
Midterm Exam

You have one hour and twenty minutes to complete the exam, be certain to watch the clock and use your time wisely. Answer questions completely but concisely. Including additional incorrect information in an otherwise correct answer may result in a loss of points. As a rough rule of thumb, five points typically take two well-crafted sentences to answer correctly and completely. So a 10-point question typically requires four concise sentences to answer.

You may refer to your notes, the lectures slides, readings and any other materials posted on our course Blackboard site. You may access either printed or electronic versions of these materials. You may not use the internet to search for additional information during the exam and you may not seek the help of any other individuals.

Good luck!

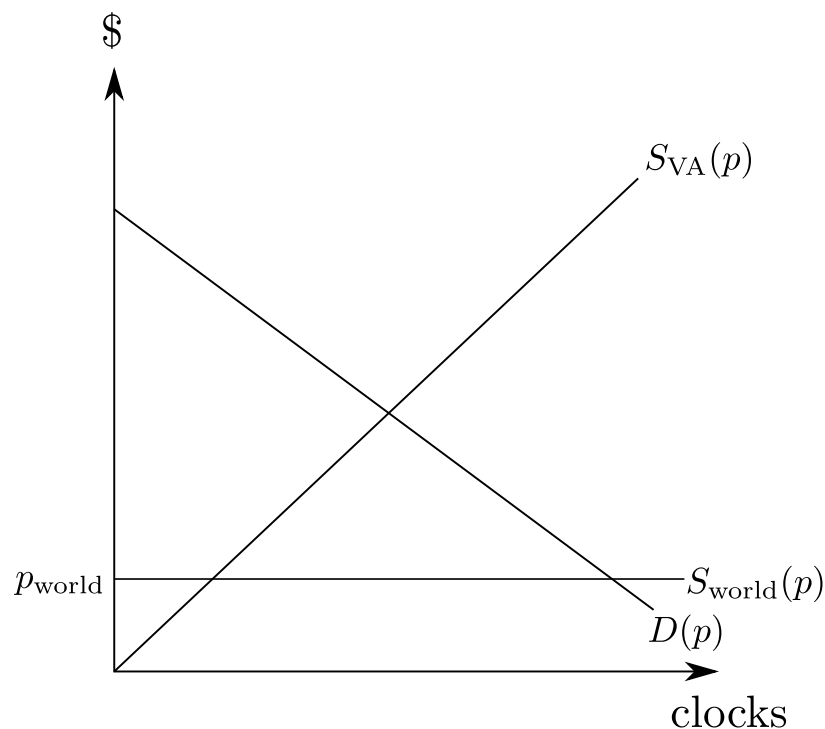
Name:

ID Number:

1. (10 points) Consider two cases where we discussed incentives varying across different segments of the American population: the politics of the Revolutionary War and the politics of tariffs. Would the groups that supported the Revolutionary War on the grounds of economic self-interest prefer raising revenue for the federal government through tariffs, taxes on domestically produced goods, or income taxes? Be certain to fully explain your answer. It may be useful to consider the arguments of Sawers (1992) and of Hamilton in the Federalist papers.

2. (25 points) When covering the Ziebarth (2013) article on bank failures during the Great Depression, we discussed how Ziebarth found a quasi-experimental setting for studying the impacts of bank failures on output and employment.
- (a) In no more than four sentences, explain why Mississippi provides a nice quasi-experimental setting for studying the impact of bank failures during the Great Depression.
 - (b) Suppose that Ziebarth had instead focused on banks that were on either side of the Mississippi-Alabama border. These banks would have experienced the same variation in Federal Reserve policies as the banks Ziebarth studies. Why would they not provide as compelling of an experiment? Your answer should be no more than four sentences.
 - (c) Recall our discussion of the differences between the Panic of 1837 and the Great Depression. We focused on the macroeconomic identity $MV = PT$, where M is money supply, V is money velocity, P is the price level and T is real output. We noted that in the Panic of 1837, a drop in M was balanced by a drop in P while in the Great Depression, it was balanced by a drop in T . Are Ziebarth's results consistent with this explanation? Be certain to fully explain your answer, with specific reference to Ziebarth's empirical results, in no more than four sentences.

