



CENTER FOR ANALYSIS OF
ECONOMIC REFORMS AND COMMUNICATION

REFORM REVIEW

ECONLAB

special edition

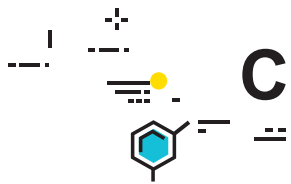
May, 2020



President of the Republic of
Azerbaijan **ILHAM ALIYEV**

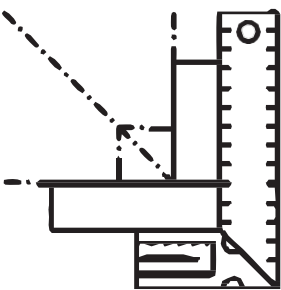
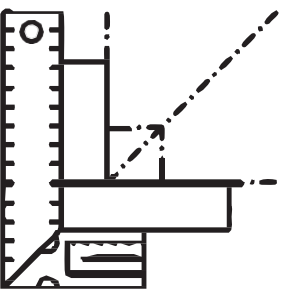
“...The World Bank has recognized Azerbaijan as one of the 20 most reformative countries, a significant achievement. This acknowledgment highlights that the comprehensive reforms implemented in our country have been positively evaluated by leading international organizations. Overall, 2019 can be characterized as a year of profound reforms across various domains, including political, economic,

and social spheres, as well as in personnel management and structural reorganization. These reforms are expected to enhance our future development, fostering greater economic growth that will be reflected in even more substantial figures.



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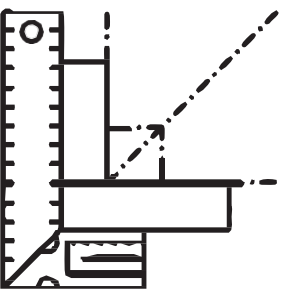
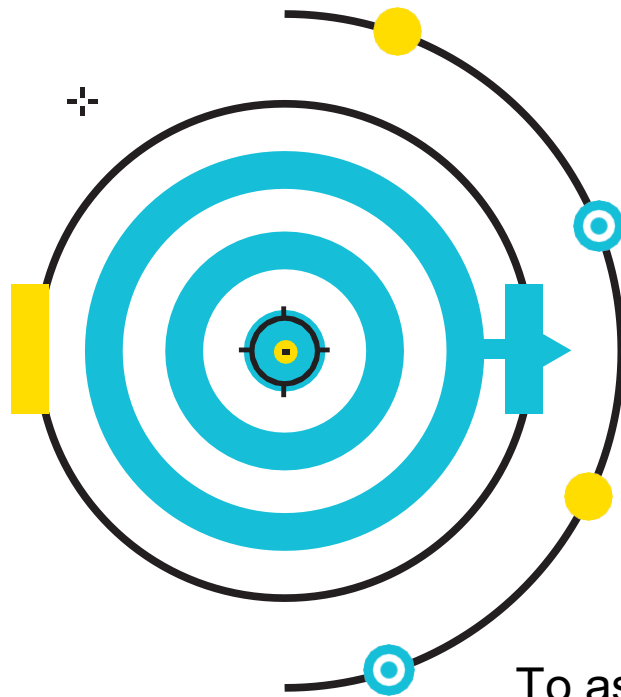
THE MAIN OBJECTIVES OF THE CENTER FOR ANALYSIS OF ECONOMIC REFORMS AND COMMUNICATION OF THE REPUBLIC OF AZERBAIJAN ARE AS FOLLOWS:

1 To support the development and formulation of the country's reform agenda.

2 To contribute to the adoption of evidence-based economic policy decisions through scientific research.

3 To prepare short-term, medium-term, and long-term forecasts at the macro, meso, and micro levels.

To assess the potential impact of external shocks on the national economy and identify the necessary measures to mitigate these effects





LIST OF MODELS DEVELOPED IN THE ECONOMIC LABORATORY OF THE CENTER FOR ANALYSIS OF ECONOMIC REFORMS AND COMMUNICATION OF THE REPUBLIC OF AZERBAIJAN

