De Zeeuw (2015) International Environmental Agreements (IEAs)

1. What are the main assumptions w.r.t. to reaction of coalition to potential deviation in the static two-stage game (Barret, 1994, Diamantoudi and Sartzetakis, 2002, Finus, 2001) and cooperative game (Chander and Tulkens 1995) between symmetric players? Explain whether the conclusions of these two approaches to model IEA are same or different?
2. What is the trigger strategy in the repeated games (Friedman 1986)? What is the difference between how the coalition reacts to the potential deviation between: A. static two-stage game and non-cooperative repeated game, B. static γ-core cooperative game and non-cooperative repeated game? Explain how free-riding benefits are reduced in the repeated game? Consider applicability and credibility of punishment strategies (in both of aforementioned games) in the IEA design?
3. Consider two-stage game between asymmetric countries (Fuentes-Albero and Rubio, 2010, and Pavlova and de Zeeuw, 2013). How are the results different between the outcomes of game with identical players and asymmetric players? Explain how introduction of transfers can affect success of an agreement?
4. Using examples of environmental and resource conflicts in section 4.3, discuss adoption of transfers/side payments? Are direct monetary transfers common or rare practice? Reflect why it is so? What can be viewed as an alternative to side payments that can help balancing asymmetry?
5. Explain what the ‘tipping point’ means using for instance, example of climate catastrophe, and how does it transform the outcome of the two-stage game, Barrett (2013)? What other example in environmental systems can you come up with where tipping point might trigger catastrophic damage? How does knowledge of tipping point affect player’s incentives to cooperate in experimental game (Barret and Dannenberg 2012)?