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The J.P. Morgan Center for Commodities is the sponsor of Global Commodity Issues eJournal. The Center was set up at the University of Colorado Denver in 2012 with large sponsorship gifts from J.P. Morgan, CoBank and other major commodities firms in agriculture, minerals/metals and energy. It is the first academic center of its kind in the world focused on issues of academic and professional interest in commodities, with the creation and dissemination of relevant knowledge having broad implications across the entire range of commodities. The Center sponsors academic programs with commodities specialization for students, allocates research grants, and invites speakers from amongst eminent academics and commodity professionals through its various sponsored speaker series.
Speculative hoarding is a necessary condition for commodity bubbles, but it has been difficult to find systematic evidence using noisy aggregate inventory statistics. We instead measure hoarding using supermarket scanner data on US household purchases during the 2008 Rice Bubble. Export bans led to a spike in prices worldwide in the first half of 2008, which spilled over into US markets. Anticipating shortages, US households with previous purchases of rice, especially Asians, nearly doubled their buying near the peak of the bubble. We document transmission mechanisms through over-extrapolation from high prices and contagion as many households bought rice for the first time during the bubble.

Technological progress in the exploration and production of oil and gas during the 2000s has led to a boom in upstream investment and has increased the domestic supply of fossil fuels. It is unknown, however, how many jobs this boom has created. We use time-series methods at the
national level and dynamic panel methods at the state-level to understand how the increase in exploration and production activity has impacted employment. We find robust statistical support for the hypothesis that changes in drilling for oil and gas as captured by rig-counts do in fact, have an economically meaningful and positive impact on employment. The strongest impact is contemporaneous, though months later in the year also experience statistically and economically meaningful growth. Once dynamic effects are accounted for, we estimate that an additional rig-count results in the creation of 37 jobs immediately and 224 jobs in the long run, though our robustness checks suggest that these multipliers could be bigger.

"Are There Exploitable Trends in Commodity Future Prices?"

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We provide evidence that a simple moving average timing strategy, when applied to portfolios of commodity futures, can generate superior performance to the buy-and-hold strategy. The outperformance is very robust. It can survive the transaction costs in the futures markets, it is not concentrated in a particular subperiod, and it is robust to short-sale constraint, alternative specifications of the moving average lag length, and alternative construction of the continuous time-series of futures prices. The outperformance of the timing strategy is stronger during recession and with high investor sentiment, which likely proxies for high real interest rates. Finally, we confirm that the outperformance of the moving average timing strategy in the commodity futures comes from the successful timing of the market portfolio.

"The Biofuel Connection: Impact of US Regulation on Oil and Food Prices"

BIS Working Paper No. 487

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Biofuel policies are frequently mentioned in the policy and academic debates because of their potential impact on food prices. In 2005, the United States authorities passed legislation under which corn-based ethanol became in practice the only available gasoline additive. Some studies have then argued that ethanol and biodiesel subsidies in advanced economies may have strengthened the link between the prices of oil and those of some food commodities. This paper tests whether the response of food commodity prices to global demand shocks and to oil-specific demand shocks has changed following the introduction of this legislation. Our results show that corn prices exhibit a stronger response to global demand shocks after 2006. Some short-lived but statistically significant response to oil-specific demand shocks is also documented. Close substitutes of corn in the feedstock business (e.g., soybeans and wheat) exhibit comparable but more muted responses, while other food commodities unaffected by biofuel policies do not change their behaviour. We also report some evidence that global liquidity is a factor driving global demand shocks, and through that channel may have affected food commodity prices.

"Energy Subsidies in Latin America and the Caribbean: Stocktaking and Policy Challenges"

IMF Working Paper No. 15/30

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The oil price decline creates an opportunity to dismantle energy subsidies, which escalated with high oil prices. This paper assesses energy subsidies in Latin America and the Caribbean — about 1.8 percent of GDP in 2011-13 (approximately evenly split between fuel and electricity), and about 3.8 percent of GDP including negative externalities. Countries with poorer institutions subsidize more. Energy-rich countries subsidize fuel more, but low-income countries are more likely to subsidize electricity, as are Central America and the Caribbean. Energy subsidies impose fiscal costs, hurting SOEs, competitiveness, and distribution. The paper overviews country experience with subsidy reform, drawing lessons.

"A Joint Affine Model of Commodity Futures and US Treasury Yields"  

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We derive a general joint affine term structure model of US government bond yields and the convenience yields on physical commodities. We apply this framework separately to oil and gold. Our results show clear links between bond and commodity markets, since bond factors play a significant role in the pricing of the convenience yield term structure. Our framework allows us to decompose the term structure of futures prices into expectations of future spot prices and risk premia components. We estimate that the risk premium in oil futures has been negative over the 1980s and 1990s, and turned positive in the mid-2000s, consistent with a declining role for supply shocks in the oil market over this period. In contrast, we estimate that the gold risk premium is mostly positive throughout the sample period.

"Anticipation, Tax Avoidance, and the Price Elasticity of Gasoline Demand"  

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Traditional least squares estimates of the responsiveness of gasoline consumption to changes in gasoline prices are biased toward zero, given the endogeneity of gasoline prices. A seemingly natural solution to this problem is to instrument for gasoline prices using gasoline taxes, but this approach tends to yield implausibly large price elasticities. We demonstrate that anticipatory behavior provides an important explanation for this result. We provide evidence that gasoline
buyers increase gasoline purchases before tax increases and delay gasoline purchases before tax decreases. This intertemporal substitution renders the tax instrument endogenous, invalidating conventional IV analysis. We show that including suitable leads and lags in the regression restores the validity of the IV estimator, resulting in much lower and more plausible elasticity estimates. Our analysis has implications more broadly for the IV analysis of markets in which buyers may store purchases for future consumption.