“The Curse of Interesting Times”

CIPMA 2011 Canadian Fuel Marketing Conference, Montreal

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April 5, 2011

Today's Presentation

- The Global Economy
- Global Energy Markets
- North American Energy Markets
- The Convenience Store Business

The Global Economy

- Recovery from the *Great Recession* was moving ahead nicely until oil prices rose and Japan suffered its tragic earthquake.
  - Global inflation was an underlying threat.
  - The increase in oil prices and Japan's situation will create problems.
- Canada's economy is nicely positioned to grow strongly.
- However, economic malaise in the United States could infect its neighbor to the north.
  - Continued troubles in housing will suppress the American consumer.
  - The U.S. dollar must decline relative to the euro and the loonie.

Economic Growth Has Returned Despite Problems in the U.S. and Europe

- China, other Asian countries, and Brazil are providing a strong foundation to economic growth.
- Activity in Europe has picked up as demand for exports from other parts of the world has picked up.
- A weaker U.S. dollar is helping boost U.S. exports and cut U.S. imports. The U.S. Federal Reserve is forcing China to do what it did not want to do: revalue its currency.

Global Growth Is Threatened by Increasing Inflation

- China's spectacular growth of more than ten percent per year is threatened by the possibility of an even higher inflation rate.
  - The government held the renmimbi/dollar exchange rate down to promote exports.
  - The policy had the effect of importing inflation.
  - Money supply has been increasing at 25 percent per year, suggesting an inflation rate of 15 percent.
- Brazil, another economic leader, is similarly threatened. Its money supply is growing rapidly.
- The year may end with much higher interest rates and lower growth in these countries.

An Aside on Economic Theory
(Real GDP) x Prices = M x V

- The standard economic model postulates real output multiplied by prices equals the stock of money times inflation.
- For shorthand purposes, economists general focus on
  - The rate of real growth
  - The rate of growth in money supply
- The inflation rate is the difference.
- Thus, with ten-percent growth and 25-percent growth in money supply, China likely gets an inflation rate of 15 percent.
- By allowing its currency to increase, the country could have had a lower growth rate and reduced inflation.

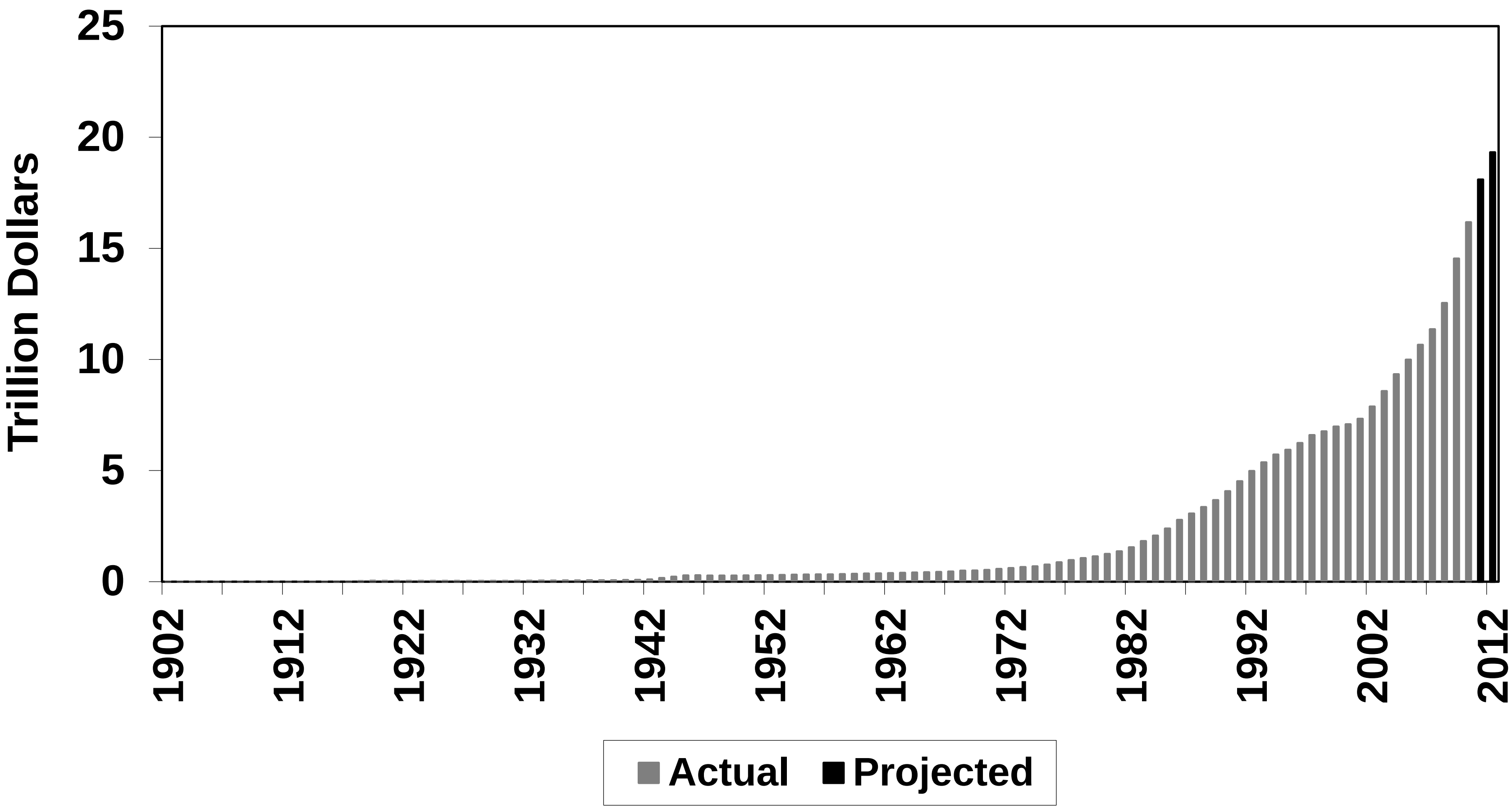
Canada Is Very Well Positioned

- Canadian growth will be strong due to the Bank of Canada's sound policies and the nation's role as a commodity exporter.
- Canadians should nominate their central banks for sainthood. They refuse to allow the country's banks to engage in the risky transactions undertaken by their American counterparts.
  - Homeowners are required to post significant down payments.
  - Bank regulators denied banks the opportunity to engage in stupid transactions.
  - Canada remained "nice and dull" and profited.
- Increasing oil and agricultural prices will boost growth going forward.

