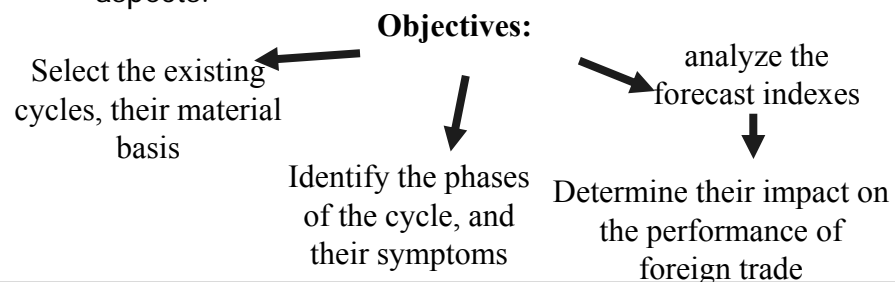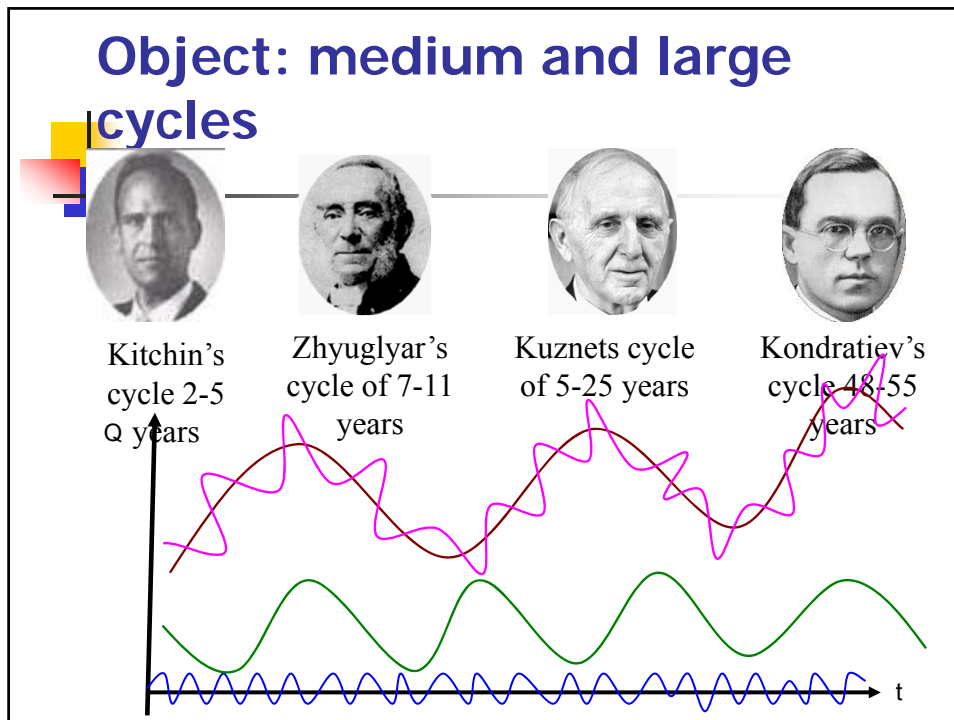# Analyze of economic situations

The medium-term cycle of industrial production
situational symptoms (indexes)
By prof. Ruzhinskaya T.I.

Purpose:

- Analyze how the cyclical nature of variables that affect the economic situation.
- Assess the possibility of predicting cyclical indicators and their impact on developed countries′ foreign aspects.

Objectives:

Select the existing cycles, their material basis

analyze the forecast indexes

Identify the phases of the cycle, and their symptoms

Determine their impact on the performance of foreign trade

Object: medium and large cycles

Kitchin's cycle 2-5 Q years

Zhyuglyar's cycle of 7-11 years

Kuznets cycle of 5-25 years

Kondratiev's cycle 48-55 years

crises of overproduction

- The emergence of periodical crises is in a narrow connection with the creation of the **world market**.
- The establishment of the world market at the same time is the result of a major prerequisite for the machine industry, the economic development inevitably proceeds not otherwise like jumps through crises of overproduction.

