

EconS 503 - Microeconomic Theory II
Homework #4 - Due date: February 13th, 2019

1. **[Temporary punishments in GTS]** Consider the setting in Example 8.15 of the *Advanced Microeconomic Theory* textbook (MIT Press). Assume a collusive agreement in which firms use a punishment scheme where they revert to the Nash equilibrium of the stage game during T consecutive periods, and after that punishment phase they return to cooperation.
 - (a) Under which conditions on the discount factor δ can collusion be sustained as a SPNE of the infinitely repeated game when firms rely on this temporary punishment?
 - (b) How does your minimal discount factor, $\bar{\delta}$, depend on T ?
 - (c) Is it always bounded between 0 and 1?

2. **Exercises from Tadelis:**
 - (a) Exercises from Chapter 10: 10.3, 10.6, 10.9, and 10.11.
 - (b) Exercises from Chapter 11: 11.2, 11.3, 11.4, 11.7.