WORKSHEET
PROBLEM SET #2 (50 Points)
AGEC 429

Due Date: 1:30 pm, Tuesday, March 23, 2021

There are two parts to this Problem Set. In Section I you are to calculate the impact of various agricultural policy instruments on U.S. rice markets. In Section II you are to write a 500 word (minimum) white paper addressed to the Secretary of Agriculture analyzing three of the policy proposals you analyzed in Section I.

I. Costs of Policy Proposals (50%)

In working these problems, assume that you are a policy analyst working for the Secretary of Agriculture. The information you need to answer the questions is given in the table below. Note that quantities are given in million hundredweight (cwt) (that means 100 lbs but that is irrelevant for these problems) and prices are given in $/cwt. You may not need all the information given in the table below for every question. You will manually enter your answers into eCampus. ENTER ONLY THE NUMERIC ANSWERS ALONG WITH THE UNITS. DO NOT INCLUDE ANY OTHER WORDS IN YOUR ANSWERS. NOTE: Quantities and dollar values must have THREE decimal places even if they are whole numbers. Prices must be written like this $10.00/cwt and must have TWO decimal places even if they are whole numbers. All prices and values must have dollar signs ($). Write out dollar values in millions as $1,234.567 million.

<table>
<thead>
<tr>
<th>Rice Quantities and Prices</th>
<th>price elasticities</th>
<th>Equilibrium Before Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (million cwt)</td>
<td>0.75</td>
<td>189.886</td>
</tr>
<tr>
<td>Demand (million cwt)</td>
<td>-0.4</td>
<td>189.886</td>
</tr>
<tr>
<td>Farm Price ($/cwt)</td>
<td>--</td>
<td>10.00</td>
</tr>
<tr>
<td>Consumer price ($/cwt)</td>
<td>--</td>
<td>10.00</td>
</tr>
<tr>
<td>Target Price ($/cwt)</td>
<td>--</td>
<td>None</td>
</tr>
<tr>
<td>Support Price ($/cwt)</td>
<td>--</td>
<td>None</td>
</tr>
<tr>
<td>Government Cost (mil $)</td>
<td>--</td>
<td>None</td>
</tr>
</tbody>
</table>

NOTE: -- = Not applicable.

1. The Secretary of Agriculture (Mr. Tom Vilsak) is considering recommending a surplus purchase program for rice to the President with a support price of $14.00/cwt. Before he submits his recommendation, he asks you to determine how much rice the government will have to purchase to support the price of rice at that level and what the cost to the government will be. Fill in the blanks below with your answers to the Secretary.

   a. Surplus to purchase = ____________________________

   b. Cost to the government = ____________________________

2. Congressman Drinksalot is proposing a marketing loan program instead of a government surplus purchase program to support price at a loan rate of $14.00/cwt because he claims it will cost the government less than the surplus purchase program. Secretary Vilsak wants to know whether the Congressman is right and asks you to calculate the cost of the marketing loan program to the government. Fill in the blanks below with your answers to the Secretary.

   a. Cost of marketing loan program to the government = ____________________________

   b. How much more (use “+” sign) or less (use “-“ sign) will the Congressman’s proposed program cost?
3. Senator Cityslicker doesn’t like the Secretary’s government surplus purchase program proposal or Congressman Drinksalot’s marketing loan program because she says both result in too much rice production and cost too much. She proposes a mandatory acreage reduction program to push the price of rice up to $14.00/cwt. Secretary Vilsak asks you to calculate the total reduction in rice supply that would be required to push price to $14.00/cwt under Senator Cityslicker’s plan.

a. Supply reduction required (Do NOT include a negative sign) =

b. Cost of the Senator’s program? =

4. **BONUS QUESTION (OPTIONAL) (2 points):** In the previous questions, Calculate the acreage reduction (%) that would be required if there is 5% slippage (Do NOT include negative sign).

5. The U.S. Rice Producers Association proposes a government funded advertising campaign to promote domestic rice consumption. They propose that the slogan for the rice promotion program should be “Try the sticky little white stuff that most of the rest of the world eats because you’ll like it and besides it will help rice farmers.” (Time to hire an advertising agency to come up with a better slogan!) Anyway, the Secretary wants to know how much more rice people will have to eat to get the price of rice up to $14.00/cwt. Fill in the blank below with your answer to the Secretary.

Increased consumption required (Do NOT include a positive sign) =

6. Congresswoman Knowitall doesn’t like the policy recommendations of the Secretary, Congressman Drinksalot, Senator City Slicker, or the U.S. Rice Producers Association. She proposes a price loss coverage (PLC) payment program with a reference price of $14.00/cwt and a NR loan rate set at a much lower $2.00/cwt safety net level because she says this program will lower the price to consumers like Congressman Drinksalot’s proposed marketing loan program but will be cheaper than either the Secretary’s or Congressman Drinksalot’s programs. The Secretary asks you to determine if she is right.