Changing phases of reproduction

- Crisis
- Depression
- Recovery
- Growth (**a pure growth phase**)

CRISIS PHASE

- Phase of the crisis matures into recovery (phase of a pure growth)
- Phase takes place in two stages
- The form of manifestation of economic crisis is the disparity between supply and demand
- crisis has a meaning that it's a spine of the cycle

DEPRESSION PHASE

- Depression phase is prepared by the phase of crisis
- **For the duration depression phase is the shortest phase of the cycle (about 3-6 months, not more)**
- **All indicators of economic conditions are in a stagnant, i.e. remain at its level they reached, without moving in one direction or another, but the indicator "encrease-decrease in inventories" continues to decline**

PHASE OF RECOVERY

- This phase ripens in late phase of depression
- There is a massive renovation and expansion of fixed capital
- Excess of demand over supply
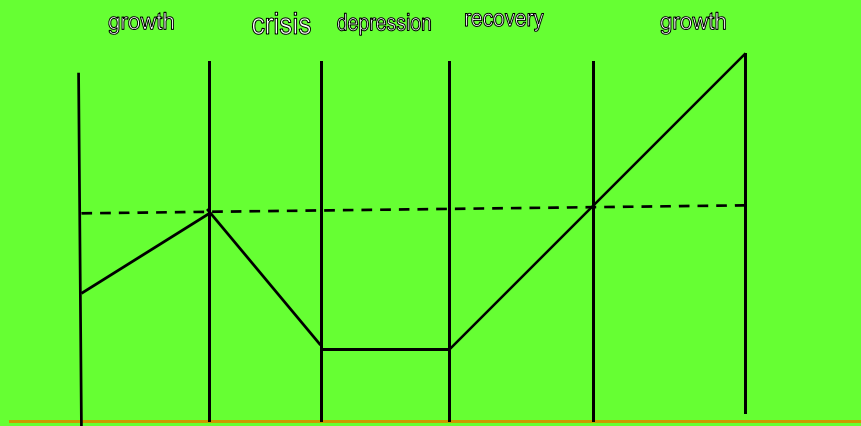- The end phase of recovery occurs when the pre-crisis peak load capacity has reached

PHASE OF GROWTH

- Phase is divided into two stages, as well as the phase of the crisis
- First stage - the period of construction in progress
- Second stage - the period of completed construction
- Все показатели идут вверх, сокращается только безработицаAll indexes (figures) are going up, unemployment is reduced only
- In the late phase of recovery there is a transition from the market "sellers" to market "buyers"
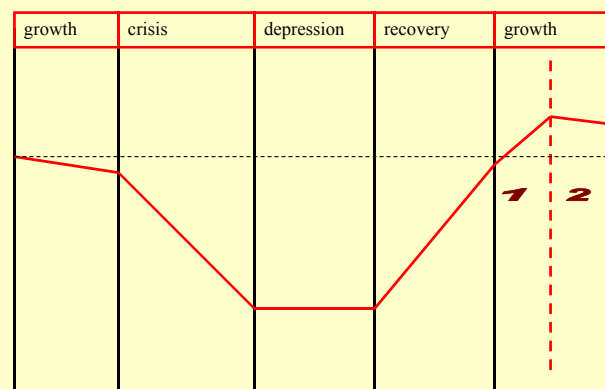- phase of the crisis is ripening
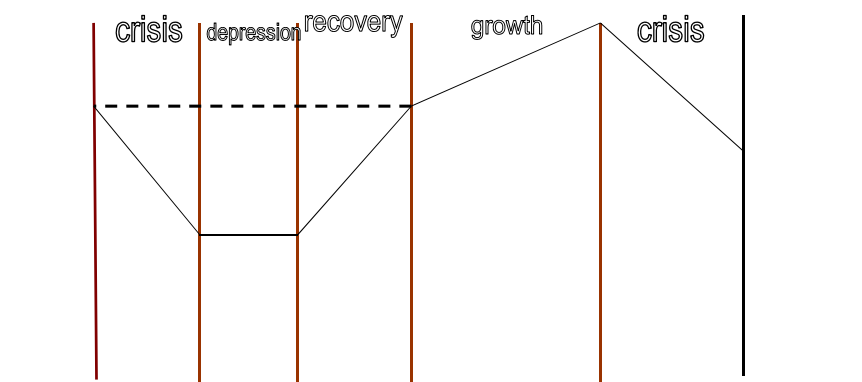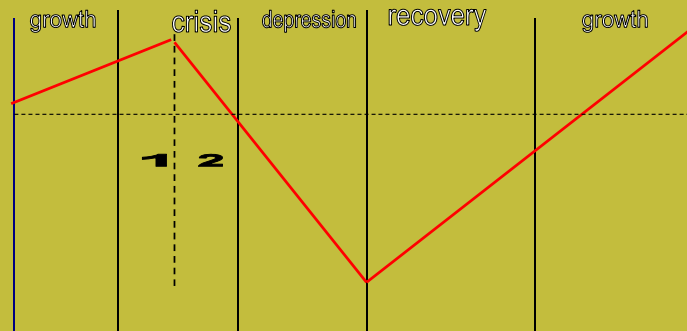
The dynamics of industrial production index

