

# Commodities, Volatility, and Risk Management:

*The impacts of trade restrictions, market imperfections, and green finance*

**Conference – Paris Dauphine, 14-15 May 2019**

*(Pre-conference instruction seminar: May 13; Post-conference student field trip: May 16)*

## Conference outline and final program

### Conference outline

This conference tackles commodity pricing and risk management, viewed through the prisms of market imperfections and environmental concerns. The main focus is on agricultural and energy markets, with specific themes intended to shine light on what the organizers and members of the scientific, industry, and policy advisory committees believe are prominent issues (or will be in the near future).

The specific issues, which the conference seeks to tackle, connect finance and the environment:

1. **New understandings regarding who bears risk** in commodity futures markets.
2. **Derivatives design/effectiveness**: new risk management products for the organic agricultural sector; basis risk and the impact of nearby futures-spot convergence issues on the term structure of grains and oilseed futures prices; effectiveness of US-based derivatives in a world where trade wars and climate change are shifting the geography of agricultural production and trade.
3. **Political risk**: links between commodity price volatility and trade restrictions; using crop insurance vs. market-based (derivatives) risk management; implications of the unfolding trade war for basis risk and trading in commodity derivatives markets.
4. **Environmental risk**: pricing climate risk; measuring and managing price risk in organic agricultural markets; dealing with stranded energy assets; modeling catastrophic risk.
5. Links between **technology and commodity market quality**, including risks linked to machine trading and liquidity provision in derivatives markets.

An optional one-day seminar, targeted at select students and industry professionals, will take place on the day prior to the conference (Monday, May 13). The morning on that day will be devoted to the fundamentals of risk management in agricultural markets, with lectures by Professor Delphine Lautier (PSL—Paris Dauphine). The afternoon will feature an intensive practical seminar for current (European business people) and future (students from Illinois and Paris) “fans” of commodity risk management. Profs. Lautier and Robe (University of Illinois) will join other academic, policy and industry experts (Dr. Ashley Hungerford from the USDA, Prof. Jean Cordier from Agrocampus-Ouest, Mr. Bruno Lepoivre from Pacifica, Prof. Bruce Sherrick from the University of Illinois, Prof. Joost Pennings from Wageningen University, Prof. Josh Woodard from Cornell University) to discuss producer protection mechanisms (such as crop insurance) in the United States and in Europe.

<https://commodity.sciencesconf.org/>

### Conference structure

The conference will run on May 14-15, 2019. In addition, a pre-conference instruction seminar targeted at interested industry professionals, policy makers, and select students will run on Monday May 13<sup>th</sup>, 2019.

The conference is organized and supported by:

**InterAmerican Development Bank (IDB)**  
**Oilseed Markets Research Initiative (MiMO)**

with additional financial support from:

**PSL—Paris-Dauphine** Research University (*DRM-Finance, LEDA, House of Finance*)  
**TCCCF—The Clearing Corporation** Charitable Foundation  
*(through the **University of Illinois**'s CCCF Endowed Professorship in Derivatives Trading)*  
**MFRL—Marketing-Finance** Research Lab (*University of Maastricht, Netherlands*)  
**CORMEC—Commodity Risk Management** Expertise Center (*a joint initiative of Wageningen University, Maastricht University, and the University of Illinois at Urbana-Champaign*)  
**LABEX “Finance and Sustainable Growth” Institut Louis Bachelier**  
**“Risks and Financial Protection of Agriculture” Research Initiative**  
**Chair “Finance and Sustainable Development” & FiME Lab Research Initiative**

Questions should be directed to Damien Fessler: [Damien.FESSLER@dauphine.fr](mailto:Damien.FESSLER@dauphine.fr)



## **Organizers:**

Delphine Lautier, Joost Pennings, Andrew Powell, Michel Robe, Bertrand Villeneuve, Damien Fessler

## **Scientific Committee:**

Michael Adjemian, University of **Georgia**  
Yacine Aït-Sahalia, **Princeton** University  
Katherine Baylis, University of **Illinois**  
Eugenio Bobenrieth, **Pontificia Universidad Católica de Chile**  
Colin Carter, University of **California** at Davis  
Michael Cook, University of **Missouri**  
Ivar Ekeland, Université **Paris-Dauphine**  
Kris Jacobs, University of **Houston**  
Jian Yang, JPM Center for Commodities *and* University of **Colorado** at Denver  
William Martin, **IFPRI**  
Joëlle Miffre, **Audencia** Business School  
Erica Myers, University of **Illinois** at Urbana-Champaign  
Nikos Nomikos, **Cass Business School**  
Anna Pavlova, **London Business School**  
Bruce Sherrick, University of **Illinois** at Urbana-Champaign  
K. Geert Rouwenhorst, **Yale** University  
Duane Seppi, **Carnegie Mellon** University  
Betty Simkins, **Oklahoma State** University  
Andres Trujillo-Barrera, University of **Idaho**  
Rick van der Ploeg, **Oxford** University  
Kumar Venkataraman, **Southern Methodist** University  
Joshua Woodard, **Cornell** University

