

Chapter 8. Transaction Costs and U.S. Natural Gas Markets

Study Question

- 8.1.** Go to the U.S. EIA International Energy Database (<http://www.eia.gov/countries/data.cfm>)
- 8.1.a.** For the latest year available, find the country with the largest gross natural gas production. Indicate the country, year, and production. How much of its gas was flared?
 - 8.1.b.** Convert the gross production in 8.1.a. from cubic feet into cubic meters. (Recall that $1 \text{ m}^3 = 35.3 \text{ ft}^3$).
 - 8.1.c.** Find the heat content of this countries natural gas in the data base and its energy content from BTU/ft³ to Kcal/m³. (Recall that $1 \text{ Kcal} = 3.966 \text{ BTU}$).
 - 8.1.d.** What country flares the most natural gas? How much? What country re-injects the most natural gas? How much?
 - 8.1.e.** Go to their glossary (<http://www.eia.gov/tools/glossary/>) and find out the difference between gross production, dry production, and marketed production. }
- 8.2.** Transaction cost economics suggests that market governance is influenced by the costs of making transactions.
- 8.2.a.** Give examples of 4 types of transaction costs
 - 8.2.b.** What are the four types of governance discussed in the book.
 - 8.2.c.** What are quasi-rents and do you expect they are high or low in the natural gas transmission industry. Why or why not?
 - 8.2.d.** Suppose the price natural gas is \$5 per Mcf, average fixed cost is \$2.00 per Mcf, and average variable cost is \$0.50. How much is quasi rent and rent.
- 8.3.** Economies of scale, economies of scope and transaction costs influence firm behavior. Define each of these concepts and discuss what influence they are likely to have on market behavior. Be sure to include some discussion of market governance and transaction cost economics.
- 8.4.** Discuss the evolution of the governance in the U.S. natural gas market. Relate the changes in governance across time to transaction cost economics.
- 8.5.** Trace the historical policy changes in the U.S. natural gas market and indicate how they changed governance in the market.