#1 - Efficiency

https://iwinst.org

IWI
1120 20th Ave. N. Suite B, Fargo, North Dakota
Chuck Fritz, Executive Director
See also:

#2 - Governments and NGOs
#3 - Benefit/Cost Analysis Primer
#4 - Government Revenues
#5 - Inflation
#6 - Natural Resource Planning
#7 - Robert's Rules of Order
#8 - Natural Resources Economics

ECONOMICS IS: The study of how individuals, firms, groups, government, society ... allocate their scarce resources among competing uses to satisfy unlimited wants.
Government’s Roles

- Efficiency
- Equity
- Stability
- Growth
Efficiency is:

1. Using the fewest resources to achieve a desired output
2. Using ALL resources to achieve the MAXIMUM output
3. Getting the greatest output from a fixed amount of resources
Our resources are: LLKE

L - LAND < Renewable
Non-renewable
(all living and non-living endowments of the earth that are being used, or could be used)

L - LABOR

K - CAPITAL

E = MC^2

E - ENTREPRENEURSHIP
(skills to put it all together)
LLKE can be measured in many units:

Pounds, units, BTU's, calories, acre feet, board feet, FTE, megawatts, protein, . . . , rubles, yen, . . .

BUT, one common denominator (numeraire) to 'measure' all resources is dollar$. Any other measure will not make it into human-centered decision-making at this time.
Q. What does society want in a two good economy?

A. To be on the highest indifference (utility) curve.
Q. What can society produce in this time period?

A. Production possibilities of good A and B.
Society's well being is maximized in this time period at MXSW, where $\text{MRT}_{A,B} = \text{MRS}_{A,B}$.

Good A

 MXSW!

Good B

a: efficient but not satisfying
b, c, d: inefficient

can’t get here, LLKE constraint
Use benefit-cost analysis to achieve efficiency:

- Resources are wasted
- No net gain for society
- Society is better off*

*In general!

Considerations:
- Discount rate for future benefits and cost
- Values
- Nothing is infinitely valued to society
- Politics is thumb on the scale for equity, stability, or growth
However, the market fails to allocate LLKE efficiently (so does government!) because:

- Externalities (plus and minus)
- Public goods (national defense, clean air and water, . . .
- Common property, absence of property rights
- Monopolies (too little produced, too high price)
- sdr ≠ pdr
- Equity – Gini coefficient
- Lack of perfect information
- Resource immobility
- Government intervention (price floor-ceiling, minimum wage, government sector manager [bureaucrats], difficult to gauge social utility curve)
Equity is:

Fairness in distribution of wealth

- Gini coefficient = \( \frac{A}{A + B} \)
  (Google it!)

Equality among all

A

B

1. 50% have 10%
2. 10% have 40%

- Lorenz curve (Google it!)
Stability:
- Soften downturns
- Soften runaway upturns

Growth is $\frac{\text{Output}}{\text{Labor}} > 1.0$
- Increase in social well-being to a higher indifference curve
- **Not** increase in GNP for the sake of bigger numbers
- **Not** increase in population for the sake of bigger numbers
Conclusion:

- Efficiency analysis is society's friend! It helps society get more of what it wants with the resources available, now and in the future.

- Every decision is an economic decision/choice.

- Government can trump/tweak efficiency in EXTREME cases to accomplish Equity, Stability, or Growth.