

DEVELOPMENT ECONOMICS (MARKET ECONOMY FORMATION MODELS)

LECTURER: **VICTOR V. SLOBODYANIK**

THE STRUCTURE OF THE COURSE

- I. Developmental tradition in Economics: it's essence, origin and sources.
- II. The world economy: unity of heterogeneous.
- III. Keynesian models of economic growth.

THE STRUCTURE OF THE COURSE

- IV. Neoclassical models of economic development.
- V. Institutional and neo-institutional analysis of the problems of economic modernization.
- VI. The exterior factors of economic development: their essence, types and role.

THE STRUCTURE OF THE COURSE

- VII. The new models of economic growth on the role of human capital.
- VIII. Factor markets and the problem of poverty in developing countries.
- IX. Government and market: the problems of their interaction in developing countries.

THE STRUCTURE OF THE COURSE

- X. Catching-up development in the modern world: the factors, results and problems.
- XI. Market reforms in Russia: short history, results and problems.

READING LIST ON THE COURSE

1. *Herschenkron A.* Economic Backwardness in Historical Perspective: A Book of Essays. Cambridge (Mass.), 1962.
2. *Preston P. W.* Theories of Development. L., 1982.
3. *Coleman D., Nixon F.* Economics of Change in Less Developed Countries. 2nd ed. Oxford 1986
4. *Rostow W. W.* Theories of Economics Growth from David Hume to the Present. N.Y., 1992.

READING LIST ON THE COURSE

5. *Rostow W. W.* The Stages of Economics Growth. A Non-communist Manifesto. Cambridge, 1960.
6. *Leibenstein H.A.* Economic Backwardness and Economic Growth. Studies in the Theory of Economic Development. N.Y., 1957.
7. *Todaro M. P.* Economic Development. 5th ed. L., 1994.
8. *Ray D.* Development Economics. Princeton, 1998.
9. *Rosenstein-Rodan P. N.* Problems of Industrialization of Eastern and South-Estern Europe // The Economic Journal. 1943. Vol. 53. June/ September.

READING LIST ON THE COURSE

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10. *Murphy K., Schleifer A., Vishny R.* Industrialization and the Big Push // Journal of Political Economy. 1989.
 11. *Hirshman A.O.* The Strategy of Economic Development. 2nd ed. New Haven, 1961.
 12. *Lewis W.A.* The Theory of Economic Growth. N.Y., 1959.
 13. *Myrdal G.* Asian Drama: An Inquiry into the Poverty of Nations. Vol. I-III. N.Y., 1968.
 14. *Schulze T.W.* Investments in Human Capital. N.Y., 1971.
 15. *Soto E. de.* The Mystery of Capital. N.Y., 1995.

READING LIST ON THE COURSE

16. Soto E. de. *The Other Way*. N.Y., 1987.
17. Prebisch R. *The Economic Development of Latin America and Its Principal Problems*. N.Y. 1962.
18. Amin S. *L'échange inégale et la loi de la valeur*. Paris. 1973.
19. Solow R. *A Contribution to the Theory of Economic Growth*// *Quarterly journal of Economics*. 1956. February.
20. Becker G. *Human Capital*. N.Y. 1954.
21. Ha-Joan Chang *Economics: the User's Guide*. London, Penguin Books, 2010.
22. Нуреев Р.М. *Экономика развития: модели становления рыночной экономики*. Изд. Норма, М., 2008.

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- *Backward countries can not develop if they entirely rely on the market*
- *Path dependence problem*
- Development tradition is not an economic school:
pragmatic and eclectic character, but its eclecticism is at the same time its **drawback and advantage.**

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- Developmental tradition **is the most important intellectual tradition** in Economics: it accounts for all the successful examples of economic development in the history of mankind (GB, the USA, Germany, the modern China).

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- Developmental tradition: its origin and evolution (Henry VII, Giovanni Botero, Antonio Serre, mercantilist economic school, German historical school).
- Development tradition had for its goal to assist the economically backward countries to develop their economies in order to catch up the economically advanced countries.

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- The followers of the developmental tradition believed that economic development can not be reduced entirely to income maximization (the richness in natural resources may be sufficient for it).
- They considered **the economic development as the result of the ever more productive capacities growth.**

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- The followers of the developmental tradition pointed out that the above-mentioned task can not be solved without **an active state economic policy under respective forms.**

THEME I.
**DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN
AND SOURCES**

- Developmental tradition in the modern world:
development economics.
- Development economics as the modern stage of the developmental tradition was set up in 1950-1960 by such economists as Simon Kuznetz, Arthur Lewis, Gunnar Myrdall, Albert Hirshmann.

