The Centre for Applied Maceonomicsand commodity Price (CAMP) at the BI Norwegian Business School invites PhD students and scholars to a

Mini PhD course **o** Oil Markets and the Macro Economy, August 2023, 2019Oslo, Norway

With Associate Professor Christiane Baumeister University of Notre Dame NBER and CEPR

Organized by Professor Hilde C. Bjørnlabb

The course will cover advanced prical research on oil market models and discuss links between oil prices and the global economy as well-inspointing countries. The focus ill be onstructural vector autoregressive (SVAR) models that have been used to disentangle the sources of oil phice dations, to study the macroeconomic consequences of oil price shocks, and to forecast the future path of oil prices Details are available from:

https://programmeinfo.bi.no/en/course/DRE7011/2019autumn

The mini-course can be accredited as a course if participants complete an assignment at the end. To register for thisourse please go to:

https://diwiduaticedreses/phd/externabandidates/ or email phd@bi.no for questionscourse, but participants are expected to cover their travel and accommodation costs.

Note: Some funding is available for accommodation for registered PhD scholars.

For questions about theoursecontent or application for funding, please email hilde.c.bjornland@bi.no

We hope to see you in Oslo Anugust

DRE7011 Mini PhD course in Oil Markets and the Macro Economy, August 2023, 2019Oslo, Norway

The course will cover advanced empirical research on oil market models and discuss links between oil prices and the global economy as well as oil-importing countries. The focus will be on structural vector autoregressive (SVAR) models that have been used to disentangle the sources of oil price fluctuations, to study the macroeconomic consequences of oil price shocks, and to forecast the future path of oil prices.

Day 1: 20 August, 10:00 am – 3:30 pm

We revisit the identification problem in structural VAR models and introduce a general Bayesian framework that encompasses standard identification approaches as special cases. In particular, we challenge the current practice of identification in global oil market VAR models and provide a more flexible approach for estimation and inference.

Day 2: 21 August, 09:00 am - 11:30 am

We illustrate these new ideas of identification by revisiting the role of oil supply and demand shocks in generating historical fluctuations in the price of oil and show how to implement those in practice.

Day 3: 22 August, 09:00 am – 3:00 pm

We discuss several approaches that have been used to study the effects of different types of oil price shocks on macroeconomic and financial variables. We examine the usefulness of external instruments based on narrative evidence and high-frequency information in oil futures markets, and the importance of modeling time variation. We also conduct case studies of the macroeconomic consequences of the 1986 and the 2014 oil price decline.

Day 4: 23 August, 09:00 am – 12:00 pm

We consider a set of oil price forecasting models, evaluate their out-of-sample forecasting performance and discuss the merits of forecast combination. We show how to use reduced-form VAR forecasting models to conduct structural scenario analysis and assess the risks underlying these oil price forecasts. We illustrate how forecasting techniques can be used to understand specific episodes in the oil market and shed light on the forces that triggered the 2014 oil price decline.

NOTE: During the course, handouts, Matlab codes and additional references will be provided.

Day 1-2: The Determinants of Oil Price Fluctuations

Baumeister, C. and J.D. Hamilton (2015), "Sign Restrictions, Structural Vector Autoregressions, and Useful Prior Information," *Econometrica*, 83(5), 1963-1999.

Baumeister, C. and J.D. Hamilton (2019), "Structural Interpretation of Vector Autoregressions with Incomplete Identification: Revisiting the Role of Oil Supply and Demand Shocks," *American Economic Review*, 109(5), 1873-1910.

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