

History of Economic Thought

The Structure of Neoclassical Theory

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The **Classical theory** of value and in general the classical economic approach were dominant in the 19th century and also some of its aspects up until the early 20th century.

But already after Ricardo and the appearance of the so-called ***Ricardian Socialists*** there has been an anti-capitalist movement mainly in England and France and also in Austria.

The **Ricardian Socialists** extended Ricardo's labor theory of value (LTV) by arguing that relative prices **must** be equal to labor times and therefore all income belongs to labor and so they did not recognize profit and rent incomes (**see the text for further discussion**)

In addition, the proponents of the LTV could not provide adequate answers to various theoretical issues. As a consequence, there was a general dissatisfaction with the LTV and especially with its (potential) conclusions with respect to profit and rent incomes.

The **Neoclassical theory** introduces the concept of **utility** on the basis of which the demand and supply curves can be derived and determine equilibrium prices and quantities.

Utility and Use Value

Distinction Between Two key concepts

1. **Use value** (in Classical Theory)

The property of a commodity to satisfy human needs regardless where they come from.

2. **Utility** (in Neoclassical Theory)

Refers to intensity of satisfaction as such utility has the measurable property and the hypothetical units of its measurement are called **utils**.

- **Law of diminishing marginal utility** (=the additional units of a good give less satisfaction)

The concept of utility existed already from the early nineteenth century from economists like Augustine Cournot, Julius Deput in France but also by J.S. Mill, Bentham and many others in England, the trouble was that they **could connect the concept of utility with the Demand side of the market but NOT with the Supply side of the market and the associate with the Supply payments to the factors of production.**

Utility: Cardinal and Ordinal

The first neoclassical economists used the concept of **Cardinal Utility** which although subjective nevertheless measurable through the hypothetical measurement unit the **util**.

The trouble with the **cardinal utility** and its measurement combined with the **law of diminishing marginal utility** led to a fairly revolutionary program of income redistribution. The argument was that by redistributing income from the rich to the poor the **marginal sacrifice** of the rich is by far smaller than the **marginal benefit** of the poor and we keep redistributing income until we equate the marginal sacrifice to the marginal benefit. The limit of course is an absolutely egalitarian society!

Francis Y. Edgeworth (1845-1926) responded to this unexpected policy proposal [Knut Wicksell (1851-1926) promoted it] by arguing that not all people have the same capacity to enjoyment and he further asserted that the richer people have higher than the poor capacity for enjoyment and therefore redistribution of income will not improve society's general welfare. In general, Edgeworth argued, interpersonal comparisons of utility are not possible because of individuals' heterogeneities and therefore capacities for pleasure.

Clearly, the **cardinal utility** with its logical conclusion leading to absolute income equality could not stand for long and Vilfredo Pareto along with Edgeworth and others argued in favor of **ordinal utility theory in which the consumer only ranks the various combinations of goods and chooses those combinations that maximize total utility subject to endowment (income, resources) constraints.**

The Pioneers

The first **Neoclassical Economists** the trio

- Stanley **Jevons** in England
- Carl **Menger** in Austria and
- Leon **Walras** in Switzerland

Developed at the same time and independently from each other the concept of **Utility** in their derivations of demand and supply curves. Jevons and Menger published in 1871 while Walras in 1874 and 1878.

The **consumer demand** was easy to derive through the **law of diminishing marginal utility**. As the consumer enjoys less satisfaction from the consumption of additional units of a good, in order to consume more units, the consumer must be offered lower prices, hence the rationale for the **negatively sloped consumer demand curve**.

As for the supply curves, we need to introduce payments to the **factors of production**, a problem dealt with by the first neoclassical economists with the introduction of the new concept of **disutility** (=negative utility).

The argument was that the worker when offers labor services suffers **disutility** and enjoys **utility** when compensated by **wage**. The worker is assumed to act rationally, that is, to maximize utility by equating **Marginal Utility** (derived from wage) to **Marginal Disutility** (during working time). The same holds true for the capitalists who by offering the services of their capital suffer **disutility** and enjoy **utility** from profits that they earn. Similarly with the landlords, who by offering the services of their land (suffer **disutility**) for which they are compensated by the rent they receive (**utility**).

The Data of the Neoclassical Approach

The neoclassical theory (like the classical theory) applies the **long period of analysis** according to which the passage of long time enables the establishment of the **law of one equilibrium price** and the associated with it **uniform rate of profit**.

It is important to emphasize that the **long period analysis** is common to both classical and neoclassical economic approaches, and therefore is common **the object of analysis**, that is the equilibrium prices and the associated with these natural (normal) payments (normal wages, rate of profit and rent rate) to factors of production (labor, capital and land).