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- Developmental tradition is not a coherent economic theory, but it is more adaptable and practically oriented due to its ability to combine the achievements of many economic schools.

THEME I.

DEVELOPMENTAL TRADITION IN ECONOMICS: IT'S ESSENCE, ORIGIN AND SOURCES

- The forth-coming themes of our course are focused on the analysis of the main market formation economic models and the practical results of their implementation in developing countries.

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- The collapse of colonial system resulted in the emergence of big group of independent countries. At the beginning of current century they accounted for 75% of the world population and 40% of the world GDP.

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- These two figures characterize the big and ever increasing gap between the industrially developed countries and the countries of the so-called “third world”.
- At the same time the countries of the given group are not homogeneous by the criteria of the level of economic development and their place within the world economy.

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- The heterogeneity of the countries of the “third world” determined their classification into different echelons.
- One of the most known classifications of this type was worked out by the American economist **Alexander Gershenkron**.

THEME II.
THE WORLD ECONOMY: UNITY OF HETEROGENEOUS



Alexander Gershenkron
(1904-1978)

Economic Backwardness in Historical Perspective: A Book of Essays. Cambridge (Mass.), 1962.

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- A. Gershenkron divided all the capitalist countries into three echelons (see the next slide):

THEME II.

Historical epochs	Countries	Specificities of capitalist development	State economic role	Place in world economy
1-st (from XIV c.)	W. Europe N. America	Long spontaneous development	Conspicuous	Predominating
2-d (end XVIII-mid. XIX c.)	E. Europe Russia Turkey Japan	Development is stimulated both by inside and outside factors	Considerable	Secondary
3-d (end XIX- end XX c.)	Colonial and dependent “periphery” of Asia and Africa	Non-organic character of capitalist evolution and rejection reaction	Dominating	Total dependence (raw material appendix)

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- Besides this classification there are many others, basing mostly on the same criteria
- Practical significance of the classification of the countries.

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- The leaders of many countries of the “third world” were inspired by the USSR experience of quick industrialization. They believed that economic backwardness could be overcome within short-run period.

THEME II.

THE WORLD ECONOMY: UNITY OF HETEROGENEOUS

- It was suggested that the problems of the developing countries were similar to those solved in the past by the nowadays developed countries.
- Basing on this logic it was quite naturally to use the instruments (models) elaborated by the main economic schools (classical, neoclassical, Keynesian and neo-Keynesian), because these models proved to be efficient in developed capitalist countries.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

I. The theory of “vicious circle of poverty”.

The founders - **H. Zinger** and **R. Prebisch**.

The main thesis: the economic backwardness is due to specific relationship between the rates of growth of population and change of GDP per capita.

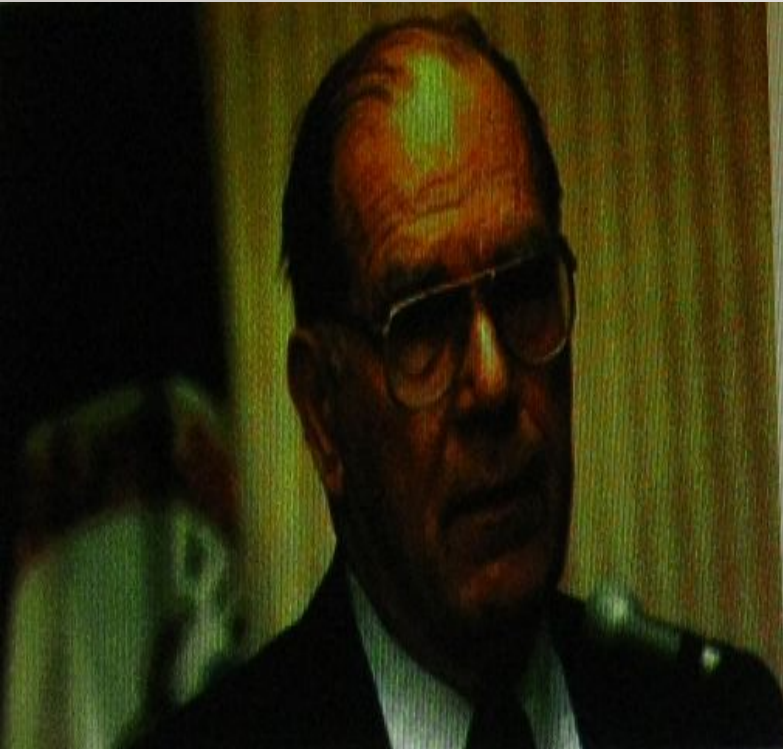
THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- It means that any increase of GDP per capita leads to ever higher increase of population, that in its turn decreases GDP per capita.
- The most known variants of the this theory are:

