14 2009 02:00 | Last updated: December 14 2009 02:00

From Prof Joseph R. Mason

Sir, In "The politics of science; **Hot air? Claims put to the test**" (December 9), James Hansen's reply to the claim "Cap-and-trade schemes are a terrible idea . . . A carbon tax which is simple and honest, is a much easier task" is dismissed by maintaining that Mr Hansen is "no economist" and that "many economists say a market mechanism is needed to set a price for carbon while enforcing a fall in emissions". Who are those economists?

As with Wall Street, people who call themselves "economists" seem to be everywhere in this debate, but few hold PhDs in the discipline and study economic dynamics with the discipline and training required to be properly cited as such.

When I testified at the Senate Energy and Natural Resources Committee on cap-and-trade policy on September 15 2009, I was the only trained PhD economist in attendance and few other participants had any economic understanding of the economics of cap-and-trade applications.

A brief review of National Bureau of Economic Research (NBER) working papers since 1988 reveals only 23 papers on carbon, the consensus of which is that both a tax and a price established through cap-and-trade are equally regressive (a claim that third-world countries are making today, to no avail) and that price levels sufficient to change production and consumption decisions meaningfully are prohibitively high from a political standpoint.

Carbon is, in fact, a poor candidate for cap-and-trade due to the uncertainty about the desired size of the cap, a drama played out with the University of East Anglia e-mails. Moreover, US policymakers desire a cap-and-trade solution without price volatility, which is not a market solution at all.

Implementing cap-and-trade mechanisms without price volatility is economically the same as a tax: a set carbon price that does not fluctuate due to demand conditions. So why not just tax?

Dogmatic adhesion to cap-and-trade is really just a politically palatable way to implement high taxes. As in the credit crisis, trained economists have issued a consistent message that has been ignored by policymakers, who, after implementation, wonder why their policies don't work.

Joseph R. Mason,
Professor of Banking,
Louisiana State University,
Baton Rouge, LA, US

The Policy Muddle is becoming Clearer

THE WALL STREET JOURNAL.

WSJ.com

OCTOBER 14, 2010

Commission Is Stumped on Future of Offshore Drilling

Bloomberg

Initial Jobless Claims in U.S. Rose 13,000 Last Week to 462,000

By Courtney Schlisserman - Oct 14, 2010

Bloomberg

U.S. Producer Prices Rose in September on Food, Fuel

By Timothy R. Homan - Oct 14, 2010

Economic Value of the Industry (Regional Economics)

- Platform Economics
- Onshore-Local
- Onshore-National

- Policy Motivation-Precautionary Principle

- R&D: Spill Response

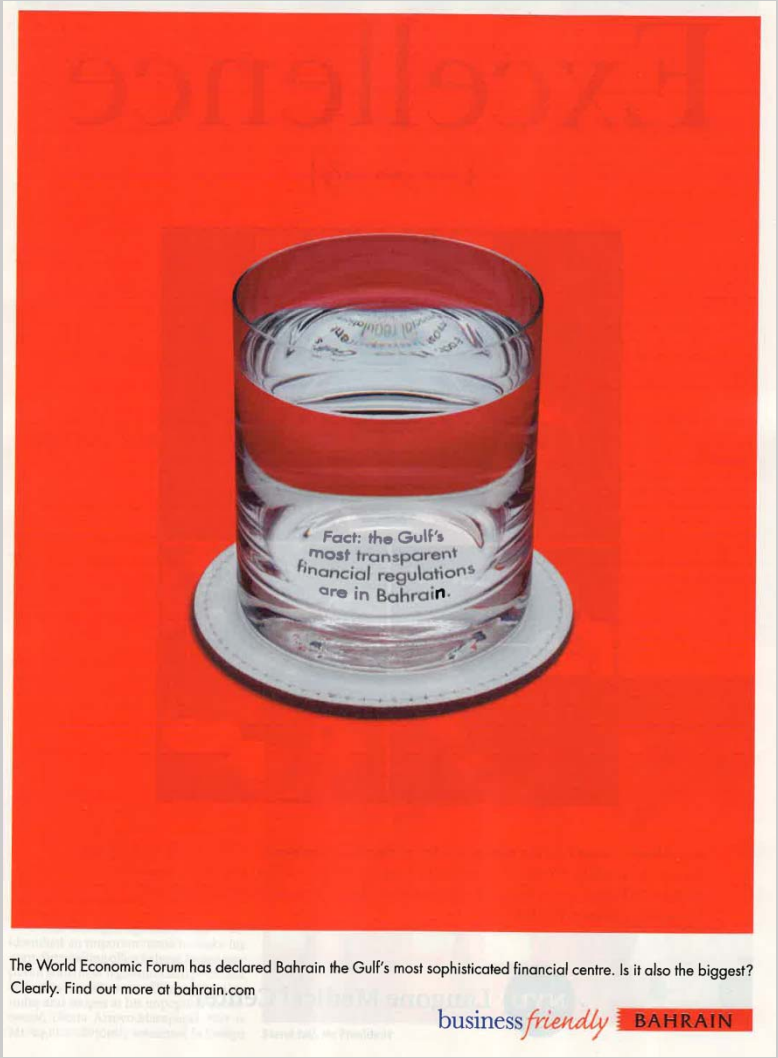
Capital Budgeting (Corporate Finance)

- Understanding project dynamics
  - Construction-/Drilling phase
  - Production Phase
  - Redeployment Phase

Regulatory Dynamics (Game Theory)

- Theory of Cooperative Games
  - Obtain Pareto-optimal outcome working together.
  - Precludes blind "precautionary" policies
  - Game-theoretic approach to regulation, generally.

Race to the Bottom?



From the Economist, magazine, 10/18/2010

Race to the Bottom?

From the Wall Street Journal, Philadelphia Home Delivery edition, 10/18/2010

Green Energy?

- Electric?
- Wind?
- Solar?
- Geothermal?

Logic will not win the argument

Economics, Policy, and Decision Support Systems

Dr. Joseph R. Mason

Prepared for the Louisiana EPSCoR Gulf Oil Spill Conference, November 1-2, 2010

Hermann Moyse, Jr./Louisiana Bankers Association Professor of Finance at Louisiana State University and Senior Fellow at the Wharton School.