The dynamics of industrial production index

growth   crisis   depression   recovery   growth

The dynamics of the index of investments in production

growth	crisis	depression	recovery	growth

1 2

The dynamics of changes in inventories

growth　　crisis　depression　recovery　　growth

1　2

The dynamics of lending rates and loan interest

growth　crisis　depression　recovery　growth

1 2　　　1　2
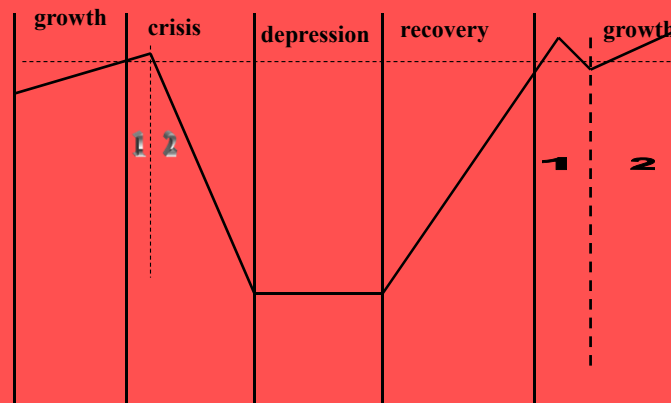
Dynamics of the phases of the construction cycle
(The dynamics of building contracts)

- **Should distinguish between income construction contracts to private and state-building, because their dynamics are very different. Nation-building acts as an element of anti-crisis policy of the government. If we compare indicators such as contracts for commercial and residential construction, a more sensitive indicator of a permit for commercial construction, which most accurately detects rotations of economic conditions.**
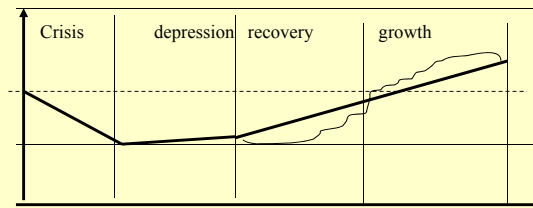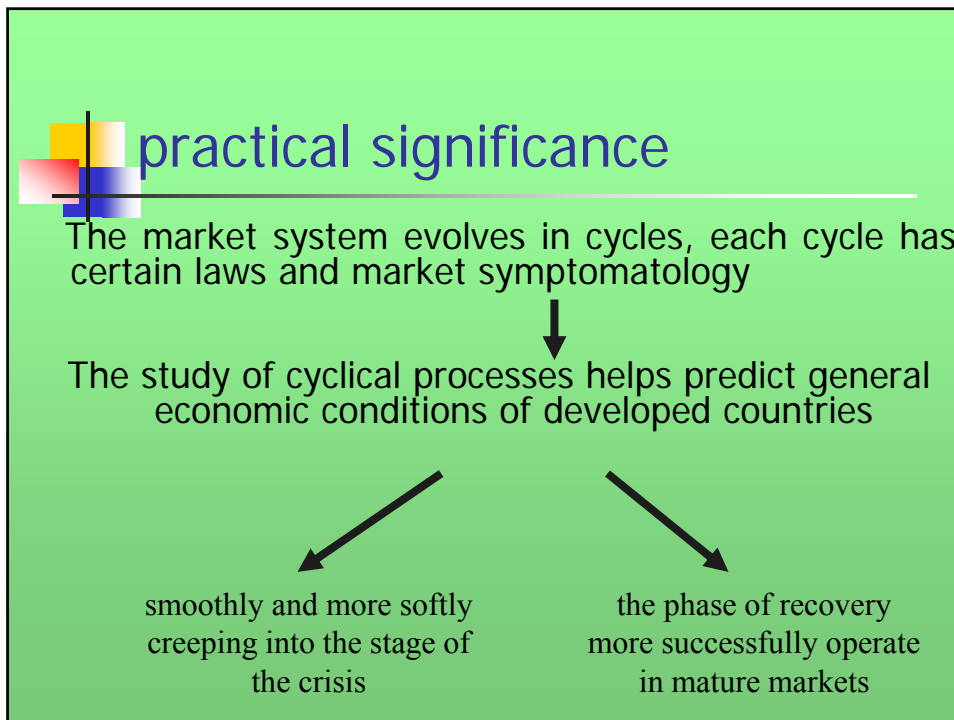

