Macroeconomics II

Lecture 02 (Feb 2020)

A map of theories of growth
Authors and concepts
Accumulation and distribution

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Lecture 02

Cap. 02 Theories of economic growth: some milestones

classical thought on endogenous growth: Adam Smith (1776), Thomas Malthus (1798), David Ricardo (1817), Karl Marx (1867);

•Keynesian analysis in the models of economic growth: R. Harrod (1939) and E. Domar (1946) (to be discussed next);

•economic growth as a process: W. Rostow (1959); the role of industrialization;

•economic growth and structural change: S. Kuznets (1957);

New challenges: Chang (2007), Piketty (2013).

<u>Reading</u>

Kurz, H. D., Salvadori, N. (2003), Theories of economic growth: old and new. In Salvadori, N. (ed) (2003), *The Theory of Economic Growth: a "classical" perspective*. Edward Elgar, cap. 1, pp. 1-22.

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classical thought on endogenous growth

political economy emerges in the context of the **Industrial Revolution** (mid-18th century, UK): inquires the factors of (economic) growth of nations, and the role of manufacturing industries in "explaining" it. The **accumulation of capital** plays a central role in the process of growth of production.

Adam Smith (1723-1790), David Ricardo (1772-1823), Thomas Malthus (1766-1834), Karl Marx (1818-1883)

Adam Smith,
1759, *Theory of Moral Sentiments*
1776, *An Inquiry into the Nature and Causes of the Wealth of Nations.*
Thomas Malthus,
1798, *An Essay on the Principle of Population*
David Ricardo
1817, *On the Principles of Political Economy and Taxation*
Karl Marx
1867, Capital

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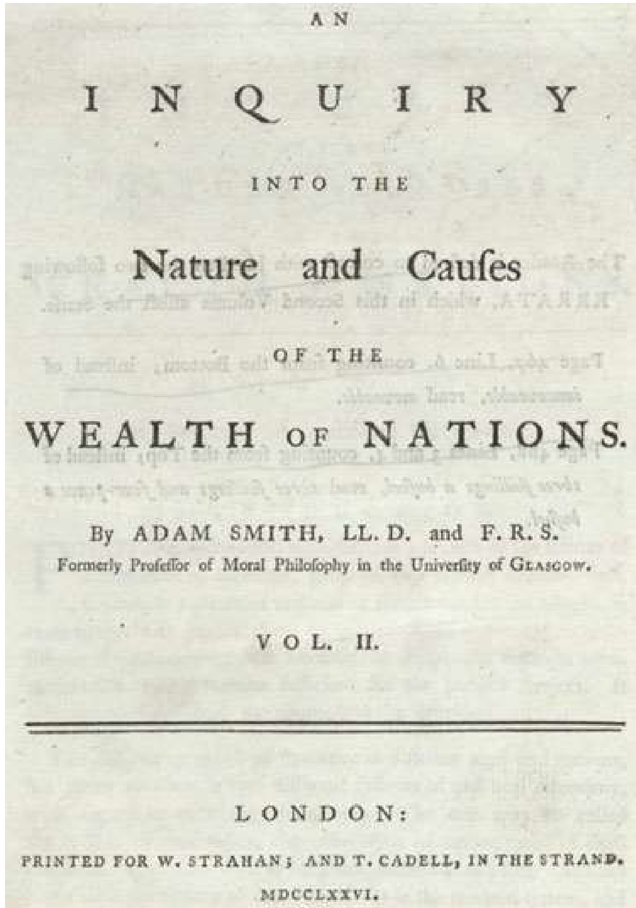
Economist and philosopher, born in Kirkcaldy, a small fishing village near Edinburgh, Scotland. He studied first at Glasgow (1737-1740) and then at Oxford, which, compared with Glasgow, the center of the 'Scottish Enlightenment,' was an educational desert. After six years of self-education at Oxford, Smith returned to Scotland and became professor of logic at Glasgow in 1751, at the age of 27. He took up the chair of moral philosophy the following year and published *The Theory of Moral Sentiments* (1759), where he introduced his idea that men are often "led by an invisible hand ... without knowing it, without intending it, [to] advance the interest of the society." At Glasgow, he lectured for an hour or two every morning to classes of up to 90 students, aged 14 to 16. He was famous: his classes attracted foreign students from Russia and other European nations. In 1776 Smith moved to London, where he published *The Wealth of Nations* (1776). His appointment as commissioner of customs in 1778 took him back to Edinburgh. He never married.

