J.P. Morgan Center for Commodities at the University of Colorado Denver Business School



Interview with Dr. Thomas Brady, Ph.D.

Executive Director of the J.P. Morgan Center for Commodities at the University of Colorado Denver Business School



Dr. Thomas Brady, Ph.D., Executive Director of the J.P. Morgan Center for Commodities at the University of Colorado Denver Business School.

In this issue of the *GCARD* we are very pleased to interview <u>Dr. Thomas Brady</u> who was named as the JPMCC's Executive Director in September 2019. Dr. Brady was previously the Chief Economist at Newmont Mining Corporation and has been a long-time supporter of the JPMCC, having served on the JPMCC's Advisory Council and Research Council as well as serving on the *GCARD*'s Editorial Advisory Board. In this interview, Dr. Brady discusses how he became involved in the commodity markets and what his goals are for the JPMCC.

Interview with Dr. Thomas Brady

Prior to becoming the Executive Director of the JPMCC, you served on the Advisory Council, Research Council and Editorial Advisory Board of the GCARD. What initially prompted your involvement with the JPMCC?

I was very intrigued by the broad commodity scope of the JPMCC when it was launched in 2012, offering education, research and public policy across the agriculture, energy, and mining-related commodity sectors. While I was employed with Newmont Mining, I very much enjoyed connecting with fellow industry Advisory and Research Council members; listening to ideas and issues shared from their particular

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industries or research focus and how I could potentially apply these to my job in mining. During my years in industry, I envisioned eventually getting involved with an academic institution following this part of my career. So far, being with the JPMCC has been great. In particular, I am appreciating the opportunity to understand the wider commodity space (previously I was focused on precious metals, oil and FX rates.) In addition, with the Center's two tenured business school faculty members, Jian Yang and Yosef Bonaparte, and myself from industry, we can truly move the center forward, addressing both applied and theoretical viewpoints for commodities.

How did you first get started in the commodity markets?

My first full-time position after I graduated with undergraduate degrees from Regis University was as a statistician. At that time, I enrolled in a commodity project investment class which focused on cash flow modeling, discounting and other financial valuation methods. This really opened up my eyes and I remember thinking, "... I would like to work for a company related to this sector someday ..." After this, I decided to pursue a Ph.D. in Mineral Economics at the Colorado School of Mines, which I still consider one of the best career moves I have made. A few years later, as I was nearing the completion of my dissertation, I very much wanted to work for a large, global commodity-related company. Initially, I had a post-doc assignment with J.P. Morgan's commodity research team in New York. It was a tough decision to leave that opportunity. However, I ultimately accepted a full-time position in corporate development with Newmont Mining. Over 2 separate stints of employment, I stayed with the company for nearly 15 years with roles in financial risk management, strategic planning, investor relations and ultimately as the firm's chief economist. Working in commodities has and continues to be a great choice for me, every day brings new challenges, a global perspective and there is always something to learn. With the JPMCC, I want to open up these types of opportunities to our students.

You have held various roles including in financial risk management and strategic planning. How can you apply your past experiences as Executive Director of the JPMCC?

My career in industry has been centered in quantitative finance (so I am admittedly biased here.) In my opinion, anyone seeking a career in commodities (and/or overall business for that matter) needs to have a basic understanding of and be comfortable in applying quantitative methods. Analyst positions on corporate development, business planning and strategy teams, at a minimum, require strong financial modeling abilities, coupled with a good understanding of underlying financial market fundamentals. Those seeking positions with treasury and trading/risk management groups need to have a thorough understanding of financial derivative instruments, their underlying value drivers and risks as well as trading market fundamentals. I increasingly see how technology is shifting, and I recommend supplemental skills that enhance the ability to collect and work with large data sets, such as Python and/or R programming. Overall, these quantitative and technology skills have broad applicability across the broad commodity sector. With my past experience, I understand the many needs from industry and seek to align the Center towards these.

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What are your goals for the JPMCC? What impact can the JPMCC have on the commodity industry?

My goals for JPMCC are three-fold concerning: undergraduate, graduate and professional commodity education; applied commodity research, and public education concerning commodities.

