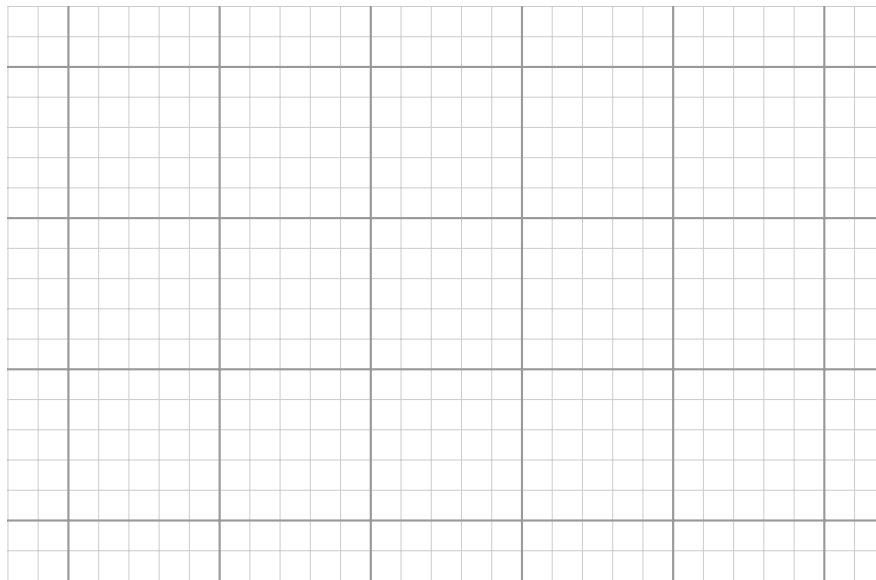


Assignment 5: Supply and demand

Due Wednesday 5 October. Please submit hardcopy at the beginning of class (11:00 a.m.), or if you prefer, under the door of Wimberly Hall 339C by 10:50 a.m.

Part A: The U.S. market for used cars



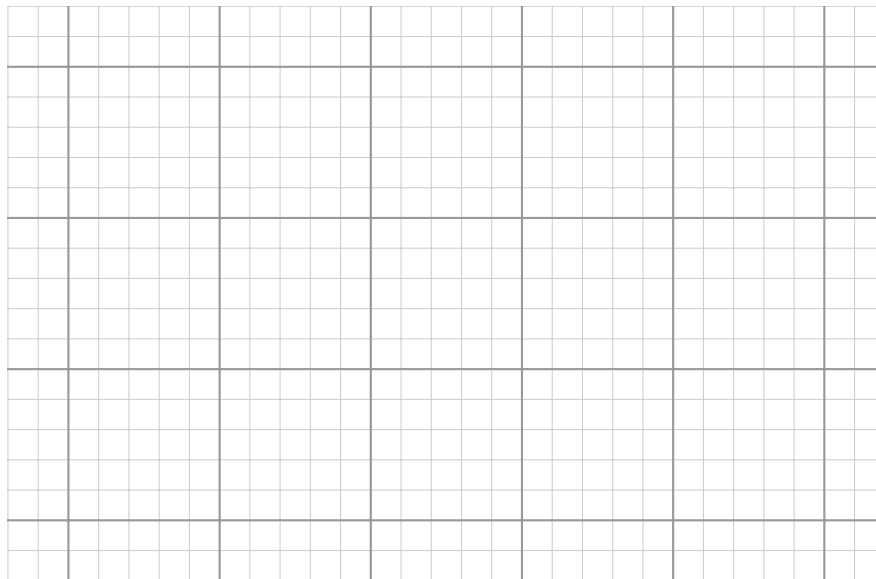
1. Depict the U.S. market for used cars in equilibrium with a supply and demand model. Label the curves as S and D , equilibrium price as p_1^* , equilibrium quantity as q_1^* , and axes as appropriate.
2. Suppose supply chain disruptions significantly reduce the availability of cars. Appropriately depict the new market-clearing equilibrium (e.g., prices, quantities, curves) using subscripts of 2.
3. What type of market is this—a factor market or a product market?
4. What entities does the demand curve represent?