The U.S. Economy Will Be a Global Millstone for a Decade

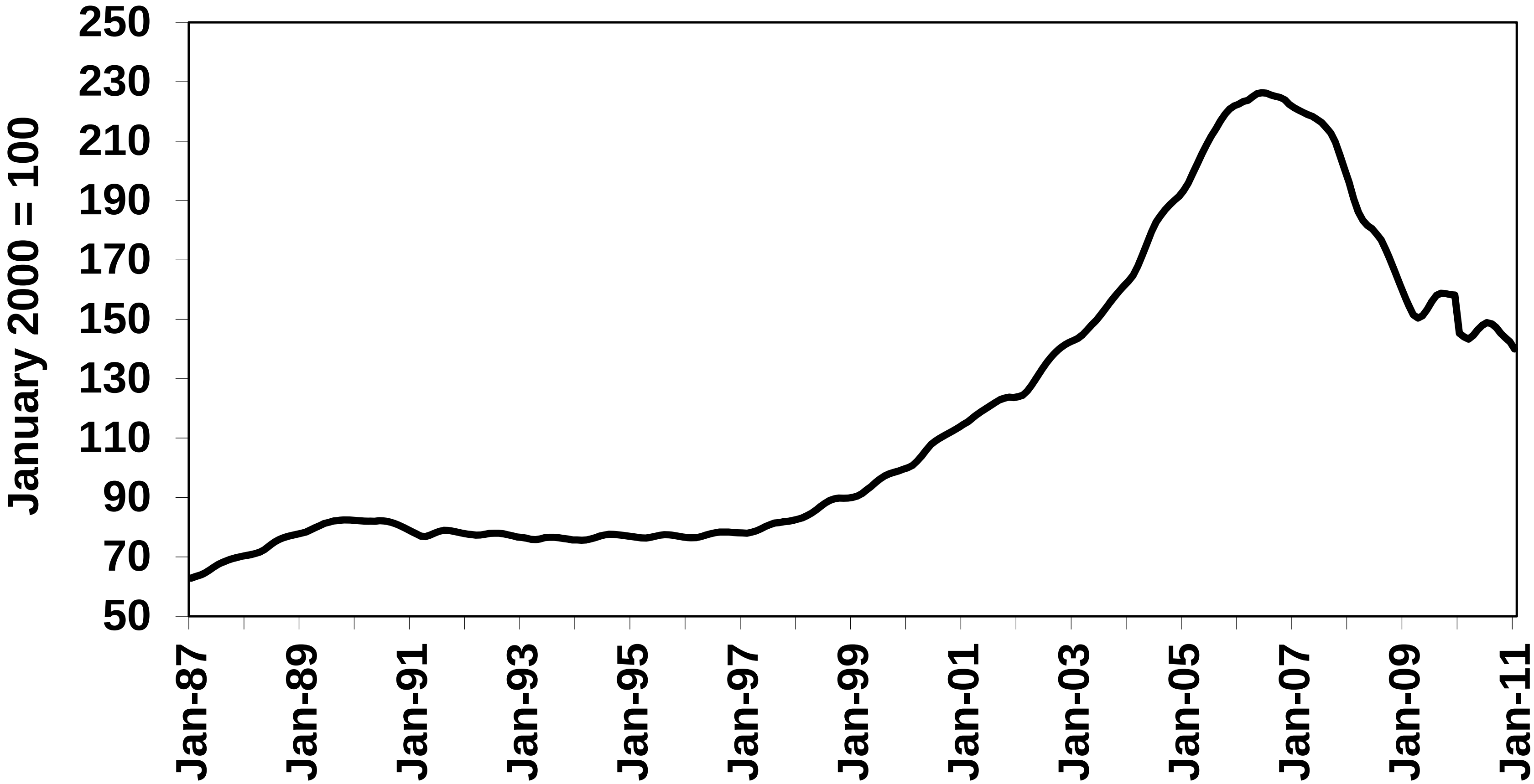
- The U.S. government debt represents a drag on the economy. Economic research reveals that government debt increases 86 percent within three years of a banking crisis.
  - Borrowing can increase.
  - Activity and tax revenues can decline
- The continuing collapse in housing prices creates a second problem.
- Growth can only come through exports.
- Higher inflation, a lower exchange rate, and political instability are a real threat.

U.S. Government Debt (Federal, State, Local), 1902 to 2010 and Projected to 2012



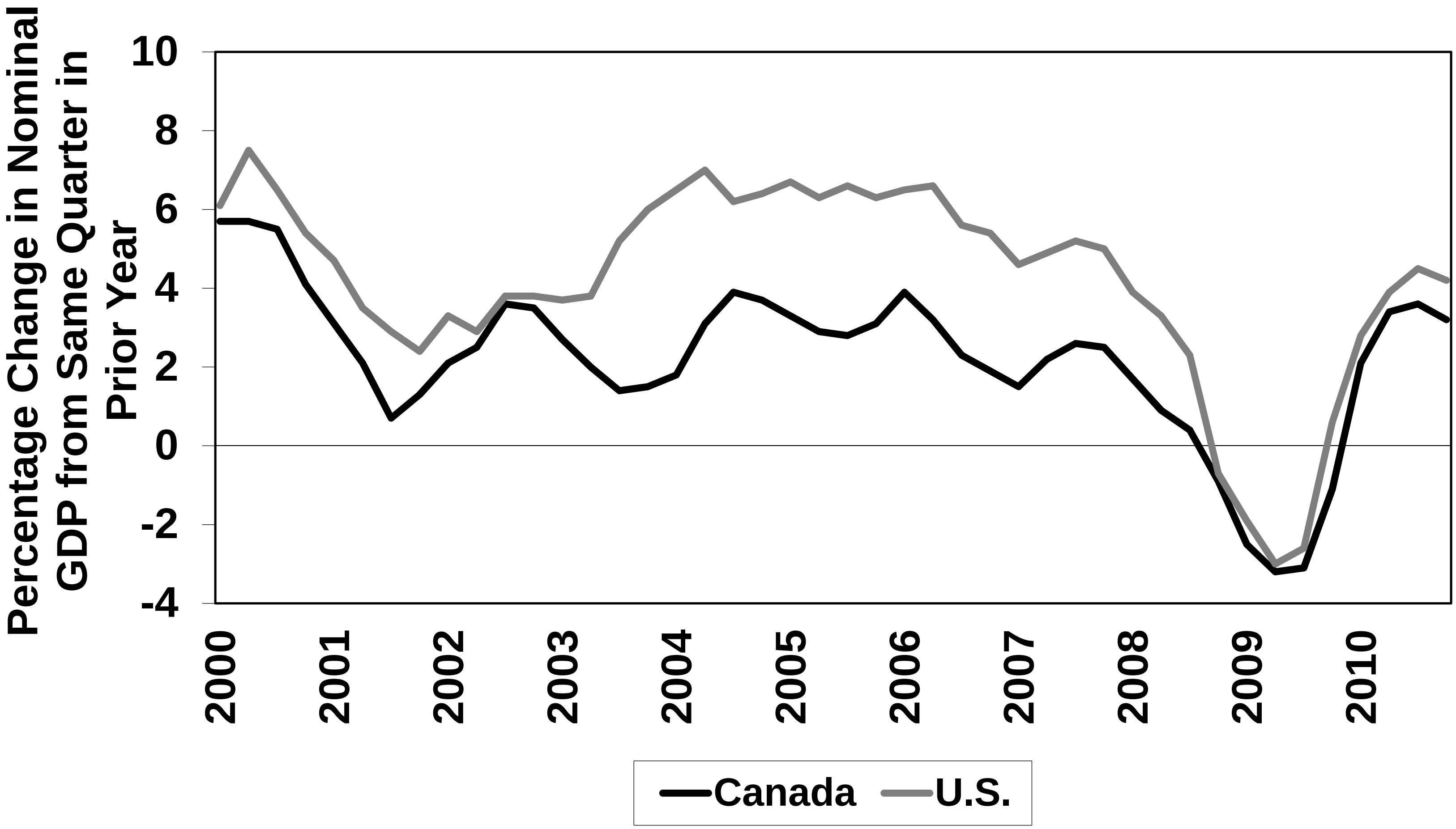
Source: U.S. Treasury and Congressional Budget Office.

Case-Shiller Monthly Composite Index for Housing Prices in Ten Major Metropolitan Areas, 1987 to 2011