What would be Congresswoman Knowitall’s proposed program cost?

7. Is Congresswoman Knowitall right (from Question 5) that her program lowers the price to consumers like the MLP? (Check one)
   - □ YES
   - □ NO
   - □ CANNOT DETERMINE

8. How much cheaper or more expensive is Congresswoman Knowitall’s program than Secretary Vilsak’s proposed program? (INCLUDE a positive sign (+) if the answer is “more expensive” and a negative sign (-) if the answer is “less expensive”.)

8. How much cheaper or more expensive is Congresswoman Knowitall’s program than Congressman Drinksalot’s proposed program? (INCLUDE a positive sign (+) if the answer is “more expensive” and a negative sign (-) if the answer is “less expensive” if needed.)
II. White Paper to the Secretary of Agriculture (50%)

A bill for a government surplus purchase rice program as proposed by Secretary of Agriculture Tom Vilsak makes its way through the Senate (question 1 in Section I) while a bill representing Congressman Drinksalot’s marketing loan rice program is passed by the House of Representatives (problem 2 in Part I). The two bills are sent to a Conference Committee to craft a final policy. The Conference Committee announces that in addition to the programs proposed in the two bills, they will also consider a proposal by Senator Hayseed, a member of the Conference Committee, to combine the proposed marketing loan rice program with Congresswoman Knowitall’s price loss coverage (PLC) program (problem 5 in Part I) with the reference price set at $14.00/cwt and the NR loan rate set at $4.00/cwt because Senator Hayseed says it would be cheaper than either the government surplus purchase program or the marketing loan program by themselves.

On separate paper, you are to write (typed, not handwritten) a WHITE PAPER addressed to the Honorable Tom Vilsak, the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. The WHITE paper should discuss and provide a comparative analysis of the THREE policy proposals that the House and Senate Conference Committee is considering. (A White Paper is a short discussion of policy issues usually in the format outlined below. Busy executives like the Secretary of Agriculture do not have time to read lengthy, detailed economic analyses.) So, your job is to compare the three proposals to succinctly inform the Secretary about your analysis and conclusions. Your discussion will focus on the numbers involved and who gains and loses from each. You will also talk about the national welfare implications (who gains and who loses). However, PLEASE don’t try to explain how you calculated the numbers and don’t just give numbers or draw graphs. You need to help the Secretary understand what your numbers and graphs mean. Your focus should be on providing the Secretary a White Paper discussion of the three policy proposals being considered by the Conference Committee that will be understandable but complete for the Secretary.

Your paper must be AT LEAST 500 words long and include the following elements:

- **Introduction** - Introduce the issues to be discussed and the objectives of your white paper.
- **Proposal Analysis** - Graphically compare and contrast the three competing policy proposals with supporting discussion.
- **Cost Analysis** – Explain and compare the costs of the three proposed programs.
- **Welfare Analysis** – Explain who gains and who loses from the three proposals including the effect on national welfare (the deadweight loss).
- **Conclusions** - Based on your analysis, provide the Secretary with your conclusions regarding: (1) which proposal will cost the least and why; (2) which proposal will be most acceptable to consumers and why; (3) which proposal will be most acceptable to producers and why; and (4) which proposal will have the least effect on the national welfare and why.

REMEMBER:
1. FOLLOW THE SAME GUIDELINES IN PREPARING THIS PAPER AS IS REQUIRED FOR THE POLICY PAPERS.
2. YOU MUST INCLUDE AND SIGN THE AGGIE HONOR CODE AT THE END OF YOUR PAPER.
3. THIS WRITING MUST BE TYPED AND INCLUDE AT LEAST 500 WORDS. WRITING ASSIGNMENTS THAT DO NOT MEET THE MINIMUM WORD REQUIREMENT WILL RECEIVE AN AUTOMATIC ZERO GRADE.
4. USE TIMES NEW ROMAN 12 FONT AND DOUBLE SPACE.
5. FOLLOW THE GENERAL GUIDELINES AND THE RUBRIC FOR THIS ASSIGNMENT FOUND ON THE WRITING ASSIGNMENT GUIDELINES PAGE ON OUR CLASS WEBSITE (OR THROUGH ECAMPUS). USE THE RUBRIC TO GUIDE YOUR WRITING.
6. MAKE SURE YOU USE DIVIDE YOUR PAPER INTO SECTIONS WITH THE SECTION HEADINGS GIVEN ABOVE.