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***The Concepts of Economic Growth  
and Economic Development: Standard  
Macroeconomics and “Pure  
Economics” Approaches***

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# *Economic Growth and Its Measurement by Standard Macro*

- Theory of economic growth – a component part of (standard) macroeconomics
- Economic growth = dynamics of the volume of final goods and services (“aggregate product”) produced during a selected time unit
- The “scalar nature” of the notion “aggregate product volume” in macroeconomics – is measured by one single value indicator (national income, gross national product, gross domestic product etc.)

# *Economic Growth, Social Well-Being and Economic Development in Standard Macroeconomics*

- Value of “aggregate product” as indicator of social (national) well-being
- Economic growth = economic development
- Rates of economic growth as the ultimate measure of success

# *Practical Consequences of Standard Macroeconomic Approach*

- Special attention to precise measuring of the “volume of economic activity” (introduction all over the world of “the system of national accounts”)
- Widespread international comparisons of growth rates
- Increased interest to modeling economic growth

# *Well-known Problems*

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- Problems in comparing values of aggregate product in time and in space
  - Some important areas of economic activity (i.e. labor within households) are not taken into account
  - Harmful consequences of human activity are ignored
  - Some aspects of social life, which we feel are important for social well-being, are not taken into account by the volume of “aggregate product” (i.e. income differentiation within society)
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# *Standard Reaction*

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- Endeavors to improve the methodology of determining the volume of “aggregate product” (NEW indicator by J.Tobin and W.Nordhaus, 1972)
  - Proposals to take into account a system of indicators rather than a single one when measuring social well-being and its dynamics (as a result economic growth is no more equal to economic development: emergence of “development economics” as a special economic discipline)
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# *Can Standard Reaction Fully Satisfy Us?*

It improves our understanding of the ends of economic activity, its efficiency, but:

- the search for optimal single indicator cannot completely overcome an obstacle of lacking markets for the results of some human activities;
- system of indicators approach is not able to provide us with a definite measure of social well-being, which would be theoretically consistent (any index depends on the weights of different parameters)

# Back to “Aggregate Product”

- “Aggregate product” is a **vector** of goods and services, not a **scalar**
- It is transformed in the scalar form by the means of prices, which are market product
- Limited applicability of the notion “aggregate product volume” – only to market economy
- Limited comparability of “aggregate products” in space and time (the result depends on the set of prices used)

# *Micro- and Macro- Approach to Well-being*

- In microeconomics individual income may be regarded under given set of prices as a measure of well-being only because the income can be transformed in a bundle of goods and services maximizing her (his) utility function
- In macroeconomics aggregate income is considered to be a **direct** measure of social well-being; It is not meant to be exchanged for a new bundle of goods
- Microeconomics postulates impossibility of inter-personal comparison of utility; macroeconomic notion of aggregate income violates this axiom

# A.Pigou on “Pure” and “Realistic” Science in Economics

“For there are two main types of positive science. On the one side are the sciences of formal logic and pure mathematics, whose function it is to discover *implications*. On the other side are the realistic sciences, such as physics, chemistry and biology, which are concerned with actualities... This distinction is applicable to the field of economic investigation. It is open to us to construct an economic science either of the pure type represented by pure mathematics or of the realistic type represented by experimental physics. Pure economics in this sense... would study equilibria and disturbances of equilibria among groups of persons actuated by any set of motives  $x$ ... Contrasted with this pure science stands realistic economics, the interest of which is concentrated upon the world known in experience...” (The Economics of Welfare. First published: 1920)

# *Do We Need Pure Macro?*

- Microeconomics – pure science, standard  
macroeconomics – realistic science
- Application of micro approach to macro level  
would mean a realization of *pure (vector)  
macroeconomics*.
- General equilibrium theory and “vector macro”  
will not coincide with each other only if we  
accept that operation of market mechanism do  
not always lead to socially optimal results

# *How Micro Approach Can Be Applied to Macro Level?*

- We need:
  - The **system of social preferences** with regard to different states of the world
  - Information on the available resources
- Then we can discover the tangency point of the production possibilities frontier and one of the indifference curves (planes)
- This approach would help formalize such widely used notions as “social interest” and “priorities”

# *K.Arrow “Possibility Theorem” As a Huge Obstacle*

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The meaning of the theorem:

Under certain natural assumptions with regard to the properties of group preferences there exists no social choice rule, but decision-making by dictator, which could transform individual preferences of the group members into group preferences

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# ***Research Directions Aimed at Solving the “Arrow Problem”***

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- Softening initial assumptions referring to the properties of group preferences
- Substituting the idea of “a unique point of consent under given decision-making algorithm” among the group members for the idea of group preferences based in individual preferences of the group members;
- Accepting as a postulate existence of group preferences practically unrelated with the individual group member preferences (“organic state approach”)

# Conclusions: *Pure Economics*

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- Pure economic theory of social well-being cannot be directly applied to the analysis of real economy and political decision-making, because many of its parameters are unobservable.
  - But it helps understand both complex internal forces driving the society and usefulness and limitations of realistic science in dealing with them
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# Conclusions: Standard Macroeconomics

- Standard macroeconomics and theory of economic growth as its important component part reduce complex multidimensional reality to a relatively simple scalar one
- They simplify the reality, thus helping its assessment and the decision-making
- But they inevitably produce some distortions and additional “realistic analysis” (development economics) is therefore needed to fill the gap between economic growth and economic development