MONOPOLY REGULATION

- ## Crisis Stage I - creeping into crisis, advance decline in output, the prices' growth is accelerated

Crisis Stage II - the fall in output is increasing, price growth has been slowed

- Phase ofGrowth Stage I - the period of construction in progress
- Phase ofGrowth Stage II - Completion of construction of new enterprises and expanding old ones; to saturate the market of goods, prices are rising faster
- Phase ofGrowth stage III - signs of trouble with the sale of goods, the beginning of a gradual reduction of output, price growth slows

MONOPOLY REGULATION

crisis | depression | recovery | growth

I II

I

II III

— non-monopoly products
— monopolized goods

practical significance

The market system evolves in cycles, each cycle has certain laws and market symptomatology

The study of cyclical processes helps predict general economic conditions of developed countries

smoothly and more softly creeping into the stage of the crisis

the phase of recovery more successfully operate in mature markets

conclusion:

The study of cyclical processes and systems of the targets has a great importance on economic development as a country and its foreign economic indicators, and the world economy as a whole

INFLUENCE
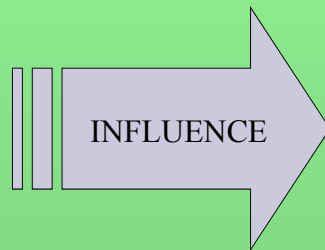
In the phase of the crisis it's permitted to minimize losses

In the phase of growth to optimize the components of the foreign trade

---

Changing the medium-term cycle flow in the second half of the 20th century and early 21st century

- 50-60s upward economic situation of a large cycle
- 70-80s declining economic situation of a large cycle
- 90th - early 21st century - an upward economic situation of a large cycle

Modification of the medium-term cycle

- В основе периодичности цикличности движения воспроизводства лежит обновление основного капитала в виде его активной части – машин и оборудования. We can therefore say that every medium cycle - is a mini-wave of technological progress.
- The crises of the 20th century
- 20 века – 1990-1901, 1907-1908, 1913-1914, 1929-1933, 1937-1938, 1948-1949, 1957-1958, 1969-1970, 1974-1975, 1980-1982, 1990-1992, 2001-2002, 2007-2008……. The basis of the periodicity of cyclical movements of reproduction is the renewal of fixed capital in the form of its active parts - machinery and equipment.

The six signs of modification of the medium-term industrial cycle

- **1. Changes in the length of the cycle**
  (in the first half of the 20th century, during the second half of the 20th century and early 21st century)
  Causes: Accelerating renovation of fixed assets, the emergence of new industries, reducing the life cycle of finished products
- **2.Reducing the depth and duration of the phase of the crisis**
  Reasons: accelerating renewal of fixed assets, the emergence of new industries, reducing the life cycle of finished products, the emergence and implementation of the economic sectors of computers, computer equipment, etc. Creating a service that is a definite shock to the crisis, because the service sector is not producing at the same time is a major consumer. Development and improvement of forecasting techniques.
- 3. **Change the epicenter of the crisis.** 19th Century - Great Britain. United States - 20th century - beginning of the 21th century, when the U.S. runny nose, sneezing all over the world began. The next epicenter - a new battle.

The six signs of modification of the medium-term industrial cycle

- 4. **Slowly creeping into the phase of the crisis**
- Early decline in output and capacity utilization, increased regulation of demand and supply on the basis of state regulation of marketing, improve forecasting methods, the active intervention of government agencies in the country's economy
- 5. **Synchronization** of crisis in developed economies (after the economic crisis, 1969-70) Reason – level of the economic development in leading countries had become at the same rates. Prior to World War II there was a significant gap in the economic potential of the U.S. and the rest of the world. By this time the International division of production had been formed.In the 70s several countries (developed economies) fall into crisis phase at the same time and at the same time they came out of this phase.
- 6. **Stagflation.** The trend first appeared during the crisis years 1969-71. Earlier proposals for the adaptation suzivshemusya purchasing power occurred due to falling prices in the initial period. At the present stage in the crisis in price or remained unchanged or increased in most economies in the world. So now the prices have to rise continuously, not excluding the phase of the crisis.

