

CH 6:
Utilitarianism, Welfare Theory and
Systems Debate

ECON 361

2017-2018

Jevons

“maximum satisfaction” of the needs

Marshall

allocation of time

Walras

macro

A new theory...

We can talk about a new theory... based on **marginal utility** and **marginal productivity**... welfare theory.

Contributions by

- Edgeworth
- Pareto



Francis Ysidro Edgeworth
(1845 –1926)
Irish



Vilfredo Pareto
(1848 -1923)
Italian

- Not only W. S. Jevons but also F. Y. Edgeworth got influenced by Jeremy Bentham (1748-1832).
- The goal of Edgeworth (1845–1926) was to give utilitarianism an “exact” form; see especially his two books
 - *New and Old Methods of Ethics* (1877)
 - *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences* (1881)

- Measurability of utility
- Diminishing marginal utility
- Welfare of society
- Complementary goods
- Substitute goods

Can utility be measured or not ?

His answer to that was no. Utility can not be measured and can not be compared interpersonally. But for practical purposes it is admissible to assume that it can.

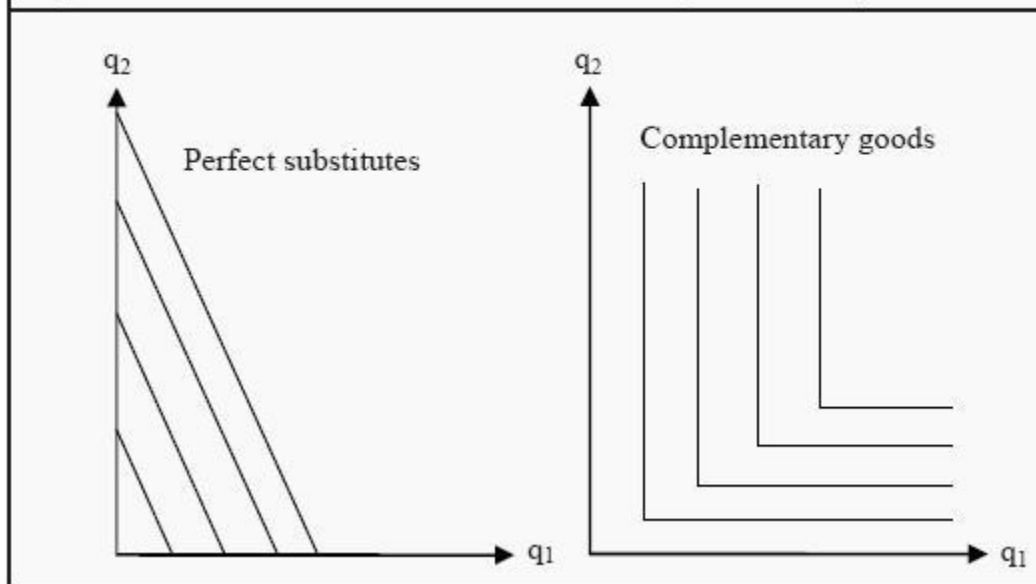
He divides utility into 2 types:

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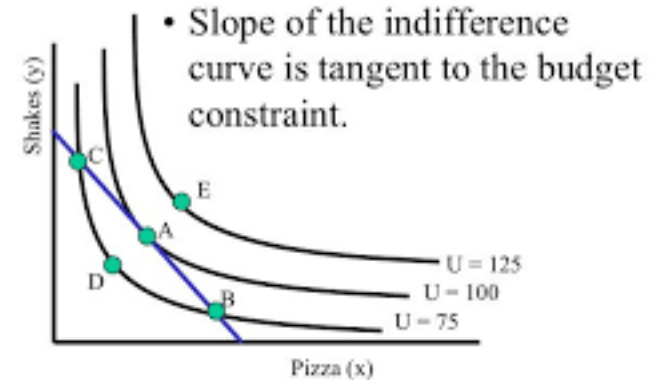
- **Ordinal:** The satisfaction that derived from various commodities that can not be measured objectively. Comparison with indifference curve.
- **Cardinal:** Something that can be measured in numerical terms. Ex. Something that can be measured in numbers. An attempt to measure consumers satisfaction in numerical terms.