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH



□ the theory of quasi-stable equilibrium
of **H. Leibenstein** (1922-1994):

The agricultural productivity growth leads to the increase of GDP per capita that is quickly annihilated by the population growth

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH



□ **The theory of vicious circle of capital shortage of R. Nurkse (1907-1959):**

the capital shortage → low labor productivity
→ low level income → low buying capacity →
weak stimulæ for investments → the capital
shortage

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH



J. M. Keynes
(1883-1946)

□ **The Keynesian interpretation** of the vicious circle of poverty: low level of savings → investment shortage → low production efficiency → low production profitability → low rates of economic growth → low incomes → low consumption level → low level of savings.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH



2. The concept of the take-off into self-sustained growth by Rostow W. (The Stages of Economic Growth. A Non-communist Manifesto):
- the traditional society;
 - the preconditions for take-off;
 - the take-off;

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The drive to maturity;
- The age of high mass consumption;
- The stage of life-quality search.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The stage classification is based on mostly technical-economic criteria, such as
 - technological level;
 - branch structure of economy;
 - production accumulation share in national income;
 - consumption structure etc.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- In so doing, the economic development is reduced to high rates of growth. The theory puts the accent on the relationship between investments and GDP rates of growth and neglects the necessary social and institutional changes.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- Nevertheless, W. Rostow' s theory marked a step forward comparing with the previous theoretical views.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

3. The theory of big push

The theory of big push is a synthesis of two above-discussed concepts: the vicious circle of poverty and self-sustained growth.

The founder of this theory is P. Rosenstein-Roden (1943)

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- In accordance with his views and the views of his followers (R. Nurkse, G. Zinger, A. Hirshman), the developing countries needed **the initial industrialization**.
- This problem was considered from the neo-Keynesian point of view.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The first economists of the given school that contributed to the solution of this problem were R. Harrod and E. Domar (1939-1949).
- Both of them are the authors of the economic models called: Domar's model and Harrod's model.
- Both models are mutually complementary, though there are some differences between them.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- In accordance with the Keynesian tradition, the authors considered investments as the instrument to control the economic growth.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH



Euvsey Domar

Euvsey Domar (1914-1997)

Studies on Economic Growth

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- In Domar's model the ratio between capital and economic output ($\frac{K}{Y}$) and rate of saving (s) are constant, that's why the volume of output (Y) depends entirely only on capital.
- The increase of output (ΔY) depends on increase of investments (ΔI):

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

$$\dot{\Delta Y} = m \times \Delta I = \frac{1}{1-c} \Delta I = \frac{1}{s} \Delta I, \quad \text{where}$$

m – multiplier of expenditures;

c – marginal propensity to consume;

s – marginal propensity to save (const);

$\frac{K}{Y}$ – (const)

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- In so doing the increase of the aggregate supply may be represented in the following way:

$\Delta Y = a \times \Delta K, \text{ or } \Delta Y = a \times I, \text{ where:}$

a - marginal productivity of capital;

I – Investments;

In case of equilibrium $\Delta AD = \Delta AS$

$\frac{\Delta I}{I} = a \times s, \text{ because } I = S, S = s \times Y, \text{ and } s = \text{const}$

THEME III.
KEYNESIAN MODELS OF ECONOMIC GROWTH

- So, the income equilibrium rate of growth (when all the production capacity are fully used) is directly proportional to the rate of saving and marginal productivity of capital ($\frac{\Delta Y}{\Delta K}$)
- The Domar's model says that in order to maintain the equilibrium, investments and national income should grow at constant rates

THEME III.
KEYNESIAN MODELS OF ECONOMIC GROWTH



R. Harrod (1900-1978)

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- Unlike Domar's model where the investments were considered as an exogenous factor, in Harrod's model investments have endogenous character

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

$I_t = v \times (Y_t - Y_{t-1})$, where v – accelerator

$$\frac{Y_t - Y_{t-1}}{Y_{t-1}} = a \frac{Y_{t-1} - Y_{t-2}}{Y_{t-2}}$$

$$Y_t = Y_{t-1} \left(a \frac{Y_{t-1} - Y_{t-2}}{Y_{t-2}} + 1 \right)$$

if $I = S$, *than* aggregate demand is:

$$Y_t = \frac{I_t}{S} = \frac{v(Y_t - Y_{t-1})}{S}$$

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

Equilibrium economic growth presupposes that $AD = AS$:

$$\frac{v(Y_t - Y_{t-1})}{s} = Y_{t-1} \left(a \frac{Y_{t-1} - Y_{t-2}}{Y_{t-2}} + 1 \right)$$

