

# [Quantitative methods class discussion wk7](https://assignbuster.com/quantitative-methods-class-discussion-wk7/)

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Quantitative Methods Quantitative Methods There are numerous circumstances where it would be better to incorporate sensitivity analysis. Sensitivity analysis involves how inputs and outputs from mathematical models can be reconciled with a concentration on quantification or other propagation methods. On that note, sensitivity analysis has important roles in different areas worth noting. First, for model simplification especially when fixing models that also use inputs that influence the output given by the model structure. Second, deals with enhancement of communication particularly when making credible and persuasive recommendations that are critical in the budgeting process and areas of economics. It means there must be parameters of identifying effective model inputs and outputs to improve robustness for further research (Anderson, 2012). Third, sensitivity analysis would be helpful when presenting certainty and uncertainty prospects when interpreting headcount, linear programming, operating expenses, and future tax rates.   
Therefore, in regards to understanding how shadow price operates, it is integral to understand the function of monetary values in the calculation of costs. Calculation, thus, entails the determination of how marginal utility applies in the economics of constrained optimization. Additionally, seeking of optimal solution means that the shadow price must abide by the limited resources that are found in the production line when a business is operating above a given limit. In the same context, through the use of infinitesimal change and the Lagrange multiplier, dual variables are calculable because of cost decisions. Overall, shadow pricing focusses on the impact of monetary values of goods and services being sold at the optimal level in the market.   
Reference   
Anderson, D. (2012). Quantitative Methods for Business. New York, NY: SAGE.