

U.S. Natural Gas Markets

Fundamentals or Transparency? The natural gas market's response to supply and demand fundamentals has been mistakenly linked to a lack of transparency. Although complex, the U.S. natural gas commodity market is among the most transparent of all commodity markets in the world.

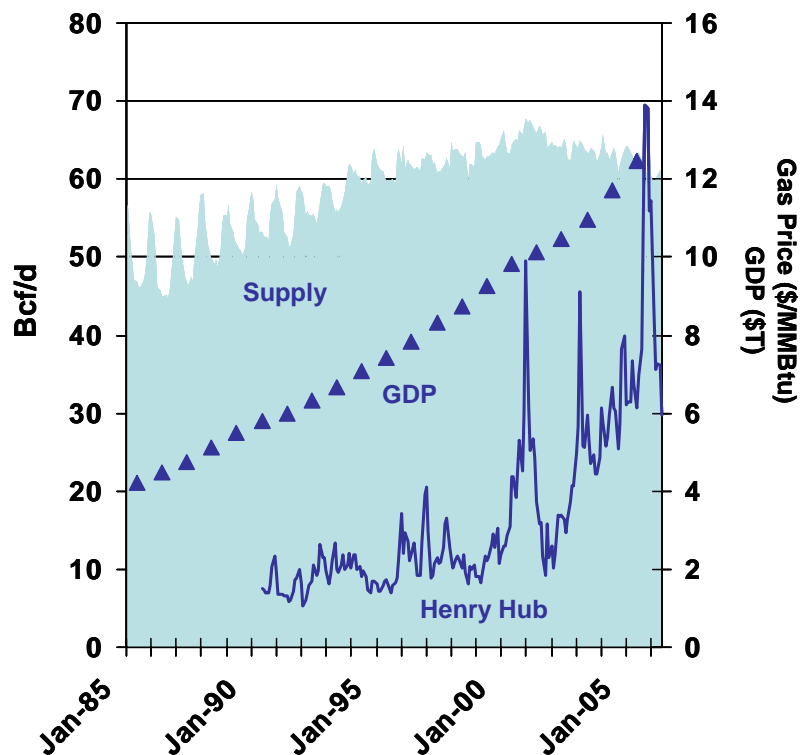
Widening the existing government portal into the natural gas market, either through increased reporting or government oversight, will not help bring energy prices down. Even a presumably "harmless" precautionary reporting requirement aimed at improving transparency can have material, adverse consequences on the market. Rather, policies addressing supply and demand fundamentals are the appropriate way to alleviate pressure on natural gas prices.

Natural gas prices are responding to economic growth and supply and demand fundamentals. Illustrated in the chart on the right, GDP has nearly tripled in just 20 years, while domestic natural gas production flattened during the last 10 years. Specifically, between 1984-1995, excess production capacity, demonstrated by summer to winter production swings, easily met demand increases from a growing economy.

By 1995, demand growth had eliminated available spare production capacity. For the next few years, domestic production increases and rising imports were able to match demand driven by the economy. But since 2000, despite increasing rig counts and imports, natural gas supply has been flat to declining and not kept pace with demand, being driven higher by economic growth, as well as national environmental concerns. The natural gas price environment stems from demand for limited supply and higher production costs driven by rising rig and materials costs and a maturing resource base.

It is a mistake to equate "consumption" and "demand." Demand is growing, evidenced by the growth in GDP, natural gas power generation and natural gas heating load. Consumption, by definition, equals supply, which is now relatively flat. Illustrated above, the market is responding to supply and demand fundamentals. Prices have moderated consumption resulting in a lower quantity consumed although demand has continued to grow. Policies addressing supply and demand fundamentals are the appropriate way to alleviate the pressure on natural gas prices.