STRUCTURAL AND SECTOR CRISES

- 1973-1975 - Energy Crisis
- 1976-1978 - raw materials crisis
- 1978-1980 - External debt crisis
- 1980 -1984 - food crisis (production &consumption of agricultural foods)
- 1989 - the UN declared this year like a year of the ecological crisis.
- All of the structural crises are logically linked

FINANCIAL CRISIS REASONS

- The increasing gap between the speculative capital, on the one hand, and GDP growth, on the other. In other words, to ensure system stability, the real economy must grow sufficiently to meet the demands of speculative capital.
- However, all the more revealed that corporations are becoming increasingly dependent on financial transactions.

FINANCIAL CRISIS REASONS
mortgage and financial crisis 207-2008

United States of America

- The debt crisis in the US
- The national debt - more than 10 trillion. USD
  Total external debt of the United States - 14 trillion. USD
  Total debt U.S. residents to nonresidents and residents - approx. 45 trillion. USD

MORTGAGE CRISIS 2007-2008

- Reduce the refinancing rate
- Government programs for the provision of shelter
- securitization of mortgages
- Active trading of the central bank, secured by real estate
- Increased expectations of investors

MORTGAGE CRISIS 2007-2008

- First of all, banks were losing money
- Rising asset prices was ensured properly by rising prices and the securitization of mortgages
- Unlimited credit expansion in all sectors
  Credit expansion was provided assets (including shares)
- By reducing the prices of mortgage assets the difference is to be repaid
- The nature of derivatives involves a large shoulder
  Do derivatives have a time limit of execution

Large economic cycle

- The theory of large cycles by N.Kondratiev.
- The modern theory of large loops.
- Technological orders.
- The dependence of growth on the level of economic development.
- The mechanism of formation and development of a large cycle under economic conditions.

Technological system in the waves of N.D. Kondratev in ekonomic conditions.

- The first wave (1785 -1835).
  The second wave (1830 -1890)
  The third wave (1880-1940).
  The fourth wave (1930 -1990 years ..
- The fifth wave, which began in the mid-80s, is going the present times
- In modern economic theory of alternation of business cycles associated with the change of technological structures in social production. The concept of "lifestyle" means the arrangement, the established order of something. Technological system is characterized by a single technical level of its component industries of qualitatively homogeneous flow of resources based on shares of skilled labor, general scientific and technical capacity, etc. The life cycle of technological system has three phases of development and defined period of about a hundred years.
- The first phase
  The second phase
  The third phase

The system features of a large cycle phases

- The material basis of a large economic cycle - 1) the emergence of new industries, and 2) a new type of vehicle, and 3) a new type of communications, changes in infrastructure
- Transition rate cycle from one phase to another - the growth rate of world GDP
- **Recovery hase**. Growth rates are higher than average
- **Phase of prosperity**. The rate of growth, the highest
- **Phase of recession**. Slowdown in economic growth. Growth rates are average and the completion within the period of the phase is below the average level
- **Phase of depression**. Marked by a minimum rate of GDP growth.
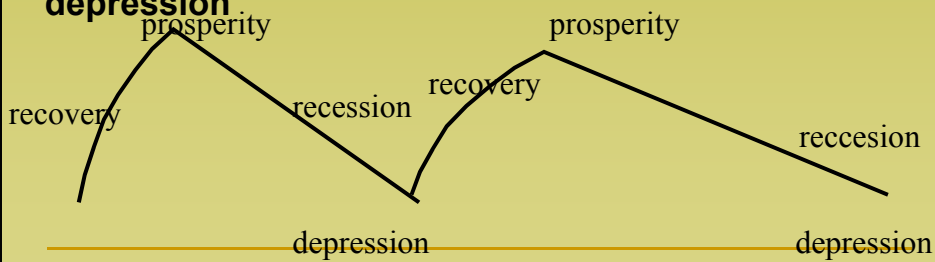
---

