Assignment 2

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Suppose, there is an energy demand dominated by the industrial sector (0.3), residential sector (0.3), commercial sector (0.2) and, E5 is the energy intensity of industry. The value of E5, is given as follows (measured in terms of energy consumed per 10,000 rupees worth of output):

\[ E5 = 0.10 \times E1 + 0.10 \times E2 + 0.10 \times E3 + 0.10 \times E4 + 0.50 \times E5. \]

In order to carry out a decomposition analysis of energy demand of India, economists use the following methods: Group 1: energy intensity Index and Group 2: energy intensity matrix. This is important in order to understand the sectoral effect. Write the following in your report:

Note: In real-world data, there may not be a clear-cut significant differences in energy intensity of different sectors under consideration. You have to use your own judgment in order to group them in the most logical manner:

Group 1: energy intensity industries, E1, E2, E3
Group 2: non-energy intensity industries, E4, E5

Suppose there are households with and without a household have the following demand for a cooking fuel:

<table>
<thead>
<tr>
<th>Price (in Rupees for fuel measured in suitable units)</th>
<th>Quantity Demanded by Urban Household (in suitable units)</th>
<th>Quantity Demanded by Rural Household (in suitable units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>250</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>300</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>350</td>
<td>18</td>
<td>4</td>
</tr>
</tbody>
</table>

At the price of cooking fuel rises Rs 200 to Rs 250, which of the following statements is correct?

- Both rural and urban households have same price elasticity of demand for cooking fuel.
- Urban households have more elastic demand pattern than rural households.
- None of the above.

Yes, you are correct. Answer: B

Accrued Answers:
- Rural household behavior on elastic demand pattern than urban households.
- The price of cooking fuel rises Rs 200 to Rs 250, which of the following statements is correct?
- A. The price of cooking fuel rises Rs 200 to Rs 250, which of the following statements is correct?
- B. The price of cooking fuel rises Rs 200 to Rs 250, which of the following statements is correct?
- C. The price of cooking fuel rises Rs 200 to Rs 250, which of the following statements is correct?

- Per capita electric consumption (in kwh per annum) for India and Singapore are given in the following table. Based on this information identify the correct statement:

<table>
<thead>
<tr>
<th>Country</th>
<th>Year 2010</th>
<th>Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1506</td>
<td>1554.65</td>
</tr>
<tr>
<td>Singapore</td>
<td>3782.72</td>
<td>5006.62</td>
</tr>
</tbody>
</table>


Both India and Singapore have the same rate of average annual growth in energy consumption (12% for both).

The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.

Average annual rate of growth of energy consumption cannot be calculated from the given data.

Yes, you are correct. Answer: D

Accrued Answers:
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.

Energy use and Externally Dominated (ESED) of a country in the last three centuries (1750-1992) are given in the following table. All values are represented in monetary terms and are adjusted by their respective price indices. Calculate the Activity Effect, Structural Effect and Energy Intensity Effect (and Total Effect) using Index Decomposition Analysis Framework.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sector 1</th>
<th>Sector 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>GDP</td>
<td>GDP</td>
</tr>
<tr>
<td>250</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>1971</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>250</td>
<td>200</td>
<td>250</td>
</tr>
</tbody>
</table>

Yes, you are correct. Answer: B

Accrued Answers:
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.

Activity Effect

Yes, you are correct. Answer: B

Accrued Answers:
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.

Structural Effect

Yes, you are correct. Answer: B

Accrued Answers:
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.

Energy Intensity Effect

Yes, you are correct. Answer: B

Accrued Answers:
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.

Total Effect

Yes, you are correct. Answer: B

Accrued Answers:
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.
- The average annual growth rate of energy in India is 3.6% while the same in Singapore is 4.1%.
- Average annual rate of growth of energy consumption cannot be calculated from the given data.