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## COMMODITY MARKETS AND THE GLOBAL ECONOMY

In an era defined by financial upheaval, few parts of the economy have witnessed the kind of volatility seen in commodities markets. In this book, Blake C. Clayton, a Wall Street analyst and Adjunct Fellow at the Council on Foreign Relations, draws on the latest thinking from academia and the private sector to deliver a clear-eyed analysis of pressing questions at the intersection of commodity markets, natural resource economics, and public policy. The result is a work that challenges the conventional wisdom about how these markets function and provides a fresh perspective on what public policy can do to improve them.

Blake C. Clayton is an equity analyst at Citigroup in New York, where he covers oil and gas companies and master limited partnerships. Prior to joining Citigroup, Dr. Clayton was a Fellow at the Council on Foreign Relations, where he currently serves as Adjunct Fellow on Energy. He holds a doctorate from Oxford University.

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**BLAKE C. CLAYTON**

Citigroup and Council on Foreign Relations



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## Foreword

Commodity markets have been the source of extraordinary global disruptive change since the start of this century. They have also suffered the consequences of the very changes they triggered. In this sense what has occurred within the commodities sector stands alongside the growth of global terrorism, the increased failure of nation-states, the challenge to the sanctity of national borders, and the rise to prominence of China, India, and other emerging market countries and the relative decline of power and influence of the United States, Europe, and Japan as key features of the geo-economic and political landscape over the past decade and a half.

In many ways commodity markets have been at the core of global politics and economics since the start of the twenty-first century and were certainly a main feature of the last decade, the so-called “Commodity Super Cycle Era,” when prices of food, fuel, industrial metals, bulks, and gold reached ever increasing record levels at least in nominal terms until these commodity prices themselves were significantly important in driving the world economy into recession in 2008. Partly this has been a function of the growing dominance of emerging markets in the world economy and the concentration of new commodity demand, itself associated with rapid if not frenetic fixed asset investment and strong industrial production in the non-OECD world. Partly too it has been a function of the collapse of the Soviet Union and the end of bipolarity with its focus on nuclear weapons and arms control. Increasingly international politics are being played out through persistent but lower levels of conflict that have affected commodity flows and also through financial instruments – including commodity instruments – that provide “safer” ways to promote national (and often group level) objectives.

The first decade of this century was dominated by the so-called commodity supercycle, a period of time when virtually all commodities witnessed

extraordinary increases in prices accompanied by equally extraordinary increases in capital investment in search of new sources of production of everything from food staples to fuel requirements to sustain growth. Simultaneously the seemingly exponential spurt in commodities prices was accompanied by, and to some degree itself driven by, an explosion of investor flows designed to tap into the expected returns from commodities.

The second decade of the century has been more nuanced: global growth has been challenged, especially in emerging markets and especially in China, leading to substantially lower growth paths for commodity demand. Commodities themselves have experienced more diversified performance, as investments in new supplies of oil, natural gas, iron ore, coal, food staples, and most base metals have created more abundance, particularly given the disappointing level of economic growth that has taken hold around the world.

Common to both decades so far has been both the growing prominence of financial flows in commodity price determination, with managed money capable of exacerbating fundamentals by going long or short on specific commodities, and what we might understand as the “volatility of volatility,” sustaining both periods of high and of low realized volatility, with abrupt and unexpected changes from the one to the other.

This book by Blake Clayton is unified by its focus on what is new and what is persistent about commodities in the global economy and what has brought them to the fore of public debates both national and global over the past fifteen years. It is a brave and distinguished effort to enhance our understanding of the geo-economics of commodities. Underlying the world of commodities and what distinguishes that world from so many other parts of the international economy has been the dramatic lack of consensus both within and across countries about how much of commodities sector should be treated as private interest versus public good, how much should be left to markets to find appropriate adjustments, and how much should be in the hands of the state. If anything, this unresolved and perennial debate about commodities has become a central part of public debate over the past decade and a half, witnessed by the dramatic re-concentration of commodity enterprises under the state in Russia and debates in all advanced economies about the appropriate relationship between government, the banking system, and commodities.

This should not be surprising. Commodities constitute the largest part of physically traded goods internationally, whether in terms of volume or value; and within commodities the two largest commodity sectors broadly encompass food and fuel. With prices for these two basic elements of



consumption – particularly across emerging markets – having experienced a dramatic roller-coaster ride during this century, there is no puzzle as to why the regulation of these two particular sectors has become the center of domestic and global debates. A five- to tenfold increase in underlying prices, which is what occurred across commodities in the short span of 2003–2008, was bound to raise questions about the proper role of government and the proper way to organize the commodity chains when governments themselves have so much at stake.

Nor has the debate over private versus public coincided cleanly as between advanced economies and emerging markets. Volatility in global food markets, the subject of Chapter 3, has become one of the central themes of the G-20, the quintessential twenty-first-century organization, itself founded in 1999 to bring together nineteen countries plus the European Union to meet on global issues that could no longer be “managed” by the seven largest advanced economies meeting without the participation of finance ministers, central banks, and heads of state from the major emerging economies of the world. Within the G-20 European countries, including especially Germany, many have been convinced that agricultural commodities should not succumb unduly to the influence of finance flows, and therefore should be off limits to investments by public and private pension funds. Even in a period of substantially lower prices for food staples and meat, the debate still rages in parts of Europe.