Adam Smith
(1723-1790)

Adam Smith (1723-1790)



AN

INQUIRY

INTO THE

Nature and Caufes

OF THE

WEALTH OF NATIONS.

By ADAM SMITH, LL. D. and F. R. S.

Formerly Profeffor of Moral Philofophy in the Univerfity of GLASGOW.

VOL. II.

LONDON:

PRINTED FOR W. STRAHAN; AND T. CADELL, IN THE STRAND.

MDCCLXXVI.

Adam Smith (1723-1790)

An **optimistic** view of economic growth.

In the capitalist economic system, the interests of **consumers** and **producers** are compatible and harmonious, despite looking after their own interests (*selfish behaviour*). It is as if there was an *invisible hand*, matching of the interests of both.

Free competition plays an important role in this process. The **Government**, on another hand, also plays an important role, promoting the good working of the institutions.

Division of labour was crucial for the working of the capitalist system: either *intra-firm* or *inter-firm* division of labour. The capitalist system deeps and widens the division of labour aiming at cost reductions, increasing output, rising profits, etc

factors of growth:

•capital accumulation
•technical progress and division of labour
•competition and free trade (institutional dimensions)

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Thomas R. Malthus
(1766-1834)

English economist. He studied at Cambridge, and was ordained in 1797. In 1798 he published anonymously his *Essay on the Principle of Population*, arguing that the number of people has a natural tendency to increase faster than food supply, and that efforts should be made to cut the birth rate, either by self-restraint or birth control – a view which later was widely misrepresented under the name of Malthusianism. In 1805 he became professor of political economy in the East India College at Haileybury, where he wrote his *Principles of Political Economy* (1820) and other works.

Thomas R. Malthus (n. 1766) (*An Essay on the Principle of Population*, p. 1798)

Population Theory: **the poor people are responsible for their own poverty, which is a consequence of the working of the capitalist system**

why?

population of a country rises as a (positive) function of average income in that country, when average income is above the subsistence level of income; then, population grows in **geometric** progression (and population doubles every new generation);

agriculture production rises in **arithmetic** progression, as the "new" land used for agriculture is less fertile than the previously used;

then, agriculture output per capita (that is, the average income) decreases; and average income may become less than the subsistence level of income; as a consequence, the growth rate of population decreases,

and converges into an equilibrium level, when average income = subsistence income level, and

growth rate of population = growth rate of agriculture output.

David Ricardo
(1772-1823)

English economist and politician, born in London. He set up in business as a young man, and by 1814 had made a fortune. In 1817 he published his main work, *Principles of Political Economy and Taxation*. In 1819 he became a Member of Parliament, and was influential in the free-trade movement. Despite his own considerable practical experience, Ricardo’s writings are abstract and frequently difficult. His law of rent was probably his most notable and influential discovery. It was based on the observation that the differing fertility of land yielded unequal profits to the capital and labor applied to it and, hence, differential rent. This principle was also noted at about the same time by Malthus and others. His other great contribution, the law of comparative cost, or comparative advantage, demonstrated the benefits of international specialization as regards the commodity composition of international trade. This was at the root of the free trade argument, which set Britain firmly on the course of exporting manufactures and importing foodstuffs.

