

Why General Equilibrium Theory Limits our Worldview

General Equilibrium Theory is the idea that all prices (or marginal products) are equal, at the margin. Reallocation of goods and services would make things less optimal. Economists use General Equilibrium Theory to explain how everything can sit in balance. It's an ideal, never reached in the real world, but something toward which economic systems tend, if left to themselves. It helps economists organize our thoughts about economic systems.

Here are the basic assumptions of General Equilibrium Theory:

- 1) The theory describes a cross-section of the economy at a moment in time.
- 2) At (general) equilibrium, prices of all things are equal at the margin. The marginal value product of work equals the marginal value product of a good, which equals the marginal value product of money. These marginal value products are represented by prices.
- 3) If a de-stabilizing force nudges the system out of equilibrium, the system will either return to the original equilibrium or, eventually, settle down at a new equilibrium.
- 4) Many pages of equations describe the typical economic system. The equations are solved by computers. We cannot solve the equations without assuming certain prices are equal.

Here is what I think is impractical about this theory:

- 1) The real world does not operate "at a moment in time," in the way that calculus, the mathematics of general equilibrium analysis, does. For example, a wage of \$15 per hour, for service work, should not be equated with a price of \$15, for the instantaneous sale of a product. They are different TYPES of variables and as such they are not equivalent. Mathematically, we do not equate a speed (miles per hour) with a distance (miles).
- 2) Much economic "work" goes on in places elsewhere than at the margin. For example, an entity's revenues determine what it can afford to purchase. Revenue (Price x Quantity) is a different TYPE of economic variable from a price. Mathematically, we ignore the existence of a volume ($X \times Y$) at our peril, while we work with a length (X).
- 3) If a system is nudged out of equilibrium by de-stabilizing forces that each move it in the same direction, I call that "non-equilibrium economics," rather than "general equilibrium." For example, if technological progress favors the cutting edge, financially, then the trailing edge remains forever behind, financially. Yes, we can call each theoretical technological advance a change to a new equilibrium, but this is semantical gymnastics rather than an honest portrayal of the nature of the situation.
- 4) If our system is solved by setting prices equal, then by definition we are assuming "equilibrium," whether or not it actually occurs. It's rather like deciding we want our water to be blue, and then dyeing it blue in order to solve the problem. Anything else that might be going on with the water is ignored, that way.