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- $$\frac{v}{s} \times \frac{(Y_t - Y_{t-1})}{Y_{t-1}} = a \left(\frac{Y_{t-1} - Y_{t-2}}{Y_{t-2}} + 1 \right)$$

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

If $AD = AS$, $a = 1$,

then

$$\frac{(Y_t - Y_{t-1})}{Y_{t-1}} = \frac{Y_{t-1} - Y_{t-2}}{Y_{t-2}} = \frac{\Delta Y_t}{Y_{t-1}}$$

$$\frac{v}{s} \times \frac{\Delta Y_t}{Y_{t-1}} = \frac{\Delta Y_t}{Y_{t-1}} + 1, \text{ or } \frac{\Delta Y_t}{Y_{t-1}} = \frac{s}{v - s}$$

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- $\frac{s}{v-s}$ – *guaruntied* rate of growth, as the condition of economic equilibrium (the full utilization of all the production capacities)
- If *guaruntied* rate of growth is higher than **natural** (it means the rate of growth under condition of full employment) → depression;
- If *guaruntied* rate of growth is less than natural → boom;
- If *guaruntied* rate of growth is equal to natural and real rates of growth → ideal (optimal) development of economy
- Dynamic equilibrium in Harrod's model is instable.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- Nowadays both Harrod's and Domar's models are considered as one single model that is used by Keynesian school to substantiate the theory of big push.
- **The model in spite of its drawbacks proved the doubtless linkage between the rates of investments growth and the rates of GDP growth**

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- H. Leibenstein pointed out that in order to initiate the big push, the level of investments should not be less than 12-15% of the national income.
- The sufficient inflow of investments will increase the rate of growth of per capita income.
- In so doing, there will be the increase of buying capacity population and aggregate demand.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- In the long run the increase of demand will stimulate the entrepreneurial activity in the country and the economic growth.
- The big push theory is a macroeconomic theory. It points out that the economic and social backwardness of the developing countries is mostly the result of capital shortage.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The leaders of many developing countries assumed skeptical attitude towards the self-regulated function of the market.
- They believed that what their countries needed, were deep structural changes in the main branches of national economy.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- R. Nurkse who supported the discussed theory, offered **the model of the balanced set of investments** as the precondition to launch the process of industrialization simultaneously across the whole economy.
- Later on this idea was developed in the works of such economist as Murphy K., Schleifer A. and Vishny R.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The theory of the balanced set of investments was sharply criticized, because of its unrealistic character: it is not possible to coordinate the investment process in the whole economy in the absence of the centralized planning body. That's why finally instead of balanced set of investments there will be macroeconomic imbalance and the failure of industrialization.

THEME III.
KEYNESIAN MODELS OF ECONOMIC GROWTH



Albert O. Hirschman
(1915-2012)

The Strategy of economic development (1957)



THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

Albert O. Hirschman was one the leading critics of the above-discussed model. His main counter argument was the shortage of sufficient capitals in the developing countries.

That's why he offered the concept (model) of **imbalanced economic growth**.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- His logic was the following:

Initial investments → imbalance → stimulate for new investments → new investments → new disequilibrium → new disequilibrium as the stimulate for new investments.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The Hirshman's model emphasizes that many branches in any national economies are mutually interconnected between themselves.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- So if the government provides the support (f. e. financial) to some of them, it provokes the chain reaction in the whole national economy: the stimulated branches become the points of growth.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- G. Myrdal and H. Zinger as the critics of Hirshman's concept.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- **Two gaps model** (Chenery H., Bruno M.): the economic development is the result of the squeezing out the exterior sources of investments and their replacement by endogenous (domestic) sources.
- Obviously this model ignored the existing shortage of capital in the developing countries.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- The Keynesian' models of economic growth were popular in the post-war period (1950-1960). But gradually it became ever more evident that they could not be considered as an effective instrument to accelerate economic growth and to overcome the backwardness of developing countries.

THEME III.

KEYNESIAN MODELS OF ECONOMIC GROWTH

- That's why the initial euphoria was replaced by a great disappointment.
- The theoretical vacuum was filled up by a new concept of modernization, worked out by the competitive neoclassical economic school, i. e. the theory of **dualistic economy** (the main ideas of which will be examined at the next lecture).