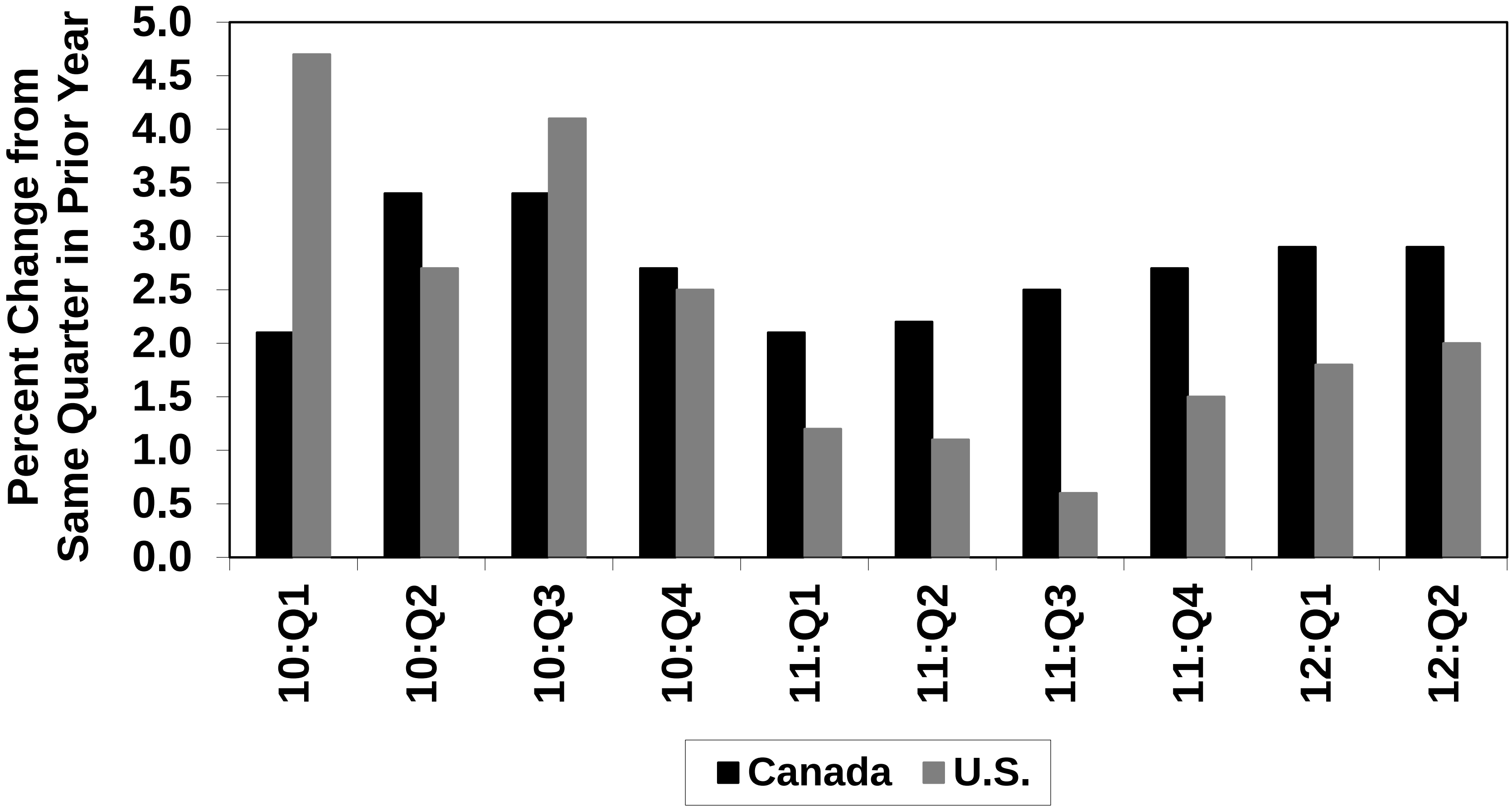
Source: Standard & Poor's.

Economic Growth in the U.S. and Canada, 2000 to 2010



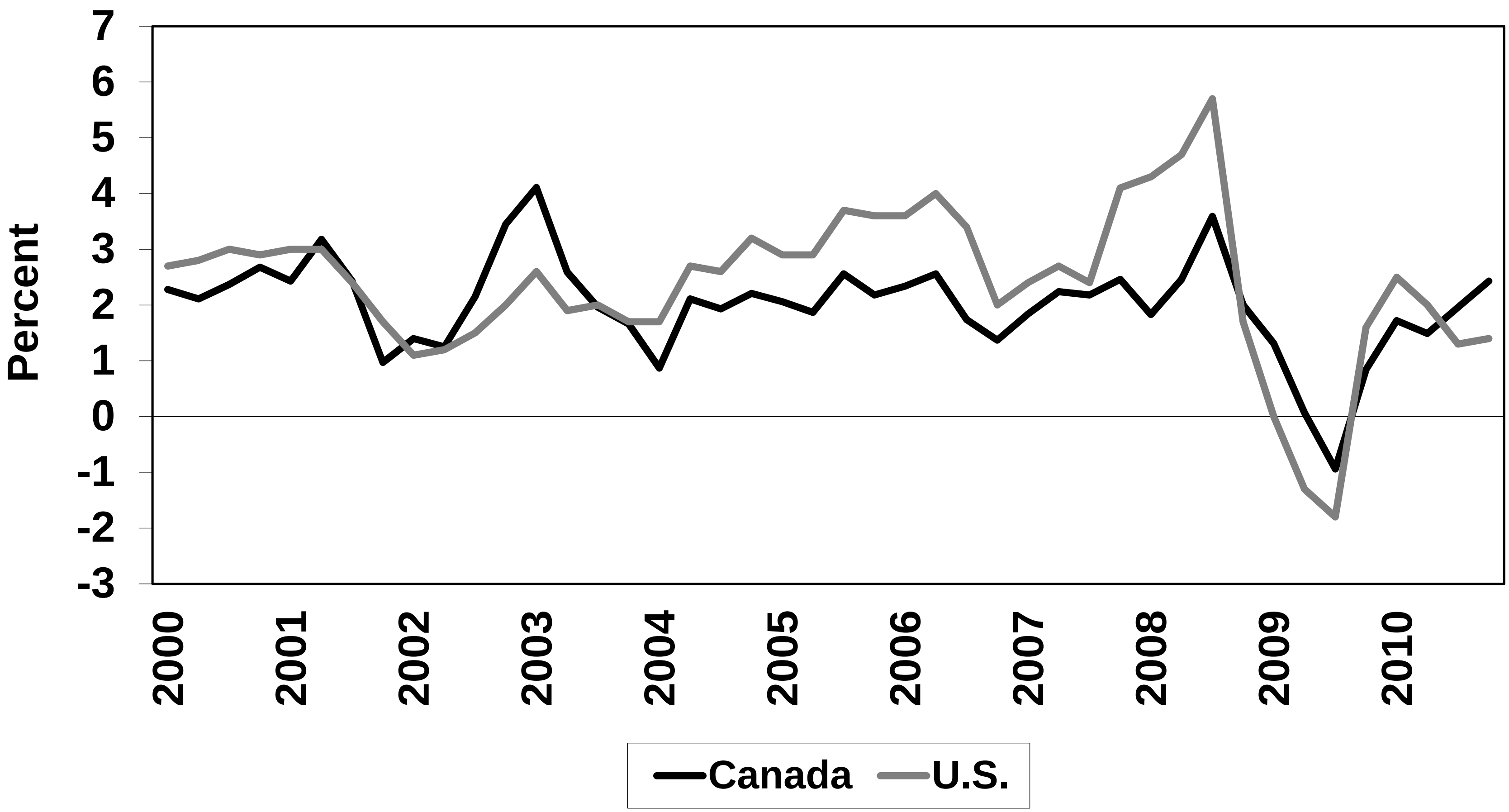
Source: PKVerleger LLC.

Projected Growth Rates for U.S. and Canada, 2011 and 2012



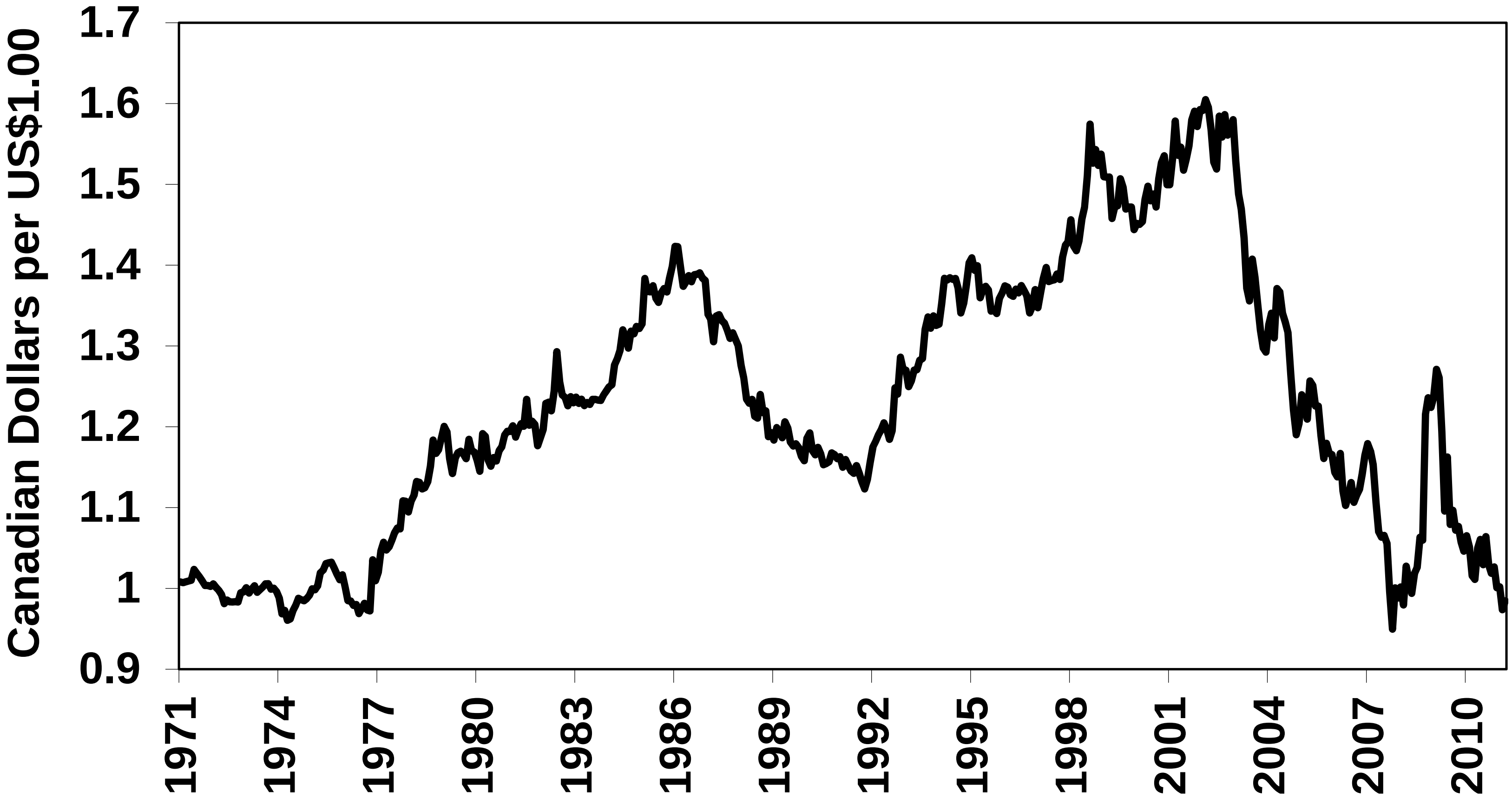
Source: Consensus Economics.