5. What entities does the supply curve represent?

6. Do you know whether q_2^* is higher than, lower than, or the same as q_1^* ?

7. Do you know whether p_2^* is higher than, lower than, or the same as p_1^* ?

Part B: The U.S. labor market

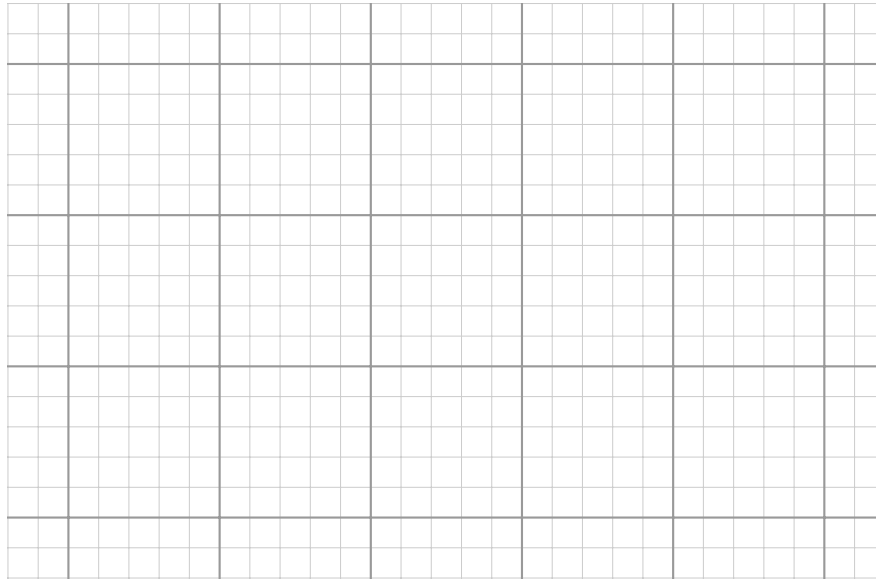


1. Depict the U.S. labor market in equilibrium with a supply and demand model. Label the curves as S and D , equilibrium price as w_1^* , equilibrium quantity as L_1^* , and axes as appropriate.
2. Suppose that due to COVID-19 cases declining, more people want to work. Appropriately shift any curves, labeled with subscripts of 2.
3. Because the demand for consumer goods is strong, firms want to hire more workers. Appropriately shift any curves, labeled with subscripts of 3.
4. Given this tandem of changes to supply and demand, please label the new equilibrium wage as w_3^* and equilibrium quantity of labor traded as L_3^* .

5. What type of market is this—a factor market or a product market?
6. What entities does the demand curve represent?
7. What entities does the supply curve represent?
8. Considering the two changes in tandem, has labor traded increased, decreased, or stayed the same? Or do you not have enough information to determine this overall effect? That is, do you know whether L_3^* is higher than, lower than, or the same as L_1^* ?
9. Considering the two changes in tandem, has the wage increased, decreased, or stayed the same? Or do you not have enough information to determine this overall effect? That is, do you know whether w_3^* is higher than, lower than, or the same as w_1^* ?

Part C: The U.S. loanable funds market

Please complete this part independently to obtain valuable feedback on your personal progress.



1. Depict the loanable funds market in equilibrium with a supply and demand model. Label the curves as S and D , equilibrium rate as r_1^* , equilibrium quantity as Q_1^* , and axes as appropriate.
2. Suppose that many investors divest from Russia, moving funds to the U.S. Appropriately depict the new market-clearing equilibrium (e.g., interest rates, quantities, curves) using subscripts of 2.
3. Has the market-clearing interest rate increased, decreased, or stayed the same?
4. What type of market is this—a factor market or a product market?
5. What entities does the demand curve represent?
6. What entities does the supply curve represent?