David Ricardo (n. 1772) (*On the Principles of Political Economy and Taxation*, p. 1817)

- income distribution is a crucial factor of economic growth, as the major constraint, or positive factor, for economic growth;

law of diminishing returns in agriculture production as a crucial factor.

then, agriculture prices rises; the subsistence level of wages rises as a consequence; the agriculture producers who use more fertile lands generate abnormal profits, which are rents for the land owners;

as a consequence, the share of profits in total income tends to decrease;

solution: long-term (technical progress) or short-term (trade liberalization, to increase the imports of corn, originating lower agriculture prices and, then, reducing subsistence wage.

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David Ricardo (1772-1823) (cont.)

His major concern has been **income *distribution*** (and not its *growth*).

Assuming the average wage as a constant, the capital accumulation raises the use of land, with decreasing returns, then originating the rise of the land rents (the most productive land is more highly valued) and, then, the profit rate becomes lower.

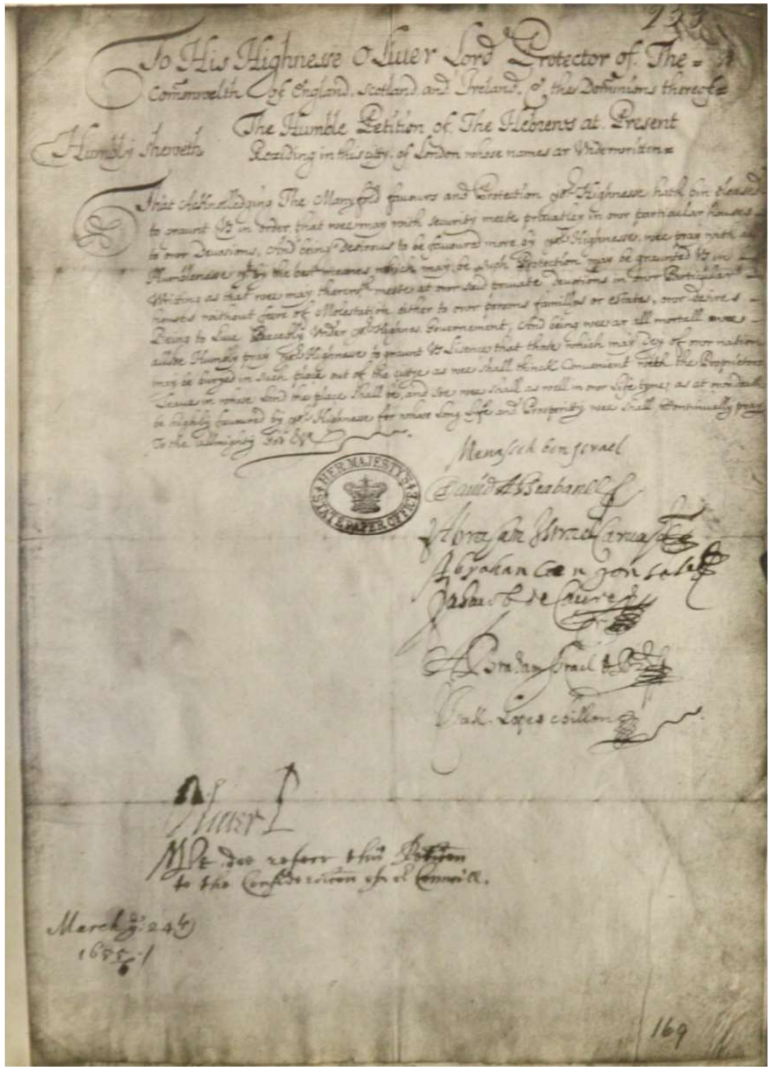
If profit rate decreases, the rate of accumulation reduces and the economy tends towards a **stationary state**.

Therefore, the **capital accumulation is endogenous** (is determined by factors which are internal to the economic system).

The wage rate is a variable that regulates labour supply and demand: when capital accumulation rises, the wage rate becomes higher than the natural wage and, then, labour supply increases. Therefore, labour is not a constraint to the economic growth: economic growth is **endogenous**.