- For undergraduate, graduate and professional education, my goal is for students coming out of the Center to have a solid understanding of the commodity markets (from production, through supply chains and ultimately to the trading floor.) I want these folks to be very well prepared for interesting and challenging careers throughout the commodity sector. Over the coming year, I would like the Center to significantly increase enrollment and expand our course offerings. Of note, we will be offering two, four-week professional education classes in commodity data analytics. I also would like us to offer a commodity market fundamentals & trading class in 2021.
- Both the GCARD publication and our annual research symposium have proven effective in providing
 applied commodity research and bridging the gap between academia and industry professionals.
 While we have seen significant increases in interest in the GCARD and participation with the
 symposium, a key goal for both of these is to expand the audience. In addition, we need to secure
 additional sponsorship for the GCARD to ensure the continuation of this publication going forward.
- Commodity-related public education is an area where the Center has yet to establish a much needed and solid foundation. In my view the Center needs to provide a nonpartisan virtual and physical location where critical commodity-related issues may be presented, discussed and debated. As an example, an issue that continues to arise here in Colorado, nationally and around the globe is, "...what is a realistic energy mix for the future...?" I believe there are too many faulty expectations out there and the Center needs to bring light to these. We will be looking to sponsor in-person sessions and online webinars over the coming months.

Overall, these goals aim to provide industry with current and future employees that possess the necessary skills to hit the ground running, by adding immediate value. Bridging the gap between industry and academia, the J.P. Morgan Center for Commodities seeks to provide practical commodity-related research, addressing business needs. Public opinion and policy are critical drivers across the commodity sector and the Center strives to ensure these are informed through proper discussion and debate.

What trends do you see in the natural resources markets and how do you plan to incorporate these trends in courses offered by the JPMCC?

Commodity markets and prices are inherently volatile, resulting in boom and bust cycles for producers, through suppliers and into financial institutions. From my experience, the majority of commodity-related firms have demonstrated a lack of ability to maintain operating discipline gained through down cycles when prices improve. This leads to aggressive hiring when prices trend up and painful personnel reductions when prices decline. In my view, one way to mitigate the downside of the prevalent hiring and firing cycles is to have education across the broad energy, agricultural and mining commodity sectors, accompanied with applicable quantitative and technology skills. This offers the flexibility for individuals

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to gain employment in other segments and add value very quickly. Our goal with education at the Center is to enhance student's employment opportunities across all commodities.

The aim of the GCARD "is to serve the JPMCC's applied research mission by informing commodity industry practitioners on innovative research that will either directly impact their businesses or will impact public policy in the future." What other initiatives are in place to carry out the research mission?

An area that I continue to find fascinating is the misalignment between academic institutions (particularly business and economic departments) and industry. In the end, this is driven by differing incentives. Over the last four years, however, it has been heartening to be involved with the JPMCC's annual commodity research symposium, with wide participation from both commodity related academics as well as industry practitioners. This conference continues to grow in reputation and participation across the commodity sector and we will be seeking to expand its influence. Likewise, the *GCARD* is fulfilling a much-needed niche in supplying relatively easy to digest, applied research across commodities for industry practitioners. During my stint as Newmont's economist, I appreciated being able to quickly read a *GCARD* article, on oil prices for example, then reflecting on the potential applicability to precious metals. Over the nearer term, I would like the Center to hold "Commodity Conversations" where we host in-person and/or virtual seminars, presentations and panel discussions to pull in both academic and industry experts to discuss key current topics and market outlooks.

Biography

THOMAS BRADY, Ph.D.

Executive Director of the J.P. Morgan Center for Commodities at the University of Colorado Denver Business School

Dr. Thomas Brady is Executive Director of the J.P. Morgan Center for Commodities at the University of Colorado Denver Business School. Dr. Brady was previously the Chief Economist at Newmont Mining Corporation where he was responsible for generating key commodity price, foreign exchange and other financial assumptions used throughout the company. In this role, Dr. Brady also developed methods to effectively quantify and communicate the economic impact of Newmont's operations to host communities and countries. Prior to this position, Dr. Brady led Newmont's Strategic Planning function that developed and implemented portfolio modeling analytics. Before Newmont, Dr. Brady was a Senior Manager at Risk Capital Management, a consultancy that advised energy and natural resource companies on financial risk, valuation and commodity hedging. He has also worked with CQG, Inc. where he developed a suite of automated trading systems for commodity futures contracts using the company's short-term, price and volume charting methods.

Dr. Brady holds a Ph.D. in Mineral Economics with research emphases in commodity markets from the Colorado School of Mines. In addition, Dr. Brady holds a Master's degree in Mathematics, also from the Colorado School of Mines.

Dr. Brady previously authored three applied research articles for the *GCARD*. He contributed to the <u>Spring 2016</u> issue of the *GCARD* on "<u>The Distribution of Economic Benefits from Mining</u>"; the <u>Winter 2017</u> issue where he discussed, "<u>Global Gold Mine Supply</u>"; and he also authored an article for the <u>Winter 2019</u> issue on the "<u>Practical Considerations for Commodity Investment Analysis</u>".