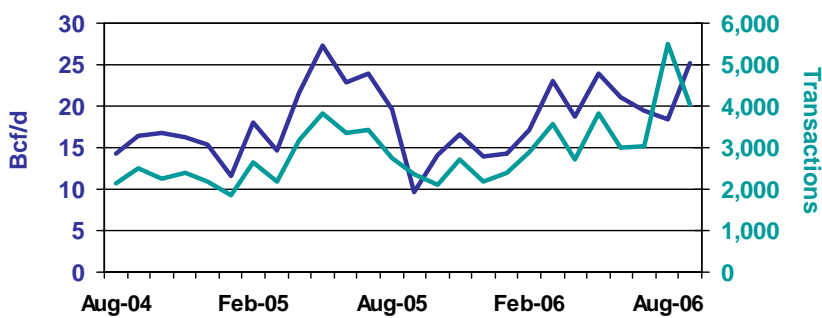
Natural Gas Prices Echo Fundamentals



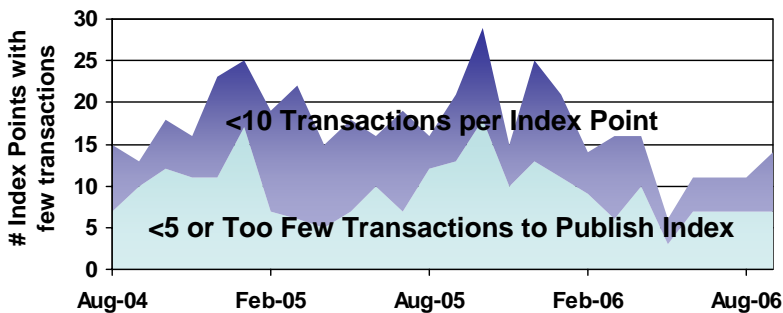
Evaluating Market Transparency. The natural gas market is robust and working well, based on facts regarding market fundamentals, and the new laws and FERC regulations that now underpin the health of the market.

Since 2000, a number of regulatory and legislative changes restored the health of, and confidence in, the natural gas market. These changes include the 2002 Sarbanes-Oxley Act, which increased public company internal controls; the 2004 FERC Policy Statement on good-faith price reporting and publishing; EAct 2005 market behavior provisions and penalties, and 2005's FERC Rule Prohibiting Market Manipulation. Evidence that these are improving market confidence, even before all of these changes were accomplished: market participants rated their confidence in the natural gas market a seven out of ten in a 2004 FERC survey.

Reported Volume & Transactions Increasing



Low-Reporting Points Decreasing



Source: Inside FERC FOM Index

improve transparency. The market is already transparent. The goal of government regulators should be to create a regulatory environment that encourages, not hinders, market participation and maintains market efficiency.

In addition to the market transparency provided by the NYMEX natural gas futures contract and the Intercontinental Exchange (ICE), competitive index publishers provide the industry with an additional market portal to support informed business decisions.

Based on Inside FERC data alone shown above, the industry has price reporting data from the month-ahead cash market for a volume that is nearly half the size of U.S. average daily natural gas consumption. While index transactions are heavily relied upon by many sectors within the industry for expediency, and because of the perception that they are a lower risk transaction, clearly in the case of natural gas markets, the tail is *NOT* wagging the dog.

The level of natural gas price reporting shows the strong market desire to enhance transparency in the last two years. The charts on the left illustrate a rise in reported volume and number of transactions, and a corresponding decline in the number of indices with insufficient reporting. A price reporting mandate, therefore, would be counter productive in light of the voluntary response. Further, if reporting is mandated, market participants can simply move away from reportable transactions. In other words, mandated reporting does not necessarily mean more transactions that qualify for index development.