Percent Change in Consumer Prices from Year Earlier in U.S. and Canada, 2000 to 2010



Source: OECD.

U.S/Canadian Dollar Monthly Exchange Rate, 1971 to 2011



Source: U.S. Federal Reserve Bank of St. Louis.

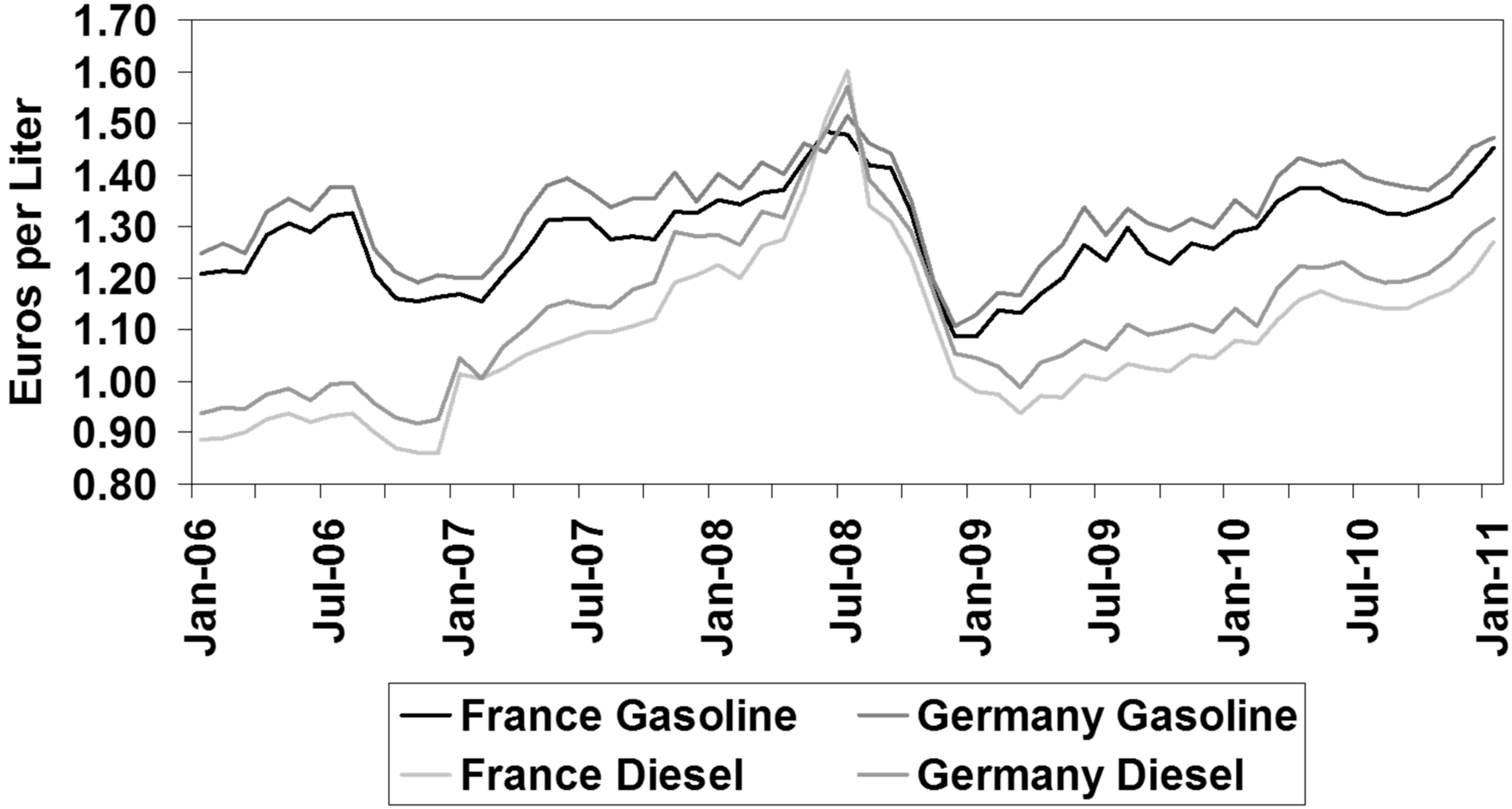
Global Energy Markets

- World crude oil prices are being driven by environmental regulations, not growing Asian consumption or OPEC.
  - Introduction of ultra-low-sulfur diesel (ULSD) caused the 2008 price increase.
  - Current increase has some of the same characteristics.
- Oil-exporting countries today merely “tag along” and do not allow the development of large discounts for heavy crudes.
- The situation will likely worsen due to new regulations to take effect in 2012 and after. Higher prices could cut growth.