Indifference curve (by Edgeworth)

Figure 3.5: Perfect Substitutes and Complementary Goods



Utility Maximization

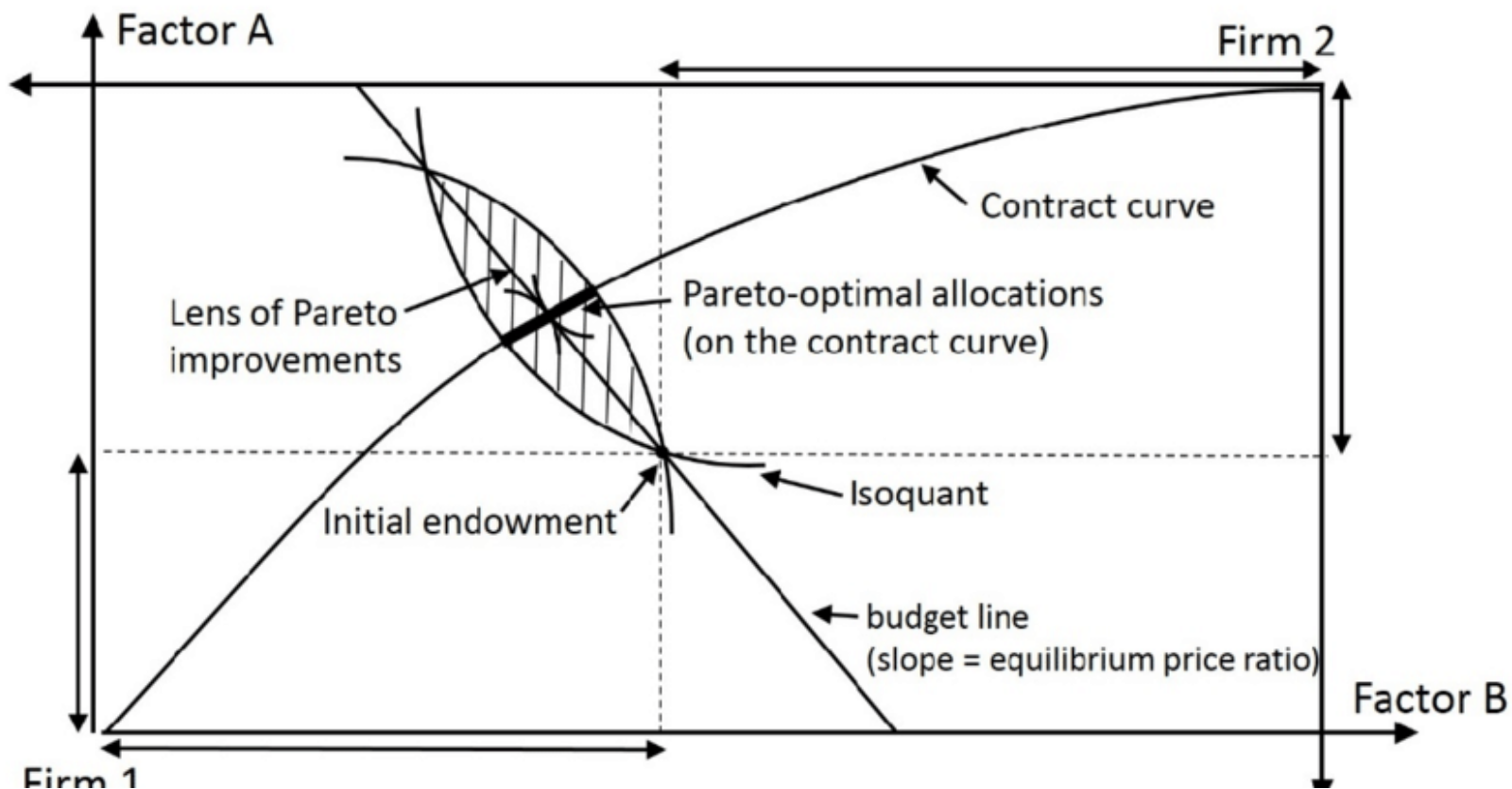


He links marginal utility and income

Edgeworth's "**exact utilitarianism**" implied that in the case of similar perceptions of utility among individuals, a **more equitable distribution of income increases the welfare of society as a whole**: the marginal utility of income is low for the rich, high for the poor, and redistribution in favor of the latter may increase total utility.

- Pareto rejected the cardinal utility and replaced it with one that is **ordinal**: although one can say whether a **bundle of goods** is preferred or subordinated to another, one cannot say **by how much** (one can not say how much one bundle is subordinated or preferred to an other)
- Utility can not be compared **between** and **aggregated** across individuals.
- Replaced the concept of “utility” with the concept of “**optimality**”
- Edgeworth box

Edgeworth box



Pareto optimality: When resources are allocated in such a way that **it is impossible to better** the situation of one individual without worsening that of another.