Ricardo's theory of comparative advantages

- International trade as an advantage to all economies
- The example of the *Methuen Treaty* between Portugal and the United Kingdom (1703)
- Wine for textiles?


To His Highnesse Oliver Lord Protector of The Commonwealth of England, Scotland and Ireland, & the Dominions thereof
The Humble Petition of The Hebrews at Present Reciding in this citty of London whose names ar Underwritten
Humbly sheweth

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Two fundamental debates

Malthus: **against the Poor Laws**.
He opposed the proposal by the government to extend the relief system to the very poor in the countryside. (around 1800)
Why?

Ricardo: **against the Corn Laws**. In parliament, he fought for the liberalization of imports of cereals. (around 1815-20)
Why?

Both represent specific social interests and both decisions, on poor relief and on the imports of corn, would have huge economic consequences, changing the balance between social classes in Britain.

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Marx, Karl

What is specific about capitalism?

separation of labour from the ownership and control of the means of production

production of commodities for profit (exchange value is more important that use value)

transformation of the labour force into a commodity that has value and produces value

What is accumulation of capital?

a social process that involves expropriation, concentration of the means of production and creation of wage labour

How accumulation of capital takes place?

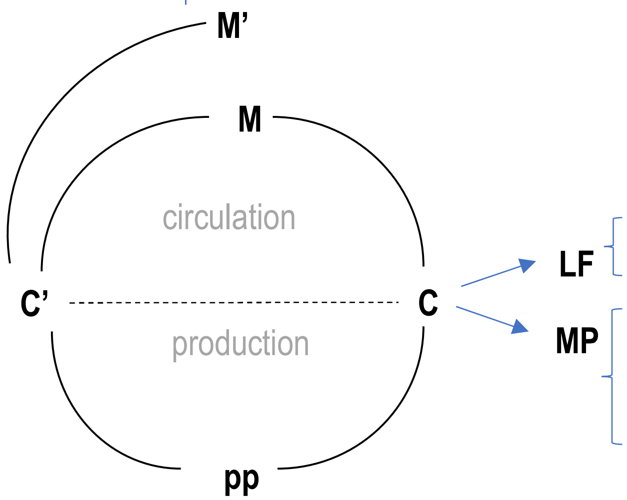
profit

Where does profit come from?

production and extraction of profits (the labour process), realization of profits, share of profits

The circuit of accumulation of (industrial) capital

Tensões sobre a partilha da mais-valia: acumulação (lucros), rendas, juros e consumo dos capitalistas. Como prossegue o circuito de acumulação de capital?
De onde vem o capital financeiro e implicações?



Realização da mais-valia. Tensões e competição (horizontal) com outros capitalistas. Ligações (jusante)

LF: Tensões (classe e género) sobre as condições de reprodução social e acessibilidade da força de trabalho

MP: Tensões sobre tecnologia (classe, género, grupo) e preços (com outros capitalistas – competição vertical). Ligações (montante)

Geração e extracção da mais-valia.Tensões sobre a organização social e técnica da produção e sobre as condições de emprego (classe e género)

Legenda: D = dinheiro (D' > D); M = mercadorias (FT = força de trabalho, MP = meios de produção); pp = processo de produção; M' são mercadorias finais do processo de produção, cujo valor > M.

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Developmentalist theories of economic growth(20th Century)

after WW II (1940s, 1950s); in the context of economic reconstruction of Europe, Marshall Plan (economists participated as experts in the UN, WBank, etc);

major characteristics of such "*school*"(?) of thought (*developmentalist theories*)

- **Study less developed economies**
- **industrialization as the driving force of economic growth;**
- **influence of Keynesian thought;**
- **advocate large-scale, short-term governmental intervention into the economy.**

main authors: Rosenstein-Rodan, Ragnar Nurske, Hirschman, Arthur Lewis, Walt Rostow, etc

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Walt Rostow (1916-2003)

participated as economist in the Economic Commission for Europe, in the implementation of the Marshall Plan.

was professor at MIT (1951-1961)

He wrote "*The Stages of Economic Growth*", The Economic History Review (new series), vol 12, nº 1, 1959, pp. 1-16.