And certainly both approaches differ from economists like Malthus and J.S. Mill who have been characterized by Marx as **vulgar economists** in that they simply assumed supply and demand determine equilibrium prices without explaining what is behind the demand and supply curves.

Neoclassical economists differ from the classical economists in the their **method of analysis** in which they utilize a different set of **data** (givens). And these are:

1. **Preferences** as they are expressed in cardinal or ordinal utility
2. **Endowment**, we know both its size and its distribution among individuals
3. **Technology** (in which there is substitutability, nearly perfect)

Stages of Neoclassical Analysis

The neoclassical analysis is then carried out in three stages (according to Walras)

1. Pure exchange economy

This is a hypothetical economy where there is no production and people are endowed with goods and they exchange with each other according to their preferences. Usual examples of such economies are prisoners of war camps, where prisoners receive regularly packages of goods from the Red Cross and exchange with each other because of differences in preferences.

2. Production with non-produced means of production (NPMOP)

Hence the NPMOP are the land and labor. The analysis of this economy does not present particular difficulties and in fact is an extension of the analysis of pure exchange economy with the difference people demand for the services of the NPMOP not directly but indirectly through their demand for consumer goods. So production is indirect exchange and the demand for NPMOP is a derived demand.

3. Produced means of production (PMOP)

Hence we introduce capital goods. Again production here is indirect exchange as in the NPMOP. The big trouble with capital (=PMOP) is that its heterogeneous nature makes it difficult (impossible for some economists) to measure in units and then we can apply meaningful optimization techniques. The same is also true in the case 2 above (=NPMOP) but not to the same extent. For example, more fertile (productive) land is a multiple of the least fertile land. Similarly, with skilled (heterogeneous) labor reduce it to a multiple of simple labor.

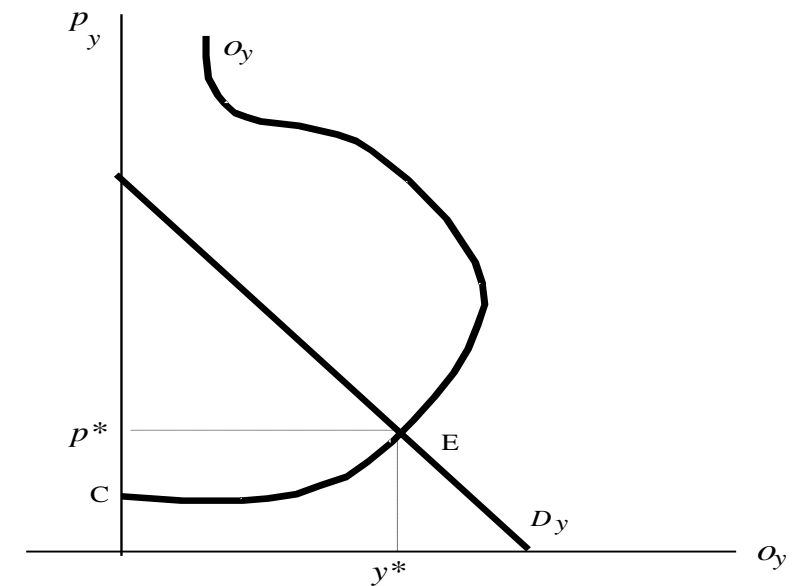
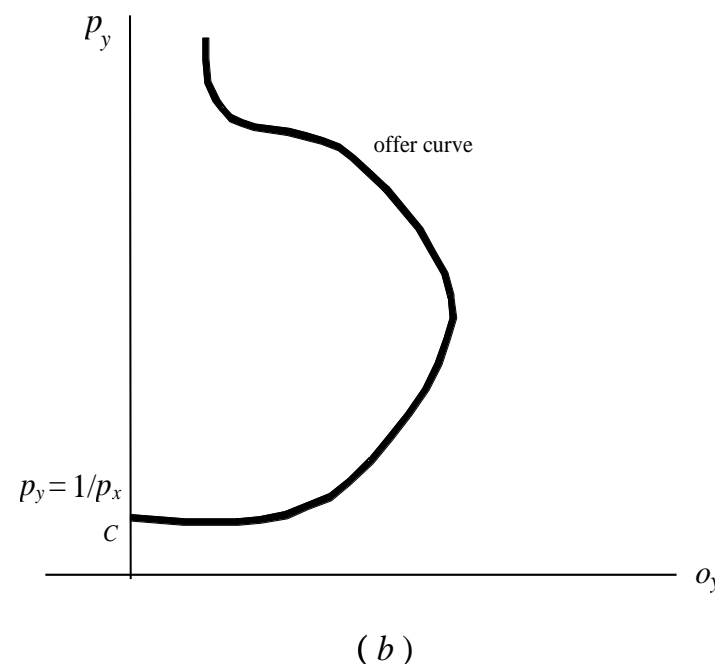
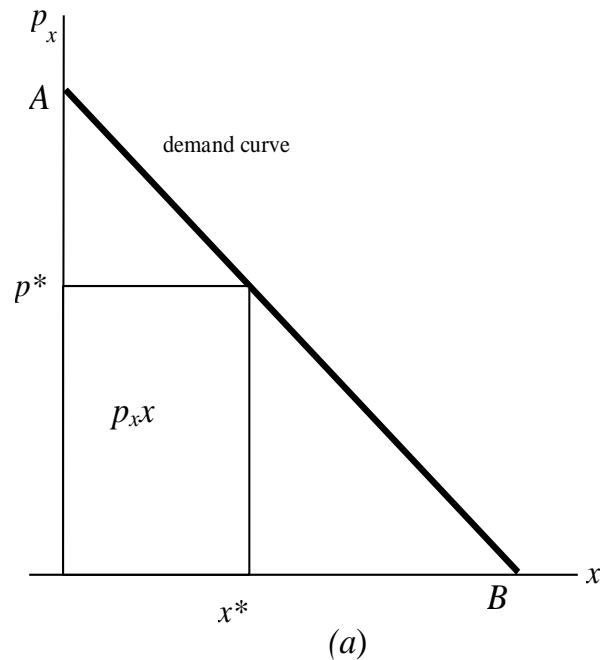
Pure Exchange Economy's Equilibrium

