



## Update from the Research Director of the J.P. Morgan Center for Commodities

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**Dr. Jian Yang**, Ph.D., CFA, J.P. Morgan Endowed Chair and JPMCC Research Director, welcoming participants at a JPMCC international commodities symposium.

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In this brief report, the J.P. Morgan Center for Commodities' (JPMCC's) Research Director will provide updates about recent JPMCC research activities from March 2021 through September 2021. This report discusses (a) the most recent JPMCC international commodities symposium; (b) a study that advances research on commodity futures volatility spillovers; (c) the continuing media attention on the research director's crude oil and agricultural analyses; and (d) other commodity research publication updates.

### The 4<sup>th</sup> Annual JPMCC International Commodities Symposium

The JPMCC organized the [4<sup>th</sup> annual international symposium](#) as a virtual conference, which took place from August 16 through August 18, 2021. The 4<sup>th</sup> annual symposium was originally scheduled for 2020 but was cancelled due to COVID-19, so the [last symposium had been in 2019](#).

As in the past, the 2021 symposium continued its core strength of providing a common forum for academics, policy researchers and practitioners who have expertise in the commodity markets. The symposium included four academic sessions and two industry panels, presenting academic and applied research from (a) top universities (*e.g.*, Yale; Oxford; Columbia; University of California, Berkeley; and the University of Pennsylvania), (b) top policy institutions (*e.g.*, the Federal Reserve System, International Monetary Fund, and World Bank), and (c) major companies (*e.g.*, J.P. Morgan, Uniper, and Trafigura). The



two keynote speakers were Charles Calomiris, Ph.D., the Henry Kaufman Professor of Financial Institutions at Columbia Business School and the former Chief Economist at the Office of the Comptroller of the Currency, and [Bluford Putnam](#), Ph.D., the Chief Economist of the CME Group. Dr. Putnam also serves on the JPMCC's [Research Council](#) and generously contributed [an article](#) to this edition of the *GCARD* on his keynote speech regarding new methods for analyzing the crude oil markets.

The symposium's industry panels covered (a) [ESG and the Applicability to Commodities](#), which was moderated by Bloomberg's Kartik Ghia, Ph.D., and (b) [whether we are in a "Commodity Super Cycle"](#), which, in turn, was moderated by the CME Group's Owain Johnson. Dr. Ghia is a member of both the [JPMCC's Industry Advisory Council](#) and the [GCARD's Editorial Advisory Board](#); and he also contributed a recent co-authored [article](#) to the *GCARD* on the applicability of Environmental, Social, and Governance considerations to commodity index construction. In addition, another *GCARD* author, David Fyfe, participated in the symposium's commodity super-cycle panel. Fyfe is the Group Chief Economist for Argus Media; and his *GCARD* article is available [here](#).

Notably, the symposium was featured in some international media publications (*e.g.*, the *China Futures* magazine of the China Futures Association and *Futures Daily*). The symposium will also be the subject of a special issue from a core finance academic journal, *Journal of Futures Markets*, to be published in May 2022.

In addition, the commodity symposium's rich blend of academic and practitioner presentations are available [here](#). Many of the symposium's presenters, discussants, and facilitators have contributed to past issues of the *GCARD*, as covered [here](#), so we are grateful that so many leading academic and industry commodity experts continue to be involved in the JPMCC's dissemination of original insights into the commodity markets.

Despite challenges, the symposium achieved greater success than past conferences in some respects. It received **the largest number of submissions**, coming from researchers from eleven countries (Canada, China, Czech, France, Germany, India, Italy, Japan, Switzerland, the U.K., and the U.S., in an alphabetical order). It was also **more inclusive and more representative internationally than previously**. This was the first time that the symposium received submissions and participation in the conference program from Japan and India, two major Asian countries ranking No. 3 and No. 7 in the world (in terms of 2020 Gross Domestic Product). The symposium program had a poster session including additional papers from Ph.D. students. The symposium also had the largest audience thus far at our annual symposium with over 500 online registrants. **The participants from 23 countries** were also more diverse than at previous symposia.

The 4<sup>th</sup> annual international commodities symposium was co-organized by the JPMCC's Research Director and by [Tom Brady](#), Ph.D., the JPMCC's Executive Director. Erica Hyman, the JPMCC's program manager, served as the coordinator for the symposium.