The Rostow Model

The traditional society – Based on subsistence; farming, fishing, forestry and some mining.

Pre-conditions for take off – Building infrastructure that is needed before development can take place, e.g. transport network, money from farming, power supplies, communications.

Take-off – Introduction and rapid growth (industrial revolution) of manufacturing industries, better infrastructure, financial investment, and culture change

Drive to maturity – New ideas and technology improve and replace older industries, economic growth spreads throughout the country

High Mass Consumption – People have more wealth and so buy services and goods (consumer society), welfare systems are fully developed, trade expands.

Albert Hirschman

born 1915 (Berlin), died 2012;

professor in several USA universities (Yale, Columbia, Harvard).

wrote *The Strategy of Economic Growth*, !958, Yale University Press

Albert Hirschman: Theory of unbalanced growth

he agreed with many ideas of Rosenstein-Rodan and Nurske: the need of a strategy of industrialization to promote economic growth, what requires large-scale investments (big-push) in several industries;

contrary to Nurske, he argued for a big-push for only a limited range of industries: an **unbalanced growth**; why? this may originate overcapacity in some sectors and supply bottlenecks in others (disequilibrium); these bottlenecks would create pressures for new investments (the market system would respond to shortages and surpluses), what would promote growth;

the role of **industrial linkages** for the working of the economy: the output of an industry requires inputs from other industries (backward linkages); when an industry expands its production it creates forward effects on other industries and the final consumer (forward linkages).

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Albert Hirschman: Theory of unbalanced growth

How to identify what to produce? Major needs of the economy (what it does not have, but requires in large enough quantity to justify industrial policy)

development strategy would consist on maximizing the industrial linkages.

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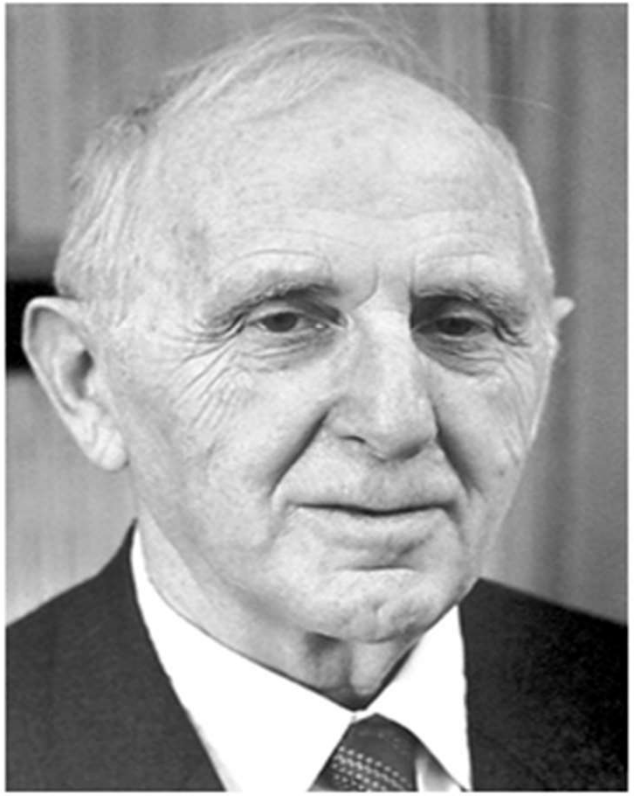
Simon Kuznets - Facts



Simon Kuznets

Born: 30 April 1901, Pinsk, Russian Empire (now Belarus)

Died: 8 July 1985, Cambridge, MA, USA

Affiliation at the time of the award: Harvard University, Cambridge, MA, USA

Prize motivation: "for his empirically founded interpretation of economic growth which has led to new and deepened insight into the economic and social structure and process of development"

Field: economic growth, economic history

Contribution: Extensive research on the economic growth of nations, developed methods for calculating the size of, and changes in, national income.

inverted-U curve of income inequality
with income level: as an economy develops, economic factors act such that income inequality first increases and then decreases.