Accordingly, there is not a need for government action attempting to

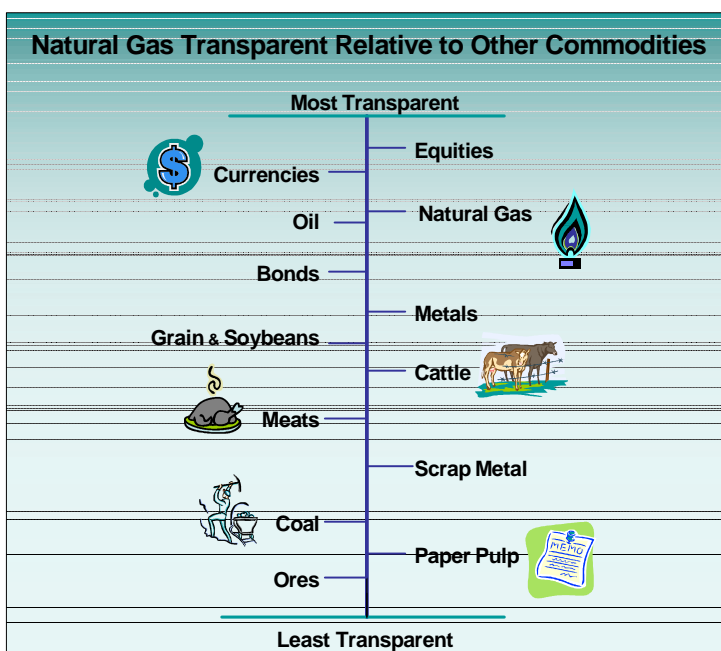
Maintaining a Healthy Market. A well-functioning market needs all players to participate freely without artificial prohibitions, such as a regulatory limit on hedging. To facilitate an even higher level of price reporting, state government officials should simply foster a regulatory environment that does not discourage fixed price transactions.

The beauty of unencumbered market participation is that if you do not like the futures market, try the cash market. If you do not like the daily market, you can go to the monthly market. If you do not like the index, negotiate a fixed price. And, if you do not like any of the options, address the supply and demand fundamentals before Congress. It is confident access to *all* of the tools available for structuring a portfolio and managing risk that will maintain a properly functioning market.

For every seller there must be a buyer, and for every buyer there must be a seller. Speculation balances the equation when there is not enough of one or the other adding liquidity to the market. If it were not for the speculators, volatility would be *higher*, not lower.

Illustrated in the chart, relative to other commodities, the natural gas market is highly transparent. Further, FERC has already taken a number of steps to ensure the viability of the market. The market is working and responding to supply and demand fundamentals, and importantly, while natural gas is already among the most transparent commodity markets, transparency continues to improve.

Markets naturally evolve based on need. The natural gas market has evolved as prices have been freed through well-head decontrol. With this evolution, today natural gas markets quickly reflect changes in information, reflecting great efficiency.



Source: Pete Locke, "Natural Gas Price Transparency and Liquidity," October 2006

However, price efficiency in natural gas or other markets does not necessarily mean stable prices, and certainly does not indicate any particular price level. Instead efficiency means that price reflects and is sensitive to changes in information on supply, demand and other market fundamentals. The natural gas price decline since the winter of 2005 illustrates the natural gas market response to changing short-term supply and consumption patterns. Natural gas prices are responding to supply additions from hurricane recovery, high storage inventories and low shoulder month consumption illustrating natural gas market efficiency.

The U.S. natural gas market is transparent, robust and functioning well based on fundamentals, new laws and regulations. Access to new sources of supply is great way to proactively address the tight supply demand balance pressuring natural gas prices.

Published by the Natural Gas Supply Association (NGSA)



NGSA represents integrated and independent companies that produce and market natural gas in the United States. NGSA is actively involved in pursuing regulatory and legislative issues that affect the association's members. Established in 1965, NGSA encourages expanded use of natural gas and supports regulatory and legislative actions that foster competitive markets.

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Additional information regarding the natural gas price transparency, liquidity and market efficiency and the role of speculation can be found in the White Paper entitled **"Natural Gas Price Transparency and Liquidity"** by **Pete Locke, Professor of Finance, George Washington University and Texas Christian University, October 2006** prepared for the Natural Gas Supply Association.