The 2008 Price Increase Resulted from Rigid Environmental Rules

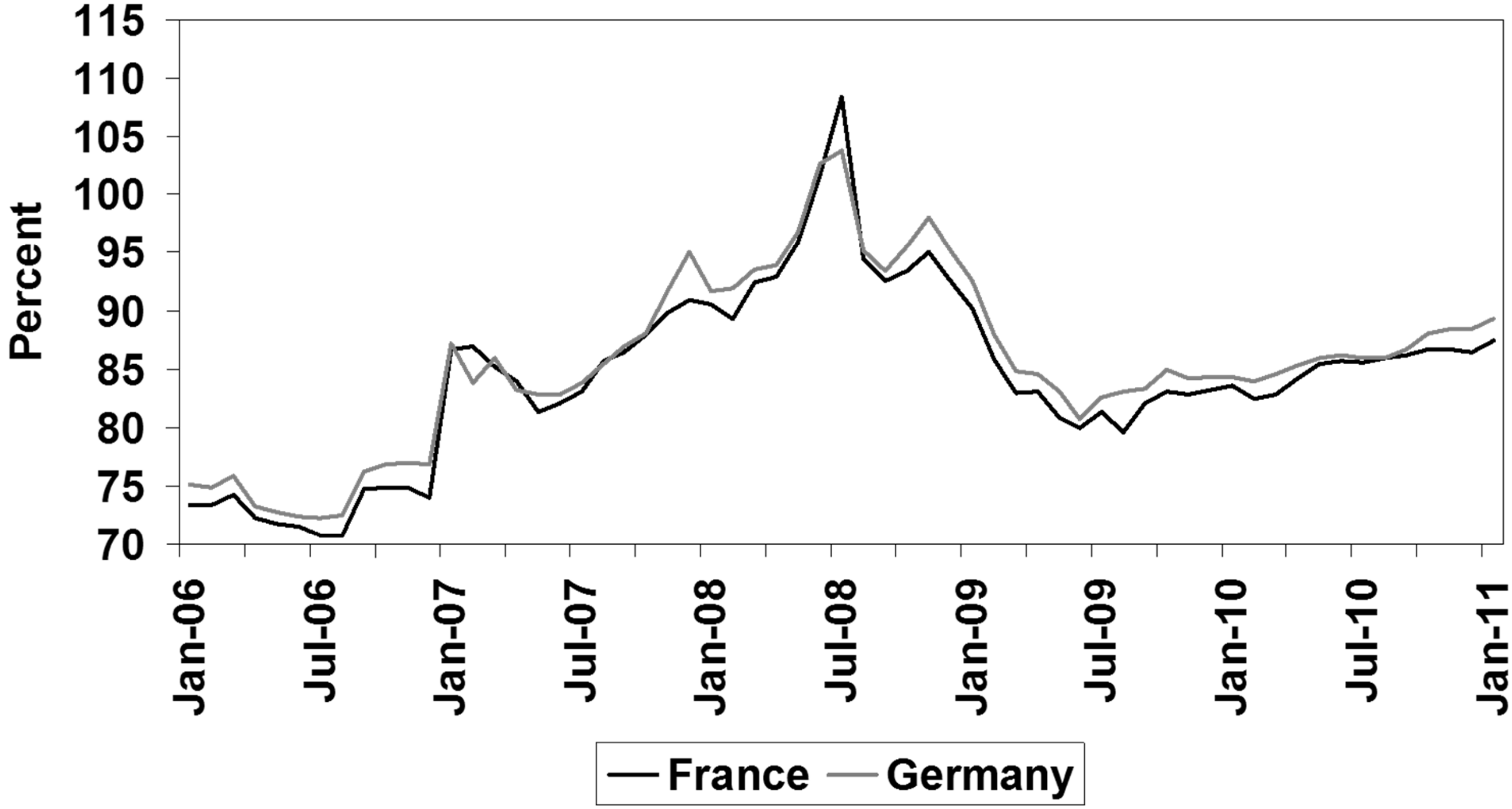
- The 2008 increase occurred because of the EU's introduction of ULSD.
  - Introduction was mandated for 2009.
  - Transition occurred in 2008.
- Sweet crude required to produce ULSD.
  - Production in Nigeria, one of the world's largest producers, dropped due to civil war.
  - The U.S. put sweet crude into the SPR just when it was needed by refiners.
- Oil-exporting countries had excess production, but it could not be used to produce ULSD.
- The price increase was predicted in December 2007.

Monthly Retail Gasoline and Diesel Prices in France and Germany, 2006 to 2011



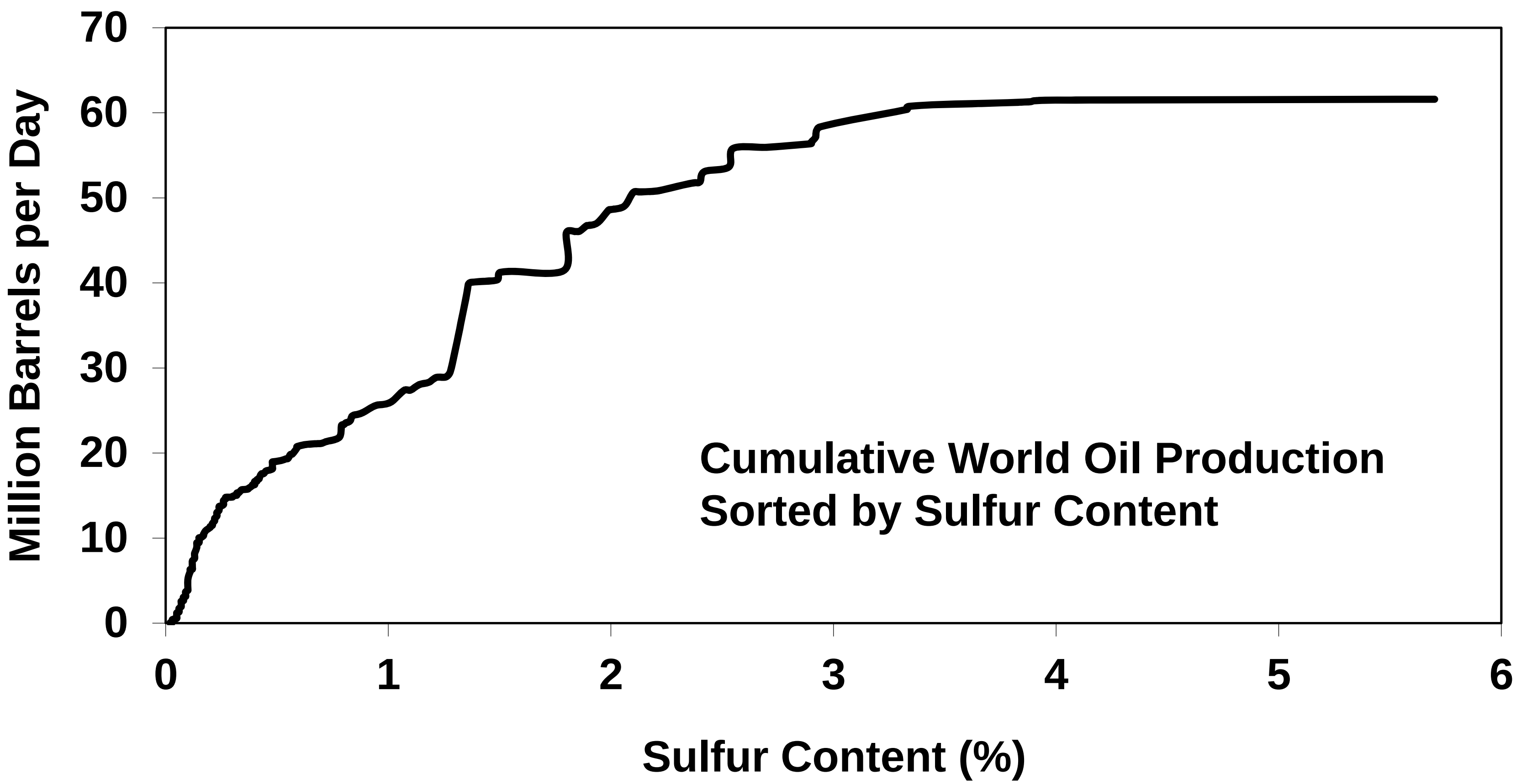
Source: International Energy Agency.

Retail Diesel Prices as Percentage of Gasoline Prices (including Taxes) in Germany and France, 2006 to 2011



Source: PKVerleger LLC.

Sweet Crude Oil Makes Up less than 25 percent of World Supply



Source: PKVerleger LLC.

Sweet Crude Is Valuable Because It Has a Very High Yield of Low-Sulfur Diesel Fuel

Product Distillation Yields from a Standard Complex Refinery		
	Arab Heavy (Saudi Arabia)	Bonny Light (Nigeria)
Crude Sulfur Content (%)	2.94	0.14
Volume of Gasoline (%)	17.4	27.2
Volume of Diesel (%)	18.5	44.8

Source: EIG.

