Oil, Money and Power: economic and political economy aspects of resource extraction

Module X, 2020-21

Gerhard Toews
New Economic School
gtoews@nes.ru

Course Website: https://mv.nes.ru

Instructor's Office Hours: by appointment **TA:** Lily Shevchenko (lshevchenko@nes.ru)

Course description

This course is designed to familiarize students with the role of natural resources in economics and politics, with a focus on oil&gas industry. Due to Russia's role as an significant player in the global oil market and the importance of oil for Russia's economy, it will be used as an example whenever possible.

The course will start by introducing the students to a brief history of the oil sector and the oil-rich economies, exemplifying how oil may be a great blessing, as well as a curse, if mismanaged. Then, we will discuss how companies decide where and when to invest, and how such decisions determine the supply of oil in the short and in the long run. On the demand side, we will discuss the main drivers of energy demand such as the appearance of substitutes, changes in energy efficiency as well as the societies' changing preferences for the internalisation of negative externalities in energy generation, e.g. caring about pollution. The latter forces firms to exhibit more responsibility towards environmental as well as social concerns, e.g. via the ESG disclosure. Bringing together supply and demand, we will explore how the interaction between supply and demand determines commodity prices on the global level and how we can use these insights to (carefully) predict the future development of commodity prices (eight lectures within two weeks).

In the second part of the course we will explore how the extraction of resources may affect economic activities in other sectors of the economy, on the local and on the aggregate level (three lectures within one week). In the third part of the course we will discuss how concentrated amounts of wealth coming from a point resource, such as oil, may affect individuals' behavior with a focus on corruption, domestic conflicts and individuals' desire to stay in and gain political power (three lectures within one week). If we have time, we will spend the last lecture in the fourth week discussing the long-term consequences of resource wealth.

Throughout the course we will use theoretical and empirical tools from a variety of subfields in economics. The main goal of the course is to enable students to make informed decisions on financial and economic issues related to natural resource extraction. Its successful completion will prepare students to advise firms in the private sector, international organizations and policy makers on issues such as the optimal timing of resource extraction, the macro economic consequences of resource extraction, on the macro-management of resource wealth as well many others.

Course requirements, grading, and attendance policies

A successful completion of Microeconomics, Macroeconomics as well as Econometrics is useful, albeit not necessary. The grade will be a combination of the final multiple choice exam (60%) and 4 applied exercises (10% each) which will have to be submitted at the end of each week.

Course contents

Historical Overview (Lectures 1 - 2)

Main reference:

Diamond, Jared. Collapse: How societies choose to fail or succeed. Penguin, 2005.

Sachs, Jeffrey D., and Andrew M. Warner. "The curse of natural resources." *European Economic Review* 45, no. 4-6 (2001): 827-838.

Smith, Brock. "The resource curse exorcised: Evidence from a panel of countries." *Journal of Development Economics* 116 (2015): 57-73.

Yergin, Daniel. The prize: The epic quest for oil, money & power. Simon and Schuster, 2011.

Classical Economics of Natural Resources (Lectures 3 - 7)

Main reference:

Dixit, Avinash K., and Robert S. Pindyck. "The options approach to capital investment." Real Options and Investment under Uncertainty-classical Readings and Recent Contributions. MIT Press, Cambridge 6 (1995).

Cust, James and Torfinn Harding "Institutions and the Location of Oil Exploration" *Journal of the European Economic Association*, Volume 18, Issue 3, June 2020, Pages 1321–1350.

Hotelling, Harold. "The economics of exhaustible resources." *Journal of Political Economy* 39, no. 2 (1931): 137-175.

Krautkraemer, Jeffrey A. "Nonrenewable resource scarcity." *Journal of Economic Literature* 36, no. 4 (1998): 2065-2107.

Kilian, Lutz. "Not all oil price shocks are alike: Disentangling demand and supply shocks in the crude oil market." *American Economic Review* 99, no. 3 (2009): 1053-69.

Micro and Macro Issues of Resource Booms and Busts (Lectures 8 - 10)

Main reference:

Aragón, Fernando M., and Juan Pablo Rud. "Natural resources and local communities: evidence from a Peruvian gold mine." *American Economic Journal: Economic Policy* 5, no. 2 (2013): 1-25. Arezki, Rabah, Valerie A. Ramey, and Liugang Sheng. "News shocks in open economies: Evidence from giant oil discoveries." *The Quarterly Journal of Economics* 132, no. 1 (2017): 103-155.

NEW ECONOMIC SCHOOL Master of Arts in Finance, Master of Science in Finance

Corden, W. Max, and J. Peter Neary. "Booming sector and de-industrialisation in a small open economy." *The Economic Journal* 92, no. 368 (1982): 825-848.

Harding, Torfinn, Radoslaw Radek Stefanski, and Gerhard Toews. "Boom goes the price: Giant resource discoveries and real exchange rate appreciation." forthcoming in the *The Economic Journal* (2020).

Political Economy Issues (Lectures 11-13)

Main reference:

Asher, Sam, and Paul Novosad. "Rent-seeking and criminal politicians: Evidence from mining booms." forthcoming in the *Review of Economics and Statistics* (2020).

Berman, Nicolas, Mathieu Couttenier, and Victoire Girard. "Natural Resources and the Salience of Ethnic Identities." *Working Paper* (2020).

Caselli, Francesco, and Guy Michaels. "Do oil windfalls improve living standards? Evidence from Brazil." *American Economic Journal: Applied Economics* 5, no. 1 (2013): 208-38.

Mehlum, Halvor, Karl Moene, and Ragnar Torvik. "Institutions and the resource curse." *The Economic Journal* 116, no. 508 (2006): 1-20.

Long-Run Consequences (Lecture 14)

Main reference:

Jacobsen, Grant D., and Dominic P. Parker. "The economic aftermath of resource booms: evidence from boomtowns in the American West." *The Economic Journal* 126, no. 593 (2016): 1092-1128. Michaels, Guy. "The long term consequences of resource-based specialisation." *The Economic Journal* 121, no. 551 (2011): 31-57.

Course materials

Neither of the books is compulsory, but if you do not like these books, well, maybe you are picking the wrong class.

- [1] Ross, Michael L. The oil curse: how petroleum wealth shapes the development of nations. Princeton University Press, 2012.
- [2] Yergin, Daniel. The prize: The epic quest for oil, money & power. Simon and Schuster, 2011.

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.