## **Regulatory/policy advisory committee & panel members:**

**Chair: Andrew Powell**, Principal Advisor, Research Dept., **IADB**  
John Baffes, DECG – Senior Agriculture Economist, **World Bank**  
Robert Johansson, Chief Economist, **USDA**  
Tassos Haniotis, Director, DG Agriculture, **European Union**  
Scott Mixon, Associate Director of Research, **CFTC**

## **Industry advisors and panel members:**

**Chair: Clémence Alasseur**, Directeur FIME, **EDF**  
Christophe Beaunoir, CEO, **Saipol** (Groupe Avril)  
Marie Brière, Head of Investor Research Center, **Amundi**  
Bahattin Büyüksahin, Head of Energy Analysis, **Abu Dhabi Investment Authority** (ADIA)  
Ronald Filler, Professor, New York Law School & Public Director, National Futures Association (**NFA**)  
Herman Kamil, Chief Debt Management Unit, **República Oriental del Uruguay**  
Nicholas Kennedy, Head of Commodities, **Euronext**  
Jeffrey Kuijpers, Executive Director—Commodities E/ME/A, **CME Group**  
Jean-Michel Lasry, Green Data Lab – **Institut Louis Bachelier**  
Bruno Lepoivre, Asst. Director, Agric. & Prevention Sector, **Crédit Agricole Assurances** (Pacifica)  
Juan Pablo Newman (**former Head of Public Credit, Ministry of Finance, Estados Unidos Mexicanos**)  
Deborah Wiese, Assistant Director, Commodity Risk Management, **Bayer A.G.**

## **Day 0 – May 13<sup>th</sup> Pre-conference Seminar**

### **“Hedging and risk management in agricultural markets”**

#### **Morning (9AM-12:15PM):**

**Introduction (9-9:10AM):** Michel Robe, U Illinois

**Lecture (Delphine Lautier, UPD)**

- (i) Hedging principles

**Coffee (UPD, 10:40-11)**

- (ii) Hedging commodity price risk with OTC and futures contracts

**Lunch (UPD, 12:30-13:30)**

#### **Afternoon:**

**Expert panel (1:30 to 3:50PM)**—Crop insurance vs. Futures-based agricultural hedging

**Moderators: Didier Folus (U Paris-Nanterre)**

- (i) **US experience (1:30-2:30)**
  - a. agency program overview  
Ashley Hungerford (USDA)
  - b. pricing and data  
Bruce Sherrick (U Illinois)  
Josh Woodard (Cornell U)

**Coffee (2:30-2:50)**

- (ii) **European experience (2:50-3:50)**
  - a. Joost Pennings (Wageningen U)
  - b. Jean Cordier (Agrocampus Ovest & UMR SMART-LERECO)
  - c. Bruno Lepoivre, Crédit Agricole Assurances—Pacifica  
& “Risks and financial protection of farmers” Research Initiative

**Student dinner for UIUC and European students (UPD, Maastricht & Wageningen Universities)**

**Dinner (7PM – by invitation only – Musée du Quai Branly)**

**Conference on Commodities, Volatility, and Risk Management:**  
***The impacts of trade restrictions, market imperfections, and green finance***  
**Day 1 – May 14<sup>th</sup>**

**Morning:** full audience, including students

**Conference introduction** (8:45-9AM): Bruno Bouchard, Vice-President, UPD Scientific Council

**Paper session 1** (9 to 11AM)\*: Risk-bearing & Risk-taking in Commodity Markets

**Chair: Joëlle Miffre** (*Audencia Business School*)

Swap Dealers' Role in Risk Bearing and Information Transmission (Scott Mixon, CFTC)

*Discussant: Hitesh Doshi, U Houston*

The Role of Hedgers and Speculators in Commodity Markets (Geert Rouwenhorst, Yale U)

*Discussant: Michel Robe, U Illinois*

Commodity Carry Trades and Tail Risk (Daniele Bianchi, Warwick U)