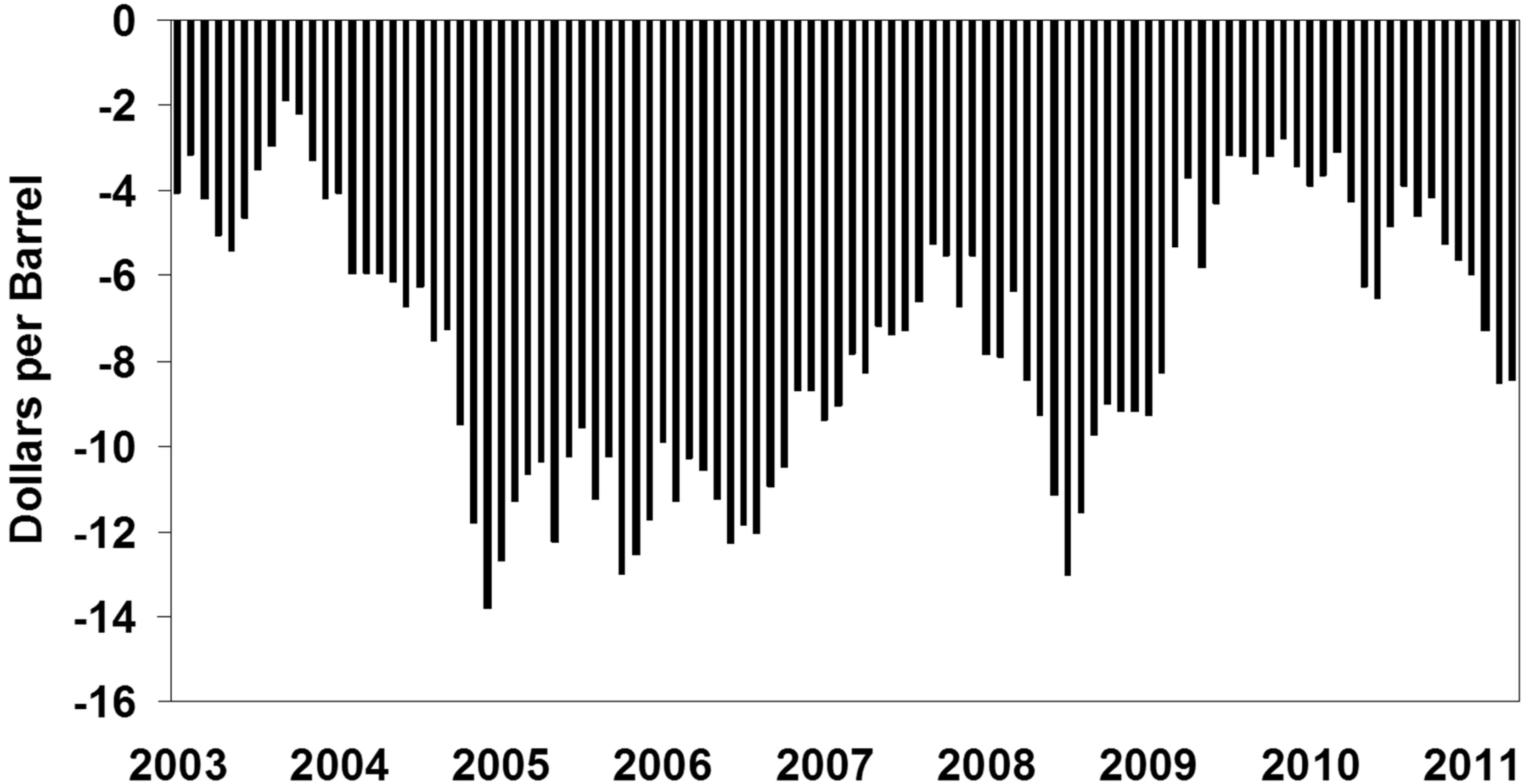
Much Less Sulfur Must Be Removed to Produce Diesel from Nigerian Crude

- 3.5 kilograms of sulfur must be removed to make one metric ton of low-sulfur diesel from Nigerian crude.
- 180 kilograms of sulfur must be removed to make one metric ton of low-sulfur diesel from Arab Heavy crude.
- Refiner capacity to remove sulfur from crude is limited.

OPEC Does Not Lead – It Follows

- Global refining is a competitive business. It is becoming more competitive.
- Refiners are price takers.
- Crude prices depend on prices set in product markets.
  - Oil-exporting countries adjust prices to market conditions.
  - Sophisticated producers acquire refining capacity.

Price Spread Set by Saudi Arabia for Arab Heavy Crude Delivery to Europe, 2003 to 2011

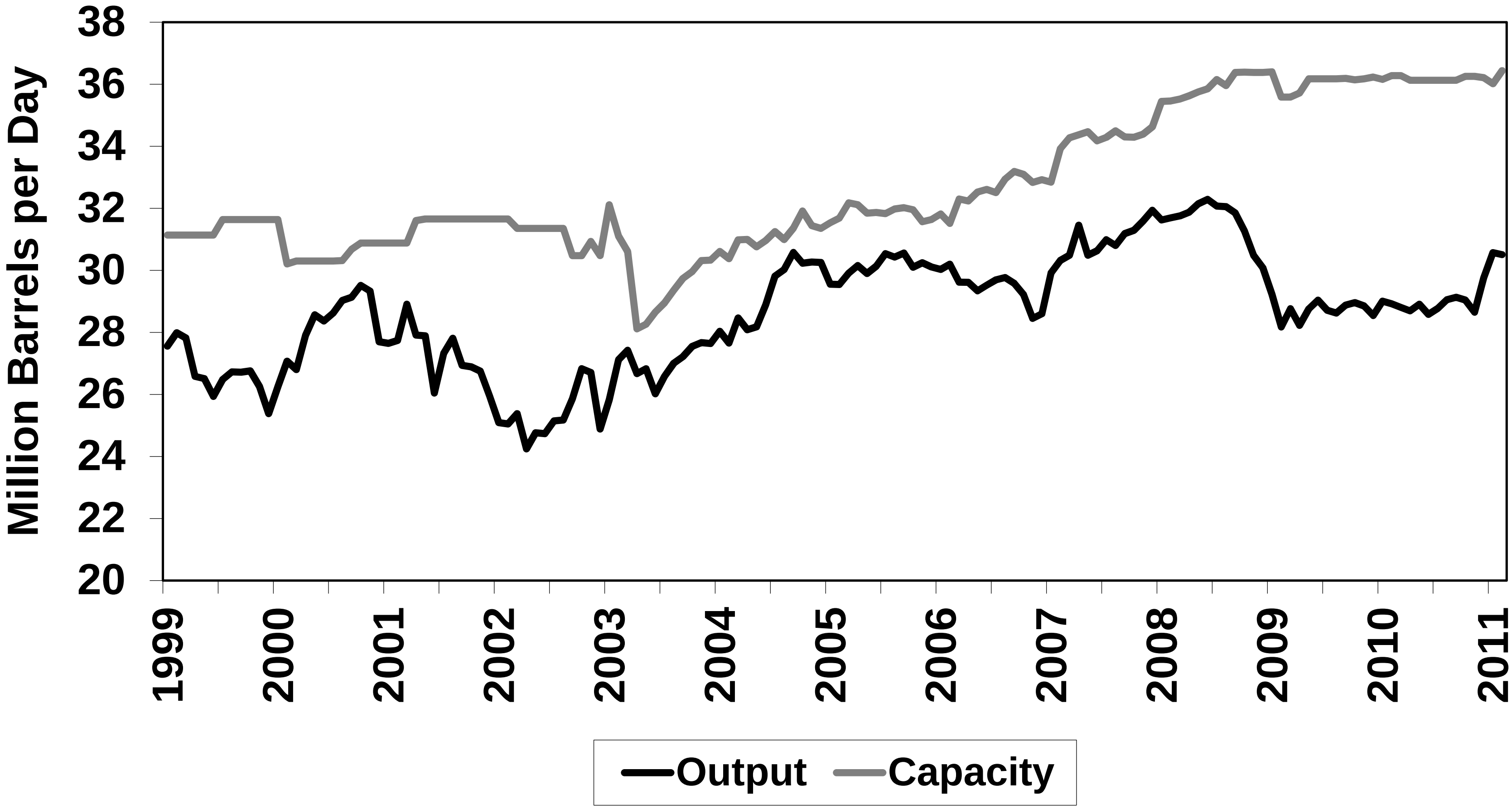


Source: Energy Intelligence Group.

2011 Looks like 2008

- Sweet crude supplies reduced by problems in Libya.
- ULSD supplies reduced by the shutdown of Japanese refineries.
- ULSD supplies in North Atlantic reduced by closures or temporary shutdowns of a number of refineries.
- Once again, sweet crude prices are being bid up.
- Oil-exporting countries are following and limiting discounts.

Monthly OPEC Production vs. OPEC Productive Capacity, January 1999 to February 2011



Source: Energy Intelligence Group.

Output, Productive Capacity, and Surplus Productive Capacity of Individual OPEC Countries, February 2011

Country	Production	Capacity	Surplus	Real Surplus
Saudi Arabia	9,100	12,160	3,060	1,250
Iran	3,575	3,900	325	0
Iraq	2,580	2,704	124	0
Kuwait	2,175	2,460	285	0
UAE	2,500	2,800	300	300
Neutral Zone	550	900	350	150
Qatar	775	680	0	0
Venezuela	2,782	2,650	0	0
Nigeria	1,746	2,650	904	0*
Libya	1,256	1,505	249	0
Algeria	1,225	1,375	150	150
Angola	1,732	2,150	418	418
Ecuador	509	505	0	0
Total	30,505	36,439	5,034	2,268
Lost Libyan Production	1,256			
Remaining OPEC Usable Surplus				1,012

* Note: IEA states that Nigeria has no surplus capacity at present (March 2011 Oil Market Report).

Source: Energy Intelligence Group; PKVerleger LLC.