Two age-old issues in the politics surrounding commodities highlighted by Clayton under the evolving conditions of this century revolve around diverging and often asymmetric relations between importers and exporters of raw materials and around sovereigns working to stem the influence of the private sector in particular, or markets in general, as they try to foster and preserve comparative advantage. Much of this book is infused by these two tensions as they have played out in recent years, including the time since the book manuscript was completed. Indeed, the intellectual construct of these chapters in looking at these two traditional issues in their new context helps us in understanding the dramatic events that have played out in the oil market in late 2014 and through 2015.

When it comes to international petroleum, for example, the inherent conflict of interests between exporters and importers has been dramatically impacted by the growth of three forms of unconventional oil and natural gas during the twenty-first century – whether coming from deep water, oil sands, or shale oil and gas. Perhaps the most disruptive of the consequences of these new sources of supply has been their role in depriving what has been regarded as the world’s most successful cartel, the Organization of

Petroleum Exporting Countries (OPEC), of its ability to successfully target prices well above production costs in order to maximize their revenue.

Two critical factors made for OPEC's success: its control of relatively lower-cost supply and the asymmetry of consequences of higher prices as between oil-producing countries and oil importers or consumers. By late 2014 it became clear to OPEC's largest producer, Saudi Arabia, that if it used its traditional means of cutting supply to balance markets in oversupply, it would not only not reduce the abundance of light, sweet crude in the world (what comes from the shale revolution), but it would, in fact, continue to subsidize new unconventional oil. Because of the robustness of new unconventional oil and its technological improvements driving down underlying costs, the conclusion for the Kingdom of Saudi Arabia and therefore for OPEC has been to stop being a swing producer and placing the burden of adjustment on new sources of supply – a process that appears to have increased long-term price volatility.

The other factor was the asymmetry of the impact of price increases. For oil-producing countries a price increase has a strong impact on their revenue given the role of oil and gas production in their economies (often well above 50% of GDP), but it has only a marginal impact on advanced economies, where energy costs tend to be under 10% of GDP. As a result, the oil-producing countries historically could succeed in efforts to keep a wedge, if not a growing one, between production costs and market prices. But now, with unconventional oil becoming increasingly available at lower prices, the original asymmetry is turned on its head, particularly as all three sources of unconventional hydrocarbons are abundant outside of OPEC. So unconventional output makes it asymmetrically more difficult for OPEC countries to achieve and sustain higher prices.

Clayton's examines in depth the 2011 release of strategic stocks by the international energy agency and the debates around that release as perhaps the quintessential issue raised by the disruptive changes abounding around commodities in this century. When should strategic stocks be released? Which countries need to get involved, including oil producers that could have a negative impact by withdrawing oil from the market? The new order questions not only when these strategic assets should be released but also what level of stocks might be desirable, and logistically how has the infrastructure of such stocks, especially in the United States, need to be revamped, perhaps moving them to other parts of the country. This is an issue that is likely to grow in importance as Saudi Arabia ends its role as a swing producer and also reduces its spare production capacity. The SPR issues embody the four major themes of Clayton's essays: the tensions and inherent conflict of

visions between commodity-importing and -exporting countries; markets and sovereigns vying for comparative advantage; the tensions in an inter-dependent global economy between national and international solutions; and the frequent difficulties in reconciling opposing forces of physical and financial markets.

Perhaps the biggest of the issues confronting commodity markets and the global economy relate to financial flows. The debates over the consequences of speculation in commodities markets, the core of Chapter 4, have subsided significantly in the aftermath of the Commodity Super Cycle, but they have not gone away. If anything, the low-interest-rate environment in this era of quantitative easing globally has increased the size and volatility of financial flows into and out of commodities. Over the twelve months before the publication of this book, there were two periods when total net length of managed money in oil reached peaks not dreamed of even in 2008. In the spring of 2014, as ISIS took over larger segments of the Sunni Triangle area of Iraq and as tensions in Europe grew over Russia's re-annexation of Crimea, net length of investors in financial oil reached their then record length and pushed "deferred" oil – contracts for settlement in 2017 and 2018 – to well over \$100 a barrel from the previous high of \$90. And then, through the summer and into September, that record net length turned into a net short position for Brent oil trading for the first time in history. As the Bank for International Settlements (BIS) noted (BIS Quarterly Review, March 2015), the decline in prices that occurred in the second half of 2014 cannot be explained by market fundamentals; rather, "the steepness of the price decline and very large day-to-day price changes are reminiscent of a financial asset." The BIS also noted that the size of indebtedness in the oil sector also played a role.

The rise in oil prices in 2015 has a similar relationship to financial flows, which by May 2015 reached another level of net length, this time concentrated in the prompt contracts of trading in the oil market. It is unclear how this record length will be played out as this book reaches the public. But one thing is clear – the world is only beginning to understand the volatility and finicky-ness of financial flows into commodities. If anything, conditions are becoming significantly less transparent and "controllable" than they were thought to be in 2008 when regulators in OECD countries started to reign in financial flows. Now, with a significant amount of metals inventories moving into warehouses that are not monitored by major exchanges like the London Metals Exchange (LME), and with many of these used to buttress securitized financing, it seems clear that volatility will not diminish any time soon, even if a world of relatively "cheap money" changes as central

banks move away from quantitative easing. This is the sort of puzzle that confronts commodity markets as the century proceeds. Clayton's book goes a long way in establishing a framework for understanding the issues that are now front and center in commodity markets.

Edward L. Morse  
Managing Director, Global Head of Commodity Research at Citigroup

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