

1 Definitions: including formulas, figures, sentences

1. graph (input-output set), GR
2. output set, $P(x)$
3. input set, $L(y)$
4. constant returns to scale
5. Farrell input technical efficiency $F_i(y, x)$
6. Farrell output technical efficiency $F_o(w, y)$
7. scale efficiency (SE_i, SE_o)

2 Concepts, problems, etc

1. Be able to write out and construct GR, $L(y)$ and $P(x)$ from ‘data sets’—like we did in class—using what we called the activity analysis model.
2. Be able to identify efficient and inefficient DMUs. Explain what the solution values of the z variables mean.
3. Be able to write out the linear programming problem to estimate technical efficiency for a given observation.
4. Be able to explain what a technical efficiency value for $F_o(x, y)$ of 1.5, for example, means.
5. Be able to show the decomposition of overall cost and revenue efficiency into technical and allocative efficiency diagrams.
6. Be able to discuss the Farrell article.