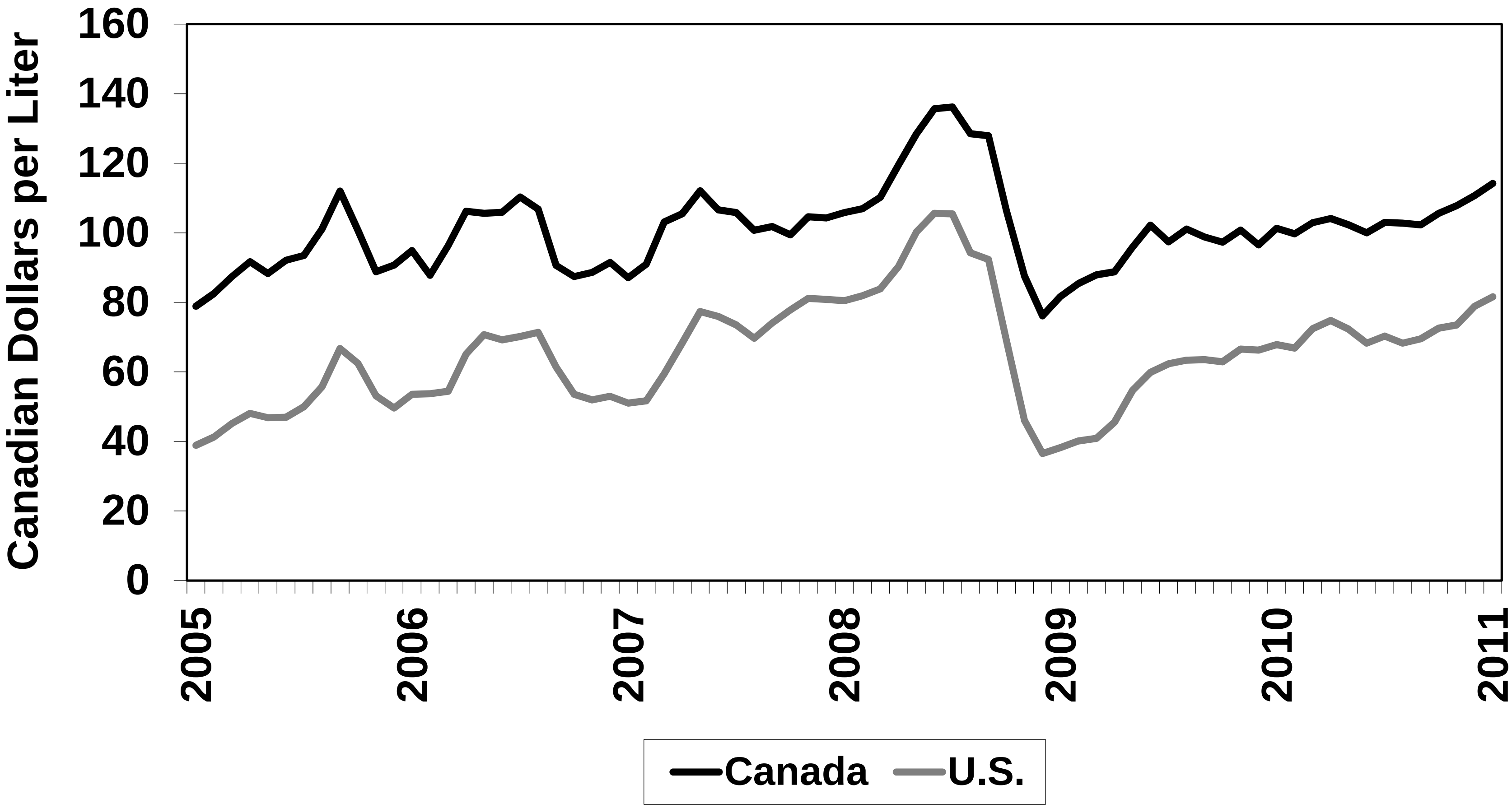
2012 Could Be Worse

- China has announced that it will implement clean fuel and lower sulfur rules.
- Global refiners may not have the capacity to meet demand for ULSD given current configurations.
- It is quite possible that prices could exceed 2008 absent recession.

North American Energy Markets

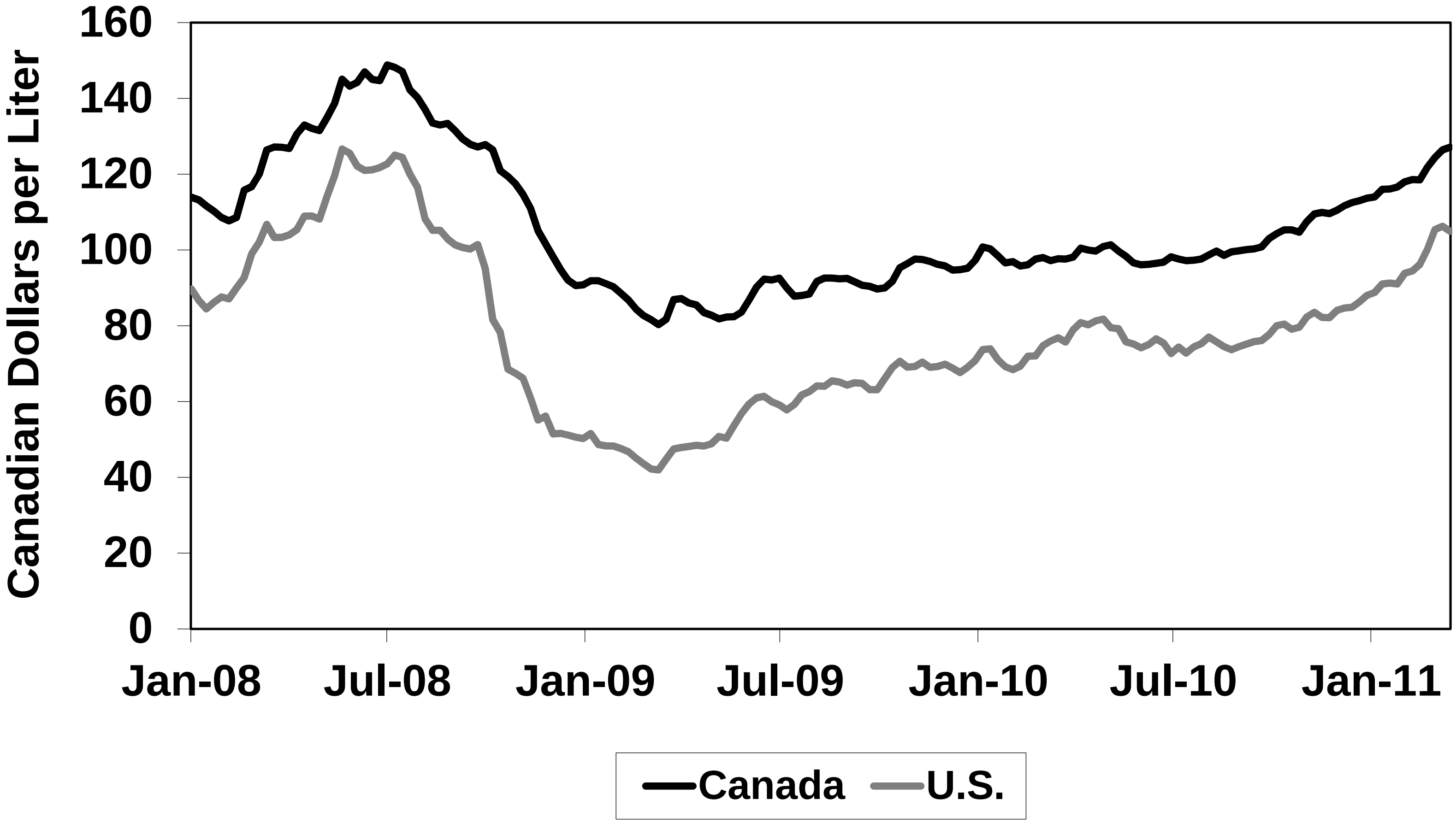
- North American energy markets will be driven by two unique factors: ethanol and natural gas.
- U.S. regulations requiring the use of greater amounts of ethanol could lead to a situation where E85 becomes a discounted fuel in the country, leading to continued sales of large SUVs.
- The fall in natural gas prices caused by the increased supply of shale gas could lead to a rapid replacement of gasoline by natural gas in a number of markets.