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The American Economic Review

VOLUME XLV   MARCH, 1955   NUMBER ONE

ECONOMIC GROWTH AND INCOME INEQUALITY*

By SIMON KUZNETS

The central theme of this paper is the character and causes of long-term changes in the personal distribution of income. Does inequality in the distribution of income increase or decrease in the course of a country's economic growth? What factors determine the secular level and trends of income inequalities?

These are broad questions in a field of study that has been plagued by looseness in definitions, unusual scarcity of data, and pressures of strongly held opinions. While we cannot completely avoid the resulting difficulties, it may help to specify the characteristics of the size-of-income distributions that we want to examine and the movements of which we want to explain.

Five specifications may be listed. First, the units for which incomes are recorded and grouped should be family-expenditure units, properly adjusted for the number of persons in each—rather than income recipients for whom the relations between receipt and use of income can be widely diverse. Second, the distribution should be complete, *i.e.*, should cover all units in a country rather than a segment either at the upper or lower tail. Third, if possible we should segregate the units whose main income earners are either still in the learning or already in the retired stages of their life cycle—to avoid complicating the picture by including incomes *not* associated with full-time, full-fledged participation in economic activity. Fourth, income should be defined as it is now for national income in this country, *i.e.*, received by individuals, including income in kind, before and after direct taxes, excluding capital gains. Fifth, the units should be grouped by *secular* levels of income, free of cyclical and other transient disturbances.

For such a distribution of mature expenditure units by secular levels

* Presidential address delivered at the Sixty-seventh Annual Meeting of the American Economic Association, Detroit, Michigan, December 29, 1954.

Suggestion

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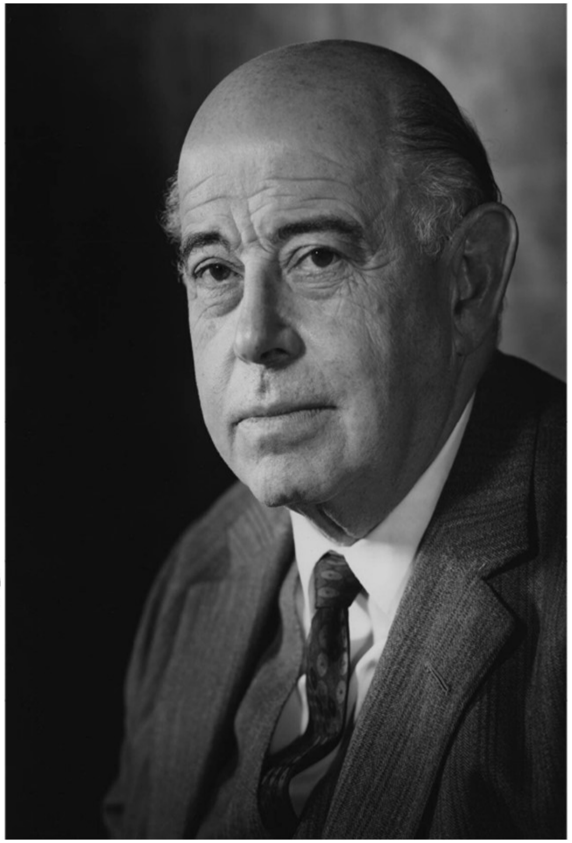
Nicholas Kaldor (1908-1986)
and the stylised facts of growth



An empirical approach, to detect the drivers of change

New questions

in economic development theories:

Inequality: Kalecki and Piketty

Industrial policies and trade relations: the debate between Justin Lin and Ha-Joon Chang