*Discussant: Marie Brière, Amundi and UPD*

**Coffee (11-11:30AM)** + **student debriefing**

**Discussion Panel 1** (11:30-12:30PM): New Platforms & Product Development in Commodity Markets

**Moderator: Ron Filler** (*NFA, NYLS*)

**Panelists:** Alexis Poullain (AMF)

Nicholas Kennedy (Euronext)

Jeff Kuijpers (CME Group)

Joost Pennings (Wageningen U)

**Lunch** (*UPD, 12:30-13:30*)

**Afternoon:** split audience **Students field trip** to AMF, 1:30-4:30PM (*Alexis Poullain*)

**Faculty and Professionals** (1:30-5PM):

**Paper session 2** (1:30-2:50PM): Modeling Commodity & Asset Markets under Climate Change

**Chair: Brian Wright** (*UC Berkeley*)

Climate Change Risks, Stock Returns, and the Oil Sector (Steffen Hitzemann, Rutgers U)

*Discussant: Delphine Lautier, U Paris-Dauphine (UPD)*

Asset Prices and Portfolios with Externalities (Steven Baker, U Virginia)

*Discussant: Eugenio Bobenrieth, PU Catolica de Chile*

**Coffee (2:50-3PM)**

**Paper session 3** (3-5PM): Long-term and Intraday Drivers of Commodity Prices

**Chair: Phil Garcia** (*Illinois*)

Intraday Liquidity Spillovers in Commodity Markets (C. Gardebroek, Wageningen U)

*Discussant: Phil Garcia, U of Illinois*

Entropy Risk in Commodity Markets (Hitesh Doshi, U Houston)

*Discussant: Steffen Hitzemann*

Equilibrium Relations between Spot and Futures Markets (Ivar Ekeland, UPD)

*Discussant: Brian Wright, UC Berkeley*

**Dinner** (*Restaurant "Brasserie Mollard", 6:30-9PM*)

**Conference on Commodities, Volatility, and Risk Management:**  
***The impacts of trade restrictions, market imperfections, and green finance***  
**Day 2 – May 15<sup>th</sup>**

**Morning:** full audience, including students

**Paper session 4** (9-11AM) <sup>\*</sup>: Political risk      **Chair: Michel Robe** (U Illinois)

Stranded Assets – Valuing Climate Policy Risk in Bank Loans (Kathryn de Greiff, U Zürich)

*Discussant: Robert Hauswald, American U*

Forestalling Democratization Using International Trade Policy (Ben Zissimos, U Exeter)

*Discussant: Casey Petroff, Harvard U*

Poverty Impact of Food Price Shocks and Policies (Csilla Lakatos, World Bank)

*Discussant: Christophe Gouel, INRA*

*Coffee (11-11:30AM) + student debriefing*

**Discussion Panel 2** (11:30AM-12:15PM): Trade Restrictions, Trade Wars, and Commodity Price Risk

**Moderator:**      **Katherine Baylis** (U Illinois)

**Panelists:**      John Baffes (World Bank)      Deborah Wiese (Bayer A.G.)  
                         Christophe Gouel (INRA)      Bruce Zanin (USEU)

**Lunch** (UPD, 12:15-13:30)

**Luncheon Speaker\*:** Tassos Hanriotis, Director, Economic Analysis, DG Ag, European Commission

(1:30-2PM) Addressing and managing risks in the Common Agricultural Policy:

*Lessons from the past and challenges for the future*

**Afternoon:**

**Paper session 5** (2-3:20PM): Environmental and catastrophic risk management

**Chair: Joost Pennings** (Wageningen U)

**Papers:**      Pricing Poseidon (Sumudu Watugala, Cornell U)

*Discussant: Scott Mixon, CFTC*

Hurricanes & Sugar Price Risk Management (Dan Scheitrum, U Arizona)

*Discussant: Josh Woodard, Cornell U*

*Coffee (3:20-3:45PM) + student debriefing*

**CLOSING PANEL:** How Do Governments Deal with Commodity Price Volatility? (3:45-5PM)

**Moderator:**      **Andrew Powell** (IADB)

**Panelists:**      Herman Kamil (Uruguay)      Nicolas Merener (UTdT, Argentina)  
                         Christophe Beaunoir (Saipol)      Juan Pablo Newman (Mexico)  
                         Tassos Hanriotis (EU)

**CLOSING STATEMENTS:** Andrew Powell (IADB) (5PM-5:15)

**Dinner** («Le Paris» Bateau sur la Seine, 7-10PM)