Average Monthly Retail Gasoline Prices in the U.S. and Canada, 2005 to 2011



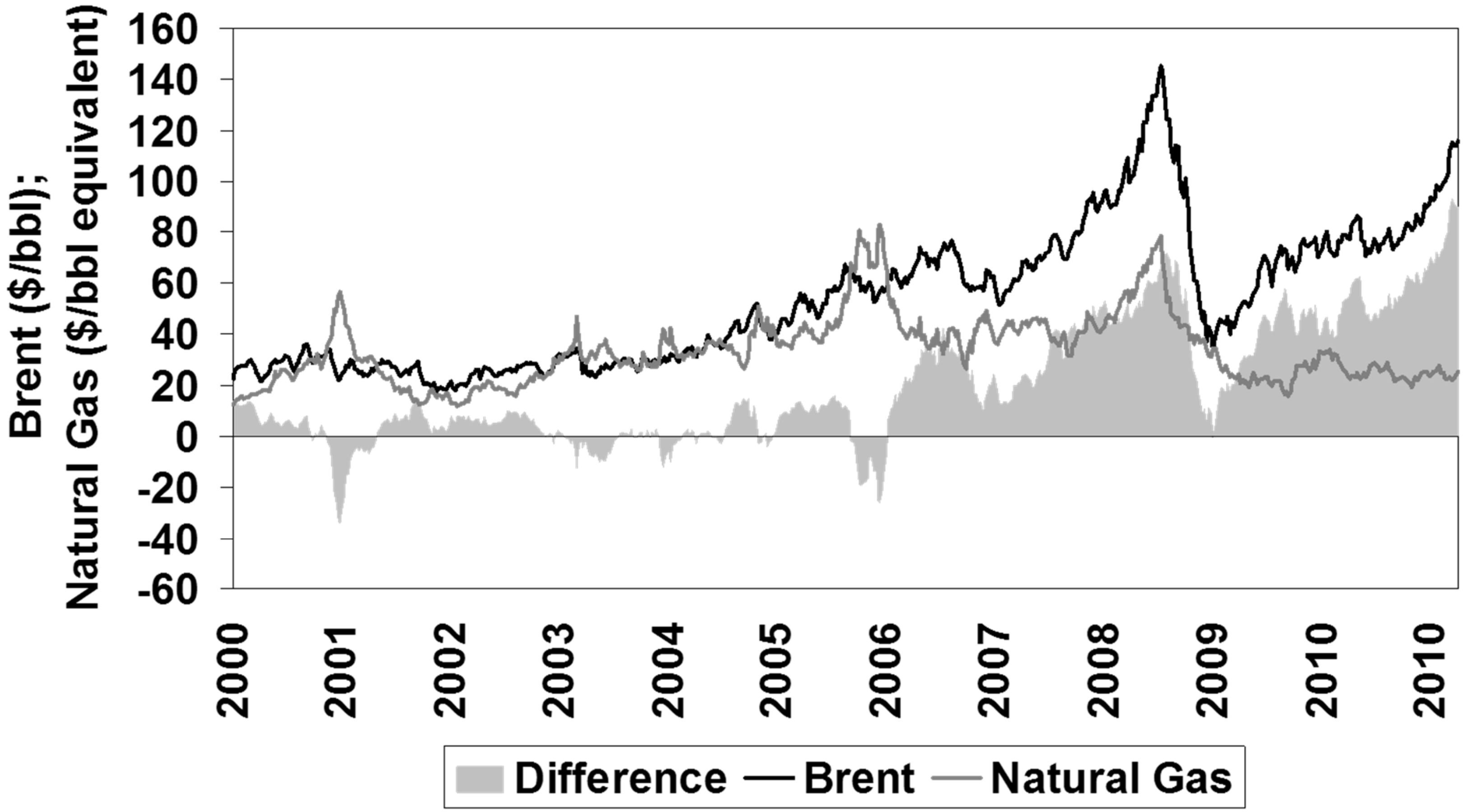
Source: U.S. DOE; The Kent Group; IMF.

Average Weekly Retail Diesel Prices in the U.S. and Canada, 2008 to 2011



Source: U.S. DOE; The Kent Group; IMF.

Weekly Brent Crude Prices vs. Weekly Spot Natural Gas Prices, 2000 to 2011



Source: PKVerleger LLC.

The Convenience Store Business

In 1960, Theodore Levitt condemned the petroleum industry to oblivion with these words:

“The gas station is like a tax collector to whom people are compelled to pay a periodic toll as the price of using their cars. This makes the gas station a basically unpopular institution. It can never be made popular or pleasant, only less unpopular, less unpleasant.”

Marketing Myopia

Levitt's Prediction of the Oil Industry's Demise was Correct but His Timing was Terrible

- Levitt anticipated the early end of the oil industry because firms did not seek to satisfy customers.
  - Entry of solar, electric vehicles predicted
  - Rapid technical change expected in 1960
- Oil condemned because the industry focused in selling and costs.
  - "Selling focuses on the needs of the seller, marketing on the needs of the buyer."
  - "A truly marketing-minded firm tries to create value-satisfying goods and services."

Levitt No Doubt Would Love to Contrast Apple with Exxon

- Apple tries to create "value-satisfying goods and services" consumers will want to buy.
  - Brilliant inventions
  - Even more brilliant marketing
  - Great stores and service
- Integrated oil companies focus on finding and developing resources.
  - Processing (refining) increasingly left to others
  - Marketing becoming even more of an afterthought
- Integrated companies have more exposure to obsolescence.

Tom O'Malley Gets the Message

- O'Malley is chairman of PBF. He owns three U.S. refineries and may buy more.
  - Career began in Phillip Brothers mailroom, worked up to chairman
  - Became CEO of Tosco, a small refiner
  - Acquired refining assets of Unocal and other companies
  - Sold Tosco to Phillips and became largest shareholder
  - Sold Phillips to Conoco
- PBF has acquired refineries in Philadelphia, New Jersey, and Ohio.

O'Malley's Message

- This is the era of disintegration.
  - Refining is of little use for integrated companies.
  - Marketing is of even less use for integrated companies.
- Refining companies "do not need retailing" and "retailers do not need refining."

Platts Oilgram News, March 23, 2011

O'Malley's Key Quote – The Answer to Levitt

When he worked for companies that owned retail businesses, "really wasn't about selling gasoline…it was convenience."

"The best stores were not operated by oil companies. The best stores were operated by retailers."

"Retailers saw gasoline as a necessary part of their business…it wasn't a reason for their existence."

Levitt was Right: the Gasoline Station Died. However, Convenience is More Highly Valued than Ever.

- The gasoline station is dying due to technological change and consumer preferences.
  - Consumers do not need tires and batteries very often.
  - Cars and trucks rarely need service.
  - The increased complexity of engine systems makes it impossible for most mechanics to provide service.
- Consumers do, however, crave convenience. **Time is the most valuable and perishable commodity in the world.**
- Consumers understand the value tradeoff. They recognize that their total expenditures are often reduced even when they pay more for an item at a convenience store.
- Consumers will patronize those locations that offer them the items they require with minimum hassle.

There Can Be No Single Formula for Success. Stores Must Be Designed for Specific Locations.

- Urban facilities may do best catering to the working woman.
  - Many owners report they do strong business in fresh vegetables, meats, and dairy.
  - C-Stores are a preferred stopping point for workers heading home. Short walks and quick checkouts make stores attractive, offsetting higher margins.
- Facilities on major highways appear to benefit from size, good quick foods, and coffee, as well as large and <u>clean</u> restrooms.
- Rural operations need to cater to local requirements and customs.

Fuel Will Continue to be Important. What Will Be Sold Will Change.

- Gasoline and diesel fuels have historically dominated the market.
- However, $25/bbl natural gas could soon play an important role in transportation.
- Electric/gasoline vehicles such as the Chevrolet Volt® could also capture significant market share, cutting traditional fuel sales.
- Electric vehicles are obviously in the offing.

Success Will Go to the Fleet of Foot

- The rate of change in the market will accelerate.
  - Fuel volumes will most likely decline.
  - The number of energy sources will proliferate.
  - Consumers will be more demanding and thriftier.
  - Markets could become more competitive.
- Success will require great skill and a lot of luck.
- One must facilitate new fuels but not bet on too many losers. Here luck is required.
- Underperforming locations must be shut, quickly. This requires a hard skin.
- New innovations must be embraced quickly. Fast movers will thrive.