INCOME AND SUBSTITUTION EFFECT

- **Normal goods:** demand rises when the price falls, and vice versa.
 - The income effect is **negative**: with a decrease in income, the demand for the good decreases (and with an increase in income it increases)
- **Inferior goods:** a good whose demand drops when people's incomes rise.
 - The income effect is **positive**: the demand for such goods increases with a decrease in income
- **Giffen good** : named after the Scottish statistician Robert Giffen (1837–1910), the demand for which increases at an increase in its price
 - The income effect, which is **positive**, dominates the substitution effect, which is negative.

THE FUNDAMENTAL THEOREMS OF WELFARE ECONOMICS

For Samuelson : First fundamental theorem of welfare economics :

General equilibrium theory's sets of data :

- (1) given preferences of agents;
- (2) given technical alternatives to produce the various commodities; and
- (3) given initial endowments of the economy of productive factors and given property rights of agents.

For Samuelson : Second fundamental theorem of welfare economics:

Pareto also showed that by redistributing initial endowments among agents, any (feasible) equilibrium, and along with it any (feasible) Pareto optimum, can be brought about.

These two theorems, developed within the framework of ordinal utility theory, replace the discussion of a redistribution of income (and wealth) based on a falling marginal utility of income and derived within a cardinal framework, as we encountered it in the work of [Edgeworth](#) (and will do so again in that of [Arthur Cecil Pigou](#), discussed in a later section).

Compared with cardinal utility theory, ordinal utility theory — with [its rejection of interpersonal comparisons](#) (great debate)—dramatically privileges the [individual](#) relative to society. In this perspective the individual, one might say, is in principle attributed a right to veto public decisions that affect his or her (subjective) well-being.

https://www.youtube.com/watch?v=pSSsZLTMDq0&ab_channel=Stand-upMaths

:)

https://www.youtube.com/watch?v=ubthNR0n3LM&ab_channel=Doubtnut :) (the victory of the concept of cardinal utility and marginal utility)

- In such a situation it seems almost **impossible to say** whether situation A is better for society than situation B.
- As a consequence, **economic policy** seems unable to improve social situations. Since **every policy alternative has some gainers and some losers**, how could one ever judge the gains of the former against the losses of the latter, **if interpersonal utility comparisons are prohibited?**



Eugen Slutsky (1880-1848)



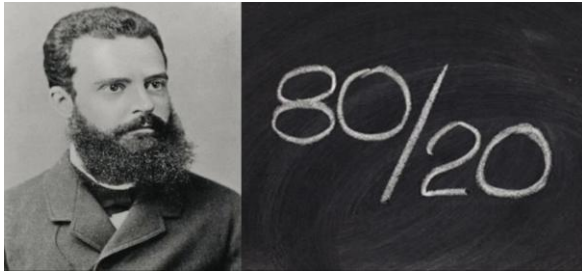
Robert Giffen
(1837-1910)



Paul Samuelson (1915-2009)

THE KALDOR-HICKS COMPENSATION CRITERION

- Kaldor took **the case of the repeal of the English Corn Laws in 1846** :
 - If those who gain from the repeal could in principle (that is, in theory) compensate those who lose, and still remain better off, then the repeal is desirable for society. There is **no need for the compensation actually to take place.**
- ◆ The Kaldor-Hicks compensation criterion
- ◆ A Pareto improvement results from a policy **no one is worse off** and some people are better off.

