

KANSAS STATE UNIVERSITY
Economic Analysis For Business

Problem Set 1 Supplement
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Economics 815
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The City Council in Manhattan is giving consideration to implementing price ceilings on rental units based on the number of bedrooms in the unit. The demand function for rental units (on a single bedroom equivalent basis) is given by $Q^D = 80 - 2P + q$ and the supply function is given by $Q^S = 2P$, where P is price, Q is quantity and q is an index of housing quality. The Council is giving consideration to imposing a ceiling price on rental units of $P^{\max} = 10$.

- a) Let $q = 20$ both before and after the imposition of the ceiling price. Are consumers of rental-housing in Manhattan well-served by this policy? Provide a careful economic analysis in support of your claim. Show your results graphically.
- b) Suppose that the Council is concerned that landlords will allow the quality of their rental units to deteriorate following the imposition of the ceiling price. Continue to assume that $q = 20$ prior to the imposition of the ceiling price. Determine the values of q that must prevail following the imposition of the ceiling price in order for consumers to be no worse-off from this policy? Provide a careful economic analysis in support of your claim. Show your results graphically.
- c) What position would suppliers of building materials likely take on the issue of ceiling prices for rental units? Provide the economic rationale for your answer.