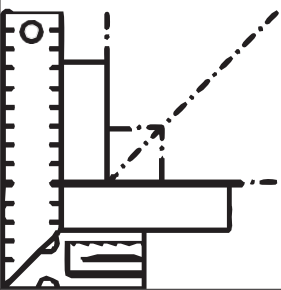
1 | Expenditure-Output model

2 | Financial Programming model

3 | General Equilibrium model

| ORANI model

5 | Microsimulation model



FEATURES OF THE MODELS OFFERED

	STATIC	DINAMIC
MACRO	<ul style="list-style-type: none">• General equilibrium model• Input-Output model	<ul style="list-style-type: none">• Financial Programming model• ORANI model
MESO	<ul style="list-style-type: none">• General Equilibrium model• Input-Output model	<ul style="list-style-type: none">• ORANI model
MICRO	<ul style="list-style-type: none">• Microsimulation model	

COST-EFFECTIVENESS MODEL

APPLICATION AREAS OF THE MODEL

- Analysis of the effects of changes in demand for final products across sectors or areas on economic and social indicators.
- Examination of the impacts of increased investment in sectors or areas on economic and social indicators.

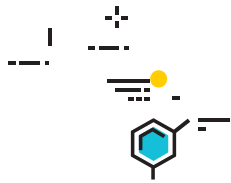
WHAT IS THE COST-OUTPUT MODEL?

The Cost-Output model is an economic framework that analyzes the interdependencies among various sectors of a national economy in terms of their monetary value.

MODEL SOFTWARE

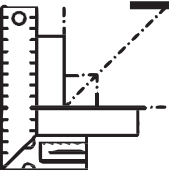
MS Excel





STRUCTURE OF THE COST-OUTPUT MODEL

Distribution of the issue Distribution of expenses	Intermediate consumption			Final consumption	Product release
	Sector 1	Sector 2	Sector 3		
Sector 1	X_{11}	X_{12}	X_{13}	Y_1	X_1
Sector 2	X_{21}	X_{22}	X_{23}	Y_2	X_2
Sector 3	X_{31}	X_{32}	X_{33}	Y_3	X_3
Costs incurred on intermediate products	V_1	V_2	V_3		
Total costs	X_1	X_2	X_3		



FINANCIAL PROGRAMMING MODEL

WHAT IS FINANCIAL PROGRAMMING?

Financial programming is an analytical framework used to assess the current state of an economy, forecast future trends, and design economic policies aimed at influencing those trends.