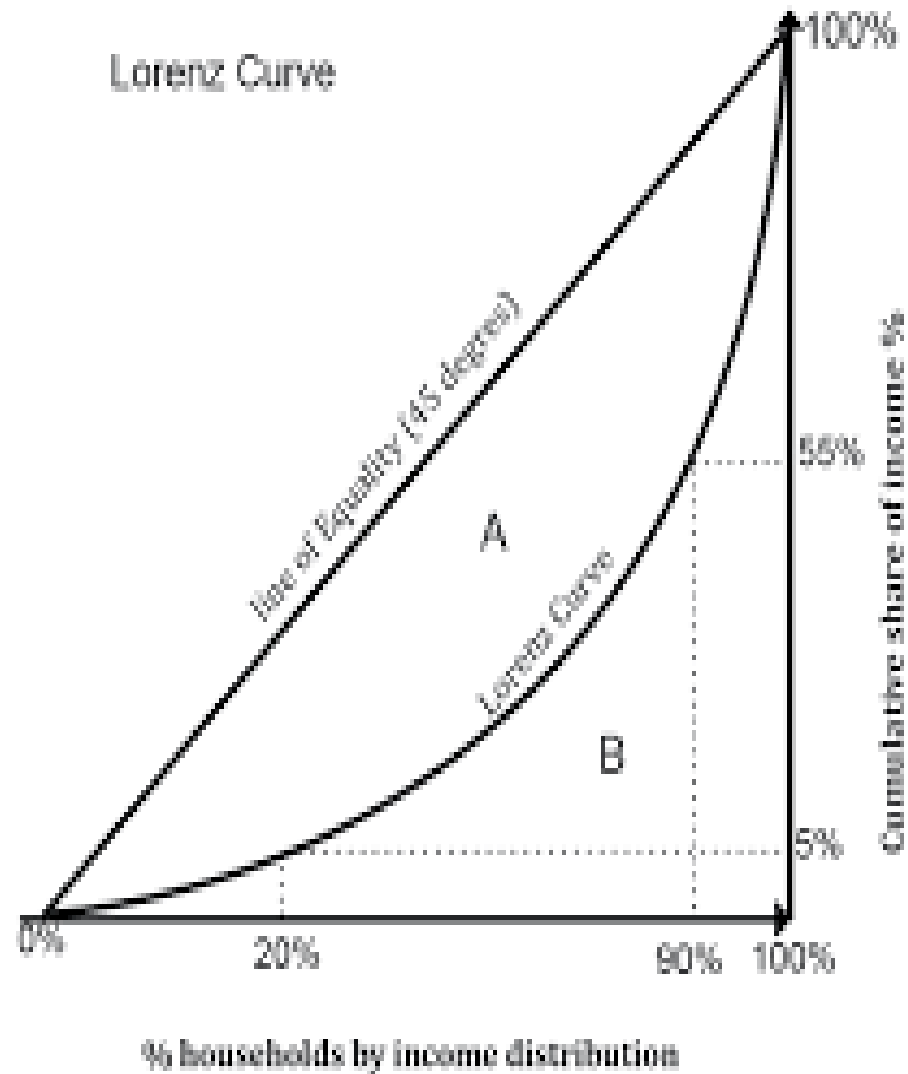


Incomes are accordingly very unequally distributed.

Over time the inequality of income distribution may decrease or even increase both in single countries and worldwide.

https://www.youtube.com/watch?v=EAynHZE-lK4&t=43s&ab_channel=BetterThanYesterday

Lorenz curve



- **meritocratic society** : in which the American dream is possible—everyone can in principle “make it,” can rise from the proverbial dishwasher to a billionaire.
- **patrimonial society** : what matters is largely whether a person is born or marries into a wealthy family and not so much how hardworking or productive the person is.

Pareto was critical to **the fictional character of homo economicus** and of the theory of **equilibrium based on that artificial construct**. He was convinced that economics alone could not satisfactorily explain social phenomena. **Late in life he turned to sociology** and with his **Trattato di sociologia generale** (1916), composed a classic work in the discipline.

- ARTHUR CECIL PIGOU (1877–1959)
(representative of the Marshallian theory of partial equilibrium)

- ✓ *The Economics of Welfare* (1920)
- ✓ *A Study in Public Finance* (1928)
- ✓ *The Theory of Unemployment* (1933)

- Pigouvian tax
- Pigouvian subsidy



Capitalism and Socialism

?

- https://www.youtube.com/watch?v=rAy_G-1JF74&ab_channel=Alux.com
- https://www.youtube.com/watch?v=6sM3KOYPL_A&ab_channel=BusinessCasual

Capitalism and Socialism

The Unsufficiency Of The Theory

Interesting remark 1:

As firms amassed economic and political power it became even more obvious that the workhorse of much of marginalist economics—**the model of perfect competition** in which none of the agents possesses any market power—**could not capture the new situation.**

Interesting remark 2:

Without much of an exaggeration one could say that in this view socialism was designed **to mimic** the properties of **competitive capitalism without private property in the means of production.**

We will see the documentary in 2 weeks!