van Dein's SCALE

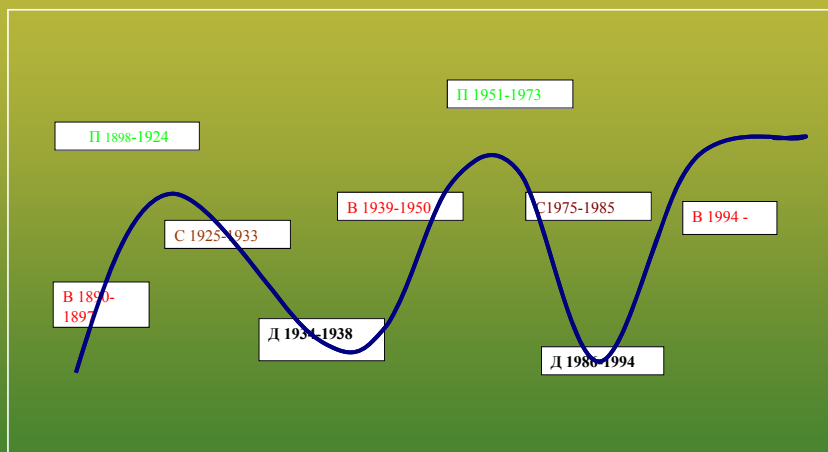| categ ories	Prosperity	Recession	Depression	Recovery
1cat.	2	1	1	4
2cat.	2	2	3	1
3cat.	1	1	3	3
4cat.	3	2	1	2
total∑	8	6	8	10
	Innovations in basis industries	Improvement of technological processes and products update		new industries

The system features a large cycle phases

- 1 Characteristics of activity in the area of innovations (Van Dein scoring system)
  2. Dynamics of average annual GDP growth rate
  3. Dynamics of average annual growth rate of industrial production
  4. The dynamics of investments
- 5. The dynamics of consumer demand
  6. dynamics of employment in the labor force
  7. The share of labor income in GDP
  8. The changing market structure
- **Phases: recovery, prosperity, recession, depression** .

prosperity   prosperity

recovery

recovery   recession

recovery   reccesion

depression   depression

Phases of the big (large) cycle: Recovery, Prosperity, Recession, Depression

П 1951-1973

П 1898-1924

В 1939-1950   С1975-1985   В 1994 -

С 1925-1933

В 1890-1897

Д 1934-1938   Д 1986-1994

elements of the fifth (now existing wave) technological system include the following industries: electronics industry, computer equipment, software, aviation, telecommunications, information services

- The duration of some waves more than fifty years are connected with the coincidence of the recession of the outgoing wave with a period of a new wave of growth. In connection with the acceleration of scientific and technical progress in the future, the length of waves will be reduced.

trends in earnings as a proportion of GDP of the seven major countries
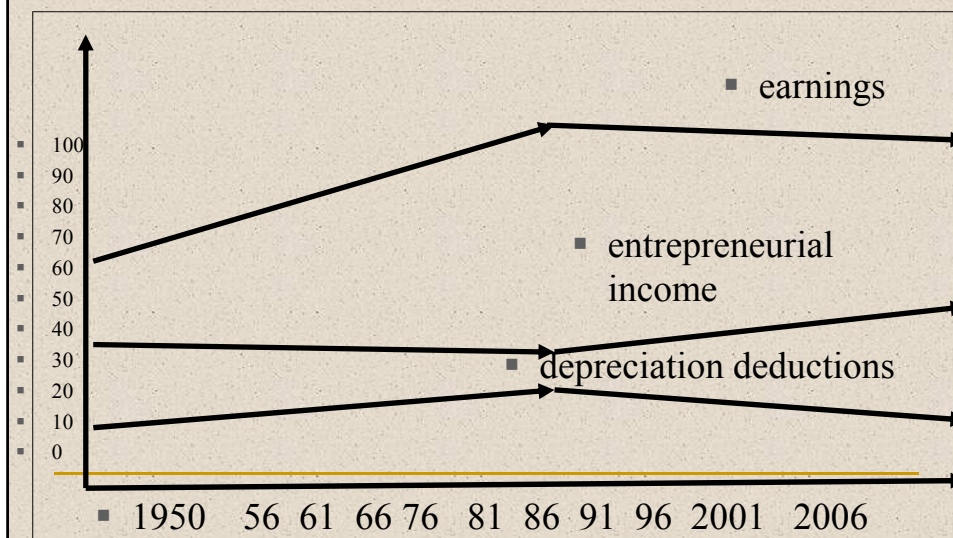
Formula John Kendrick

rate Cp = [rate Cl ·α + rate Ck(1- α)] –
- [rate P·α + rate P (1- α)]
            L   C

Where:
the rate of Cp - annual growth rate of prices of products
Cl - labor cost
Ck - the price of capital
α share of labor income in GDP
1 - α - share of property incomes in GDP
P/L - Productivity, where P - the production of goods.
P/K -in capital (capital productivity, where P – output
- [P · α + rate P (1 - α)]
    L   K   - total factor productivity.