3. (25 points) The graph below depicts the market for clocks in Virginia in the early years of the United States. Clockmaking is one of the industries that Europeans had a head start in and one that requires a great deal of skill and experience, so most clocks in America were imported from Europe. The demand curve, $D(p)$, shows the US demand for clocks at any given price. The number of clocks supplied by Virginia clockmakers at any given price is depicted by $S_{VA}(p)$ while the number of clocks supplied by foreign clock makers to Virginia is depicted by $S_{world}(p)$.



- (a) In no more than two sentences, explain why the supply of clocks from the foreign clock makers is a horizontal line as opposed to an upward sloping line like $S_{VA}(p)$.
- (b) Assuming there are no tariffs, label the following on the graph: the equilibrium price of clocks in Virginia (p^*), the number of clocks supplied by Virginia clockmakers in equilibrium (C_{VA}^*), and the number of clocks supplied by foreign clockmakers in equilibrium (C_{world}^*).
- (c) Now suppose that the US government imposes a tariff on clocks imported from Europe. The tariff is large, but not so large that it drives all foreign clockmakers out of the Virginia market. Suppose that the amount of the tariff is T per clock. On the graph, show how this tariff will change the equilibrium price of clocks in Virginia, labelling the new price p^{**} .

- (d) One primary objective of these tariffs was raising government revenue. On the graph, show how much revenue the government will generate from the tariff, labelling the revenue Rev^{**} .
- (e) The downside of tariffs is that they generate deadweight loss, lost consumer and/or producer surplus in the domestic market that does not go into government revenue. On the graph, show how much deadweight loss the tariff generated, labelling it DWL^{**} .
- (f) That deadweight loss is why economists often consider tariffs inefficient. With specific reference to manufacturing clocks in the late 1700s, explain why the tariff may be more efficient than your answers to (d) and (e) suggest.

4. (25 points) The graph below shows the key results from Feir et al. (2014) regarding the cohort size of Native American societies before and after the slaughter of the bison.

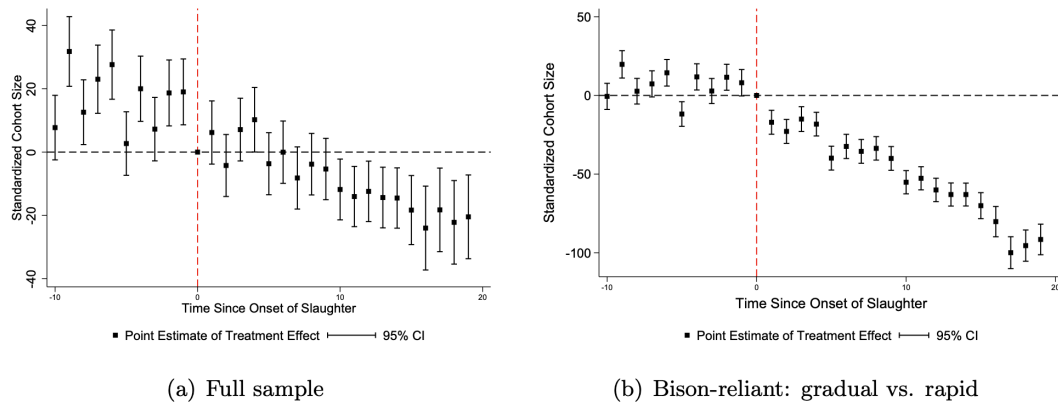
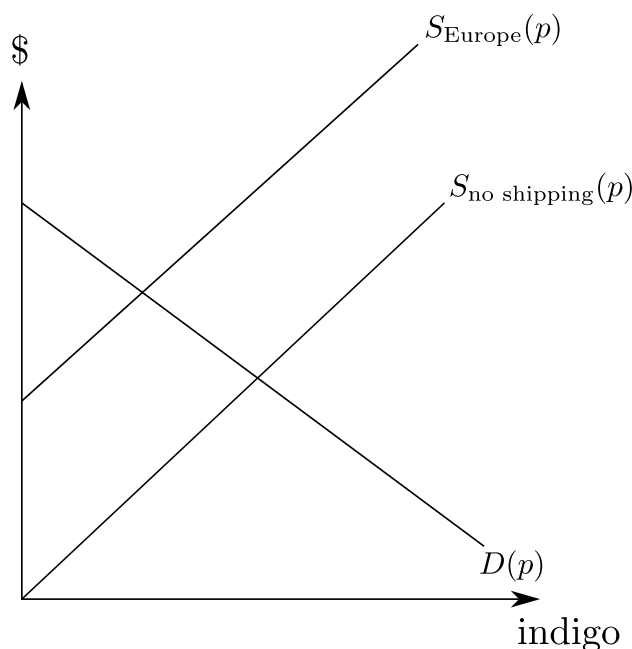