Joseph A. Schumpeter

Theory of Economic Development

(first published in German in 1912)

The static efficiency properties of perfect competition, around which the arguments of both parties in the controversy revolved, were of little importance for an understanding of the working of the capitalist system (both its bright and dark sides). The most striking features of capitalism were **its inherent dynamism** and **restlessness** and **its capacity to propel the system forward to rising levels of productivity** and **to an increasing variety of goods**. In this regard, Schumpeter, who was not a Marxist, acknowledged that **He Benefited Greatly From Marx's Perspective** (as will become more clear in chap. 8).

“MARKET SOCIALISM”

- “socialist calculation debate”
- an efficient allocation of scarce resources

Prices

- ✧ prices performing the function of signaling...
for exemple shortages
- ✧ without prices performing the function of signaling, Pareto argued, a planned economy is just groping around in the dark.

Other debates

Ludwig von Mises (1881-1973)

“Economic Calculation in the Socialist Commonwealth” (1920 in German, 1935 in English)

“all human rationality arises out of economic life (?) and needs the medium of markets to evolve”

Oskar Lange (1904–1965)

answered Mises in a paper entitled “On the Economic Theory of Socialism” published in two installments in 1936 and 1937. In his view, **the alternative between competitive capitalism and socialism no longer really existed**, since the former had long since ceased to be. Capitalism’s attributes of efficiency can only be restored, Lange maintained, within the framework of a decentralized or “market socialism.”

What is “market socialism”?

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- What is “market socialism”?
- The exemple of China

- ✧ https://www.youtube.com/watch?v=8pjpS0q9efw&ab_channel=RichardDWolff
- ✧ https://www.youtube.com/watch?v=s-xjyVYoptU&ab_channel=SocialCapital
- ✧ https://www.youtube.com/watch?v=efPiMH0DKG8&ab_channel=DemocracyAtWork
- ✧ https://www.youtube.com/watch?v=nY3VSmAl8&ab_channel=DemocracyAtWork
- ✧ https://www.youtube.com/watch?v=rThM32L94qQ&ab_channel=DemocracyAtWork

The Market Process as a Discovery Procedure

- Friedrich August von Hayek

The Road to Serfdom (1944)

- 1) the incentives for microeconomic action that come from the market
 - 2) the information that markets generate.
- **Prices**, as the outcome of spontaneous actions by individuals, are carriers of information.
 - No central planning office
 - no bureaucratic process

Third Way

- The defeat of the Central Powers in the First World War (1914–1918) and the upheavals (and related economic and social miseries) caused by the war.
- Emil Lederer (1882–1939) with Rudolf Hilferding (1877–1941)
- Schumpeter and others on key industries
- Otto Neurath (1882– 1945)
- Carl Landauer (1891–1983)
- Eduard Heimann (1889–1967)

- Nazi period

- The search for alternatives to capitalism or for ways to correct and tame it has not died—see, for example, works of the American economists John E. Roemer (b. 1945) and Joseph Stiglitz. 2008 crisis of the financial markets and the banking sector + the covid pandemic along with the powerful impact of that crisis on the real economy raised further questions about the conditions for a world that is more stable and more just.

2 debates on the covid pandemic and the future of the capitalism

- https://www.youtube.com/watch?v=hUYM26JKXYQ&ab_channel=TheInstituteofArtandIdeas
- https://www.youtube.com/watch?v=bs7W2FlCcdE&ab_channel=ConnecticutPublic

IMPERFECT COMPETITION (ch 7)

- OLD INSTITUTIONAL ECONOMICS

- ◆ Thorstein Veblen (1857–1929)

- The Theory of the Leisure Class* (1899)

- Theory of Business Enterprise* (1904)

- ◆ John Maurice Clark (1884–1963)

- ◆ Frank H. Knight (1885–1972)

- ◆ John R. Commons (1862–1945)

- ◆ Wesley Clair Mitchell (1874–1948)

MONOPOLISTIC COMPETITION

✓ Pierro Sraffa (1898-1983)

“The Laws of Returns Under Competitive Conditions” (1926)

✓ Edward Chamberlin (1899–1967)

The Theory of Monopolistic Competition (1933)

Joan Robinson

✓ *The Economics of Imperfect Competition* (1933)

OLIGOPOLISTIC COMPETITION

...a small number of suppliers in a given market.

FURTHER DEVELOPMENTS

...industrial economics

...industrial organization

...a theory of the firm, the firm's boundaries, and its relationship with the market.

John Forbes Nash (1928–2015) Game Theory, Nash equilibrium