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China's rapid growth over the past decade has been one of the main drivers of the rise in mineral commodity demand and prices. At a time when concerns about the sustainability of China's growth model are rising, this paper assesses to what extent a hard landing in China would impact other countries, with a focus on trade and commodity price channels. After reviewing the main arguments pointing to a hard landing scenario – historical rebalancing precedents, over-investment, unsustainable debt trends, and a growing real estate bubble – we focus on a sample of thirty-six countries, and use a global VAR methodology adapted to conditional forecasting to simulate the impact of a Chinese hard landing. We model metal and oil markets separately to account for their different end-use patterns and consumption intensity in China, and we identify three specific transmission channels to net commodity exporters: through real exports, through income effects (related to commodity prices), and through investment (a fall in commodity prices reducing incentives to invest in the mining and energy sectors); we also look at the role played by the exchange rate as a shock absorber. According to our estimates, emerging economies (ex. China) would be hardest hit – with a 7.5 percent cumulated growth loss after five years –, in particular in South-East Asia but also in commodity-exporting regions such as Latin America; advanced economies would be less affected. The "growth gap" between emerging and advanced economies would be considerably reduced, leading to partial recoupling.

"Quantitative Effects of the Shale Oil Revolution"  
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The aim of this paper is to analyse the impact of the so-called "shale oil revolution" on oil prices and economic growth. We employ a general equilibrium model of the world oil market in which Saudi Arabia is the dominant firm, with the rest of the producers as a competitive fringe. Our results suggest that most of the expected increase in US oil supply due to the shale oil revolution has already been incorporated into prices and that it will produce an additional increase of 0.2 percent in the GDP of oil importers in the period 2010-2018. We also employ the model to analyse the collapse in oil prices in the second half of 2014 and conclude that it was mainly due to positive unanticipated supply shocks.

"Co-Movements between Crude Oil and Food Prices: A Post-Commodity Boom Perspective"

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Using the correlations of VAR forecast errors at different horizons, this paper analyses the dynamics of co-movements between crude oil and food prices. For each food price considered, the VAR model is estimated on two subsample periods: a pre-commodity boom (1990M1-2006M12) and a post-boom period (2007M1-2015M12). Results show strong positive co-movements between the crude oil and food prices in the aftermath of the commodity boom, while no statistically significant co-movements are observed over the pre-boom period. Our findings then provide an additional empirical evidence on the actual linkages between the crude oil and agricultural markets.

"Commodity Returns Co-Movements: Fundamentals or 'Style' Effect?"

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This paper investigates dynamic correlations both across commodities and between commodities and traditional assets, such as equities and government bonds, using the Regime Switching Dynamic Correlation (RSDC) model. There are three major findings. First, results from correlations both across commodities and between them and equities and bonds are in line with the "style" effect theoretical findings. Before the recent financial crisis, while correlations across In-index commodities started to increase from mid-2005, correlations between them and equities and bonds remained at low level. Second, all correlations increased markedly with a regime change which coincides exactly with the demise of Lehman Brothers on September 15, 2008. We therefore suggest that the low correlation between In-index commodities and equities and bonds detected before the financial crisis should not be interpreted as a weak integration between commodity and financial markets. Integration was actually high, as revealed by the financial crisis, but was masked by the "style" effect. Finally, the new and original finding here is the temporary nature detected of the financial crisis effect on correlations which reverted to their pre-crisis level from April 2013. This highlights the impact of the financial-based factors on commodity price movements.

"The Response of Macro Variables of Emerging and Developed Oil Importers to Oil Price Movements"

ADB Working Paper 529

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This paper assesses the impact of crude oil price movements on two macro variables — the gross domestic product (GDP) growth rate and consumer price index inflation rate — in the developed economies of the United States and Japan, and an emerging economy, the People’s Republic of China (PRC). These countries were chosen for this research because they are the world’s three largest oil consumers. The main objective of this study is to see whether these economies are still reactive to oil price movements. The results obtained suggest that the impact of oil price fluctuations on the GDP growth of the developed oil importers is much lower than on the GDP growth of the emerging economy. The main reasons for this lie in fuel substitution (higher use of nuclear energy, gas, and renewables), a declining population (for Japan), the shale gas revolution (for the United States), and strategic oil stocks and government-mandated energy efficiency targets in developed economies. All of these factors make developed economies more resistant to oil shocks. On the other hand, the impact of oil price movements on the PRC’s inflation rate was found to be milder than in the two developed countries that were examined. The main cause for this is that the PRC experiences a larger forward shift in its aggregate supply due to higher growth, which allows it to avoid a massive increase in price levels following oil price shocks.

The role of speculators in the oil markets has been vastly investigated during the last few years. Several authors focused on the definition of speculation while others examined the relationship between oil prices and the behavior of trading actors. In this paper, we formulate a new theory able to describe “hedging needs” as well as the role of speculators in the crude oil market. According to our model, the different strategies of producers and consumers aimed at defending themselves against abrupt oil price changes can be satisfied only if speculators play a very active role. Due to the rapid growth in shale oil production, the importance of speculation in ensuring an equilibrium in the U.S. crude oil market has consequently grown noticeably. We estimate an econometric conditional Error Correction Model (ECM) applying Pesaran’s bound tests, over the sample February 2000 November 2014, using WTI and CFTC data. Our theory is well supported by econometric evidence. In other words, our model is suitable to demonstrate how commercial operators act on the market. In addition, the increasing importance of future contracts (also known as financialisation of crude oil market) helps in reaching a level of prices close to the equilibrium one. Finally, we are able to find evidence of a positive impact of the action of speculators on the efficiency of oil markets as they help stabilizing prices.