Figure 5: Coefficients on indicators for each two-year of birth before and after the slaughter interacted with whether the tribe obtained most of its calories from bison at least during part of the year. The dependent variable is the weighted number of people observed in that cohort and conditions on age fixed effects. Data is from the IPUMS 1900 and 1910 Census Over-sample. Given that some tribe-birth year combinations have no observations, we impute a population size of zero.

- (a) The panel on the left is comparing tribes that obtained most of their calories from bison to all other tribes. The panel on the right restricts attention to only bison-reliant tribes and compares those that lost the bison gradually to those who lost the bison rapidly. Why does it make sense that the points before the onset of the slaughter are well above zero in the left panel but hovering around zero on the right panel? Your answer should be no more than three sentences long.
- (b) Let's consider how these results relate to our Malthusian model of population growth and income. Which of the three curves in our Malthusian model (birth rate curve, death rate curve and technology curve) would be shifted when the slaughter of the bison takes place? Fully explain your answer, devoting one to two sentences to each curve.
- (c) Given your answer to part (b), are the observed changes in cohort size consistent with the predictions of the Malthusian model? Explain your answer in no more than four sentences.

5. (15 points) Most of our discussion of the Navigation Acts has focused on the economic burden of the Acts on the colonies, either through reduced producer surplus on exports of enumerated goods to Europe or through reduced consumer surplus on goods imported from Europe. However, the Acts did provide certain benefits. One of the benefits we discussed was the provision of subsidies for certain crops like indigo. Subsidies had the opposite effect of the extra shipping costs on exported goods: colonial exporters could accept a lower price in Europe knowing that the subsidy would add on top of that to get them to a higher net price. Below is a graph of the supply curve for colonial indigo growers under no shipping costs and the supply curve when including shipping costs to Europe. The demand curve for indigo in Europe is also included.



- (a) Recall that for enumerated goods, the added costs from shipping through England effectively shifted the supply curve up. How will subsidies for indigo shift S_{Europe} ? Show this new supply curve on the graph, labelling it S_{subsidy} , and provide a one- to two-sentence explanation of why the curve shifts in the way you have shown.
- (b) On your graph, show the producer surplus that indigo producers would lose if the subsidies went away. Label this area ΔPS .
- (c) Part of the reason indigo was subsidized is that there were very few substitutes for it in Europe. Suppose that we also considered a subsidy on wheat, something that Europe could produce for itself. Would the subsidy generate a similar increase in colonial producer surplus as the subsidy on indigo, a smaller increase in producer surplus, or a larger increase in producer surplus? Explain your answer in no more than four sentences. You may include a graph if it is helpful but a graph is not required for full credit.