## A Study Advancing Research on Commodity Futures Volatility Connectedness

The article, "[Volatility Spillovers in Commodity Futures Markets: A Network Approach](#)," coauthored by the research director was published online by the *Journal of Futures Markets* in late September 2021. It advances research on commodity futures connectedness with interesting implications on multiple fronts. First, this is the first study to comprehensively explore commodity volatility spillovers across 25 global commodity futures markets from the perspective of low frequency/long-term (from a month up to a year) versus high frequency/short-term (within a week). The total commodity futures volatility connectedness, using the paper's model, averages 42%, and ranges between 31% and 63% during 2006 to 2019. Thus, commodities should be treated as a broad asset class from the volatility spillover perspective, and commodity specialists in a particular commodity should also watch for volatility or market situations in other commodity markets.

Second, the same set of commodities play the most active role in both receiving and sending volatility shocks. They also behave similarly in both short-term versus long-term volatility spillovers. In particular, crude oil and soybeans as individual commodities, and energy and grains as groups, stand out in driving the commodity volatility connectedness. The category of agricultural commodities is also heterogeneous, with livestock and softs as the most isolated in the commodity volatility connectedness network. Market participants should pay particular attention to other commodities in the same group in the short term, but also to other commodities in other groups in the long term.

Third, while the magnitude of commodity volatility connectedness is largely (on average about 60%) determined by short-term volatility spillovers, the fluctuation of commodity volatility connectedness arises mostly from commodity volatility spillovers in the long term, which is significantly driven by broad economic conditions in the U.S. This implies that the financialization of commodities might have limited effects on explaining the fluctuation of commodity price volatility and spillovers, particularly in the long term.

## Continuing Media Attention on the JPMCC Research Director's Crude Oil and Agricultural Analyses

The JPMCC Research Director's analyses of China's oil futures contracts have already received much international media attention; this continued around the 3<sup>rd</sup> anniversary of the [launch of China's oil futures](#) in late March 2021. The analysis of, and suggestions for, China's oil futures markets were based on multiple research projects, which were earlier published as a cover story in the October 2020 issue of the *China Futures* magazine. The research director's insights were also extensively quoted by the only national English newspaper in China, *China Daily*. The same piece with some modifications was also republished by *The Star*, the most popular English newspaper in Malaysia. In addition, the research director published his second op-ed in English in *Beijing Review* (China's only national news magazine in English) in early April 2021, where the research director was introduced by the magazine as "an internationally recognized scholar on derivatives securities and markets." In this article titled, "Secrets of China's Crude Oil Futures," the research director again shared a number of new findings on China's oil futures market.



The research on China's oil futures by the research director was even more extensively featured by the media in Chinese. These media outlets include *Economic Daily* (of the State Council of China), *China Review News Agency* in Hong Kong, *China Petroleum Daily* of China National Petroleum Corporation (the fourth largest company in the world in 2020), among others. The research director's insights were also featured by more news articles in Chinese (such as *China Petroleum Daily*) when the Shanghai International Energy Exchange celebrated the one-month anniversary of China's crude oil options in late July 2021.

In addition, in mid-March 2021, *Financial News* (of the People's Bank of China) published an exclusive interview with the research director where he shared his analysis into the price discovery performance of China's agricultural futures markets, based on his [journal article](#) published in April 2021. The news item was also reposted by Zhengzhou Commodity Exchange in China.

### Other Commodity Research Updates

The July 2021 issue of the *Journal of Futures Markets (JFM)* included a [retrospective evaluation](#) of the *JFM*'s articles during its first 40 years of publication. This evaluation noted that a [2001 JFM article on U.S. commodity futures markets](#), which was co-authored by the JPMCC's Research Director, is ranked **among the top 20 most cited articles** out of about 2,000 journal articles during the period. The research director was the article's lead author, and the article is based on his dissertation.

The research director's co-authored article titled, "[Price Discovery in Chinese Agricultural Futures Markets: A Comprehensive Look](#)," published in April 2021, was recently included in the August 2021 issue of the World Banking Abstract (WBA) published by Wiley. According to its editorial statement, WBA is published every two months, and in each issue includes 250 concise abstracts of "key, contemporary articles of practical interest to banking and financial services managers" from 250 journals and other non-scholarly or non-English periodicals.

### Conclusion

While the situation is apparently getting better, COVID-19 continues to have impact on all of us. We hope we would meet in person at the 2022 symposium, if not earlier. We wish everyone a healthy and safe winter!

Best Regards,

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