APPLICATION AREAS OF THE MODEL

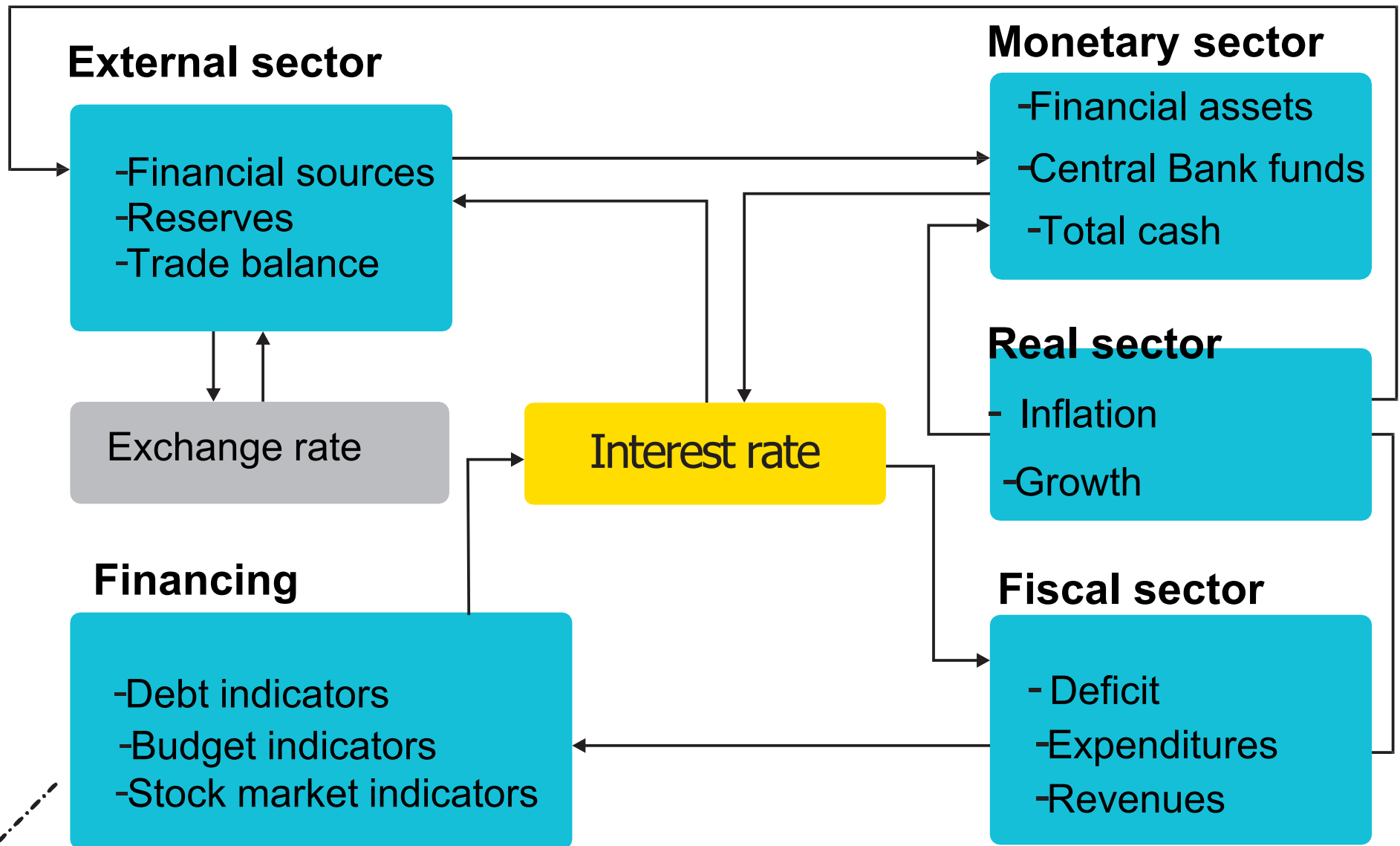
- Development of long-term macroeconomic forecasts.
- Analysis of the medium- and long-term impacts of changes in global commodity prices on the economy

MODEL SOFTWARE

MS Excel



STRUCTURE OF THE FINANCIAL PROGRAMMING MODEL



GENERAL EQUILIBRIUM MODEL

WHAT IS THE GENERAL EQUILIBRIUM MODEL?

The General Equilibrium model is an economic simulation framework that incorporates both direct and indirect economic relationships among all production sectors and agents (such as government, households, and banks) represented within a country's economic system.

APPLICATION AREAS OF THE MODEL

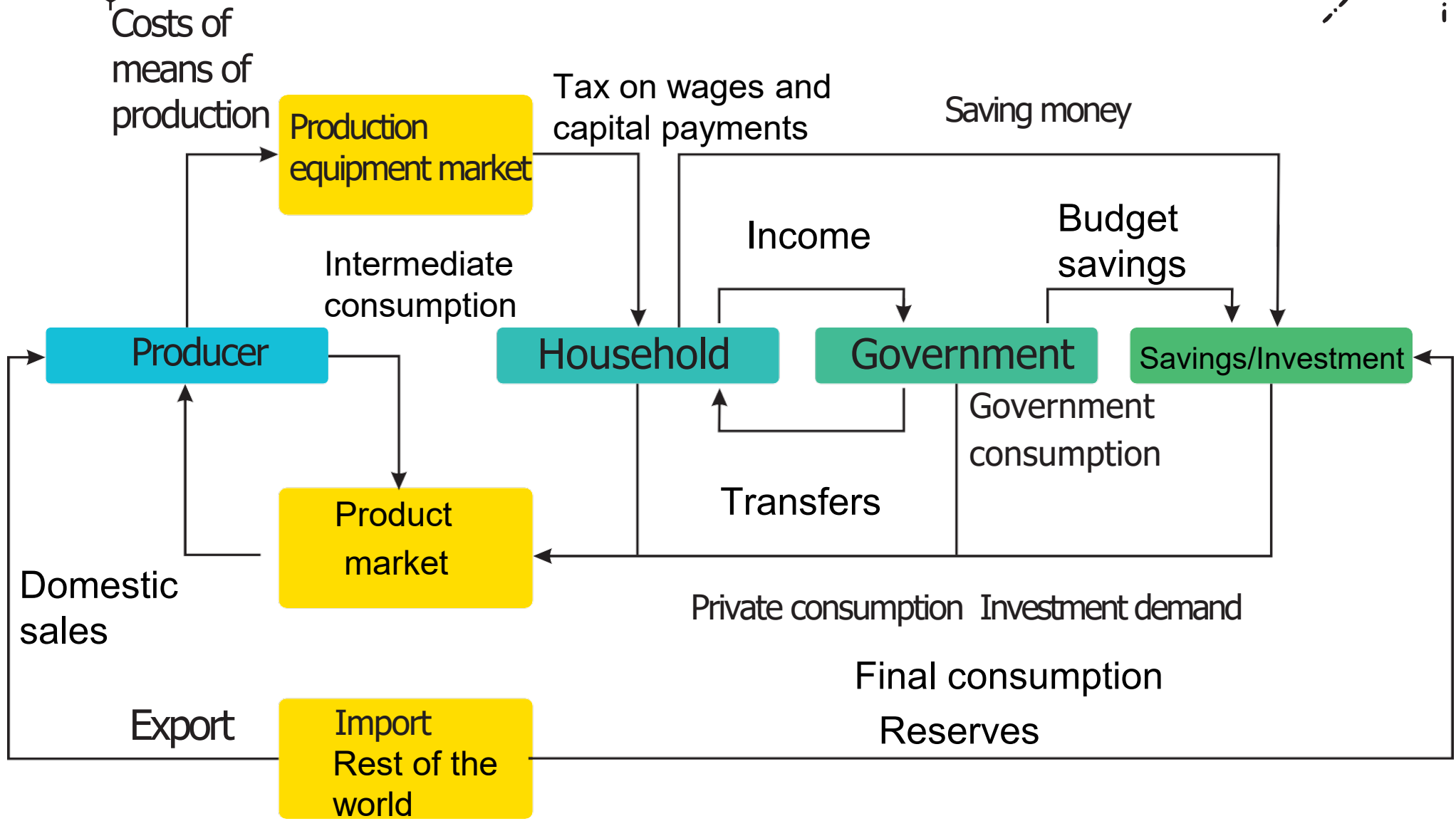
- Analysis of trade policy;
- Analysis of tax policy;
- Analysis of policies on real sectors;
- Analysis of external shocks in imports and exports;
- Analysis of investment activity.

MODEL SOFTWARE

General Algebraic Modeling System
(GAMS)



STRUCTURE OF THE GENERAL EQUILIBRIUM MODEL



ORANI MODEL

What is the ORANI model?

The ORANI model is an economic simulation framework that captures both direct and indirect economic relationships among all production sectors and agents within a country's economic system. It is designed to analyze the long-term effects of changes in economic policy. "This revision streamlines the sentence structure, enhances readability, and ensures grammatical correctness while maintaining an academic tone."

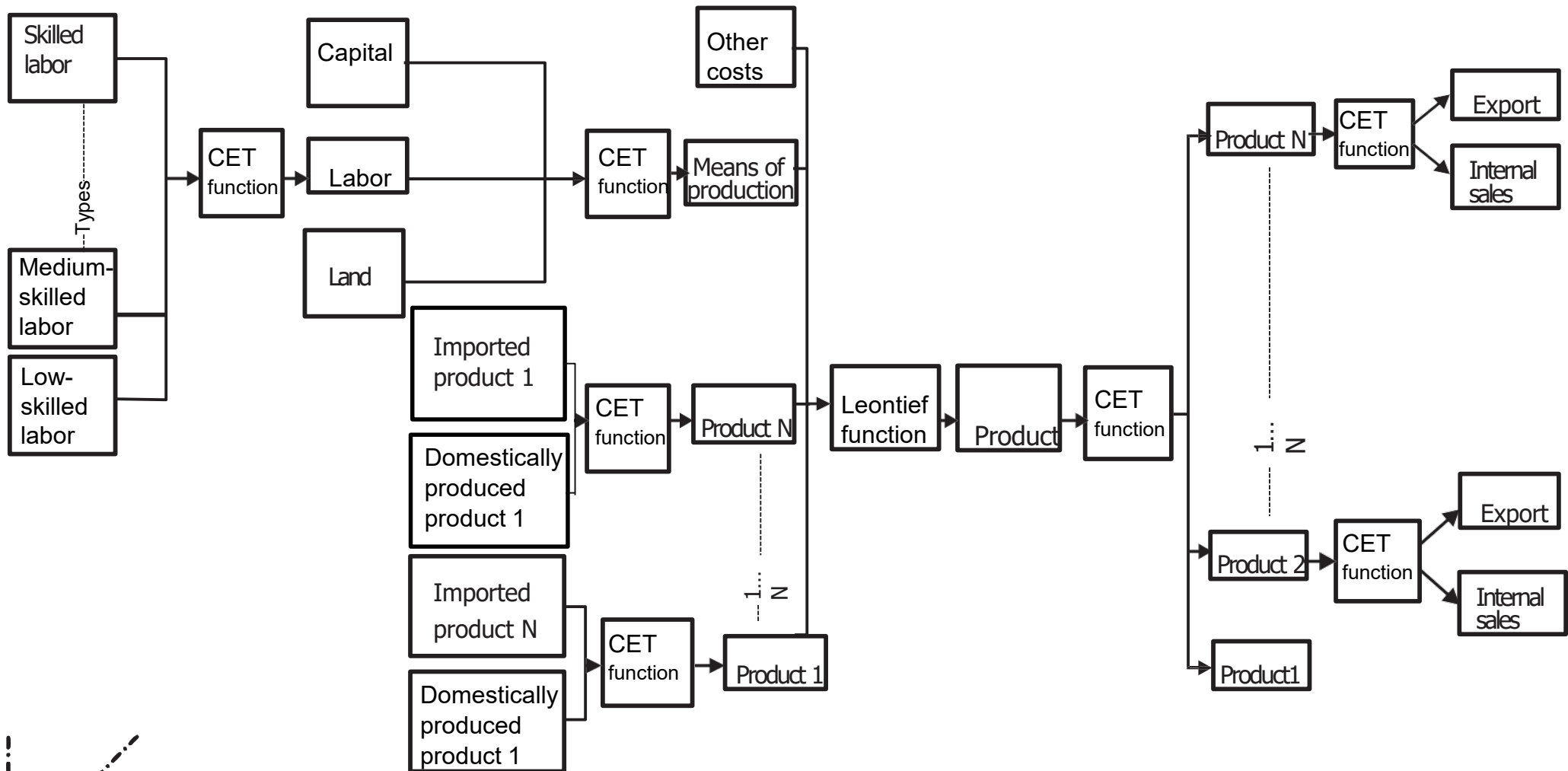
APPLICATION AREAS OF THE MODEL

- Analysis of the long-term effects of trade policy;
- Analysis of the long-term effects of investment policy
- Analysis of the medium- and long-term impacts of changes in global commodity prices on the economy.

MODEL SOFTWARE
General
Equilibrium
Modeling Package
(GEMPACK)



Structure of the ORANI model



MICROSIMULATION MODEL

WHAT IS A MICROSIMULATION MODEL?

A microsimulation model is a model widely used to analyze the impact of economic and social policies, as well as demographic changes, on the material well-being of the population.

APPLICATION AREAS OF THE MODEL

Analysis of policies related to poverty reduction;

Analysis of policies related to unemployment reduction;

Analysis of pension reforms;

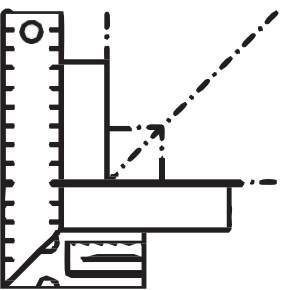