Demand and Offer Curves

The demand is derived either through indifference curves with the budget (endowment) constrained or through diminishing marginal utility.

The **offer curve** is implicit in the demand curve. As the price of x drops the price of y increase. The owners of the endowment of y offer more (at a higher price for y). However the **offer curve of y** is bound to approximate asymptotically the vertical axis for too high prices of y or what is the same too low prices of x .

The third graph puts together **demand** and **offer** to determine equilibrium **price** and **quantity**.



Walras Law

The excess demand for good i , E_i is the difference between total demand for good i , T_i and the total endowment of good i , Q_i

$$E_i = T_i - Q_i$$

The excess demand for good i of a single individual will be as follows: $e_i = t_i - q_i$

The value of all endowments or income will be equal: $\sum_{i=1}^n p_i q_i = m = \text{Income}$

and the value of expenditures for goods will be: $\sum_{i=1}^n p_i t_i = m = \text{Expenditure}$

Thus, we have: $\sum_{i=1}^n p_i t_i = \sum_{i=1}^n p_i q_i$ and $\sum_{i=1}^n p_i (t_i - q_i) = 0$ or $\sum_{i=1}^n p_i e_i = 0$

Walras law: the value of excess demands is equal to zero.

Walras law should not be confused with Say's law

1. The **Walras law** does not claim that all the markets are in equilibrium. That is, in some markets the demand will be greater than the supply and in some other markets the demand will fall short of supply, but the sum of the value of excess demands (positive and negative) will be equal to zero.
2. The **Walras law** does not imply that $S = I$, since there is no proposition in Walras's law to claim that in any single market there will always be equilibrium. In contrast, Say's law $S \equiv I$
3. The **Walras law** applies for both flows of goods and stocks of factors of production. By contrast, Say's law refers to flows of goods.

Usual Critiques of the Neoclassical Theory

1. In the neoclassical theory everything depends on something else and because of the interdependence we cannot determine the normal prices of goods and services

Answer: Not true, in the neoclassical theory there is a strictly determined causal relation based on the maximisation of utility subject to the constraint of endowment and determines the relative prices in a perfectly competitive economy. There is no doubt that despite the complexity there is a fully determined causal relation.

2. The neoclassical theory refers essentially to exchange and not to production

Answer: Not true, since in neoclassical theory the analysis of production is treated indirectly through the analysis of pure exchange. The neoclassical theory does not directly refer to production (IMO this is not important) but that the production is subjugated to exchange and certainly not that the neoclassical analysis does not include production.

3. The neoclassical theory is static.

Answer: Not true, time might be easily included in the neoclassical analysis (comparative statics and comparative dynamic analysis).

4. The neoclassical theory is a subjective theory

Answer: True, since the concept of utility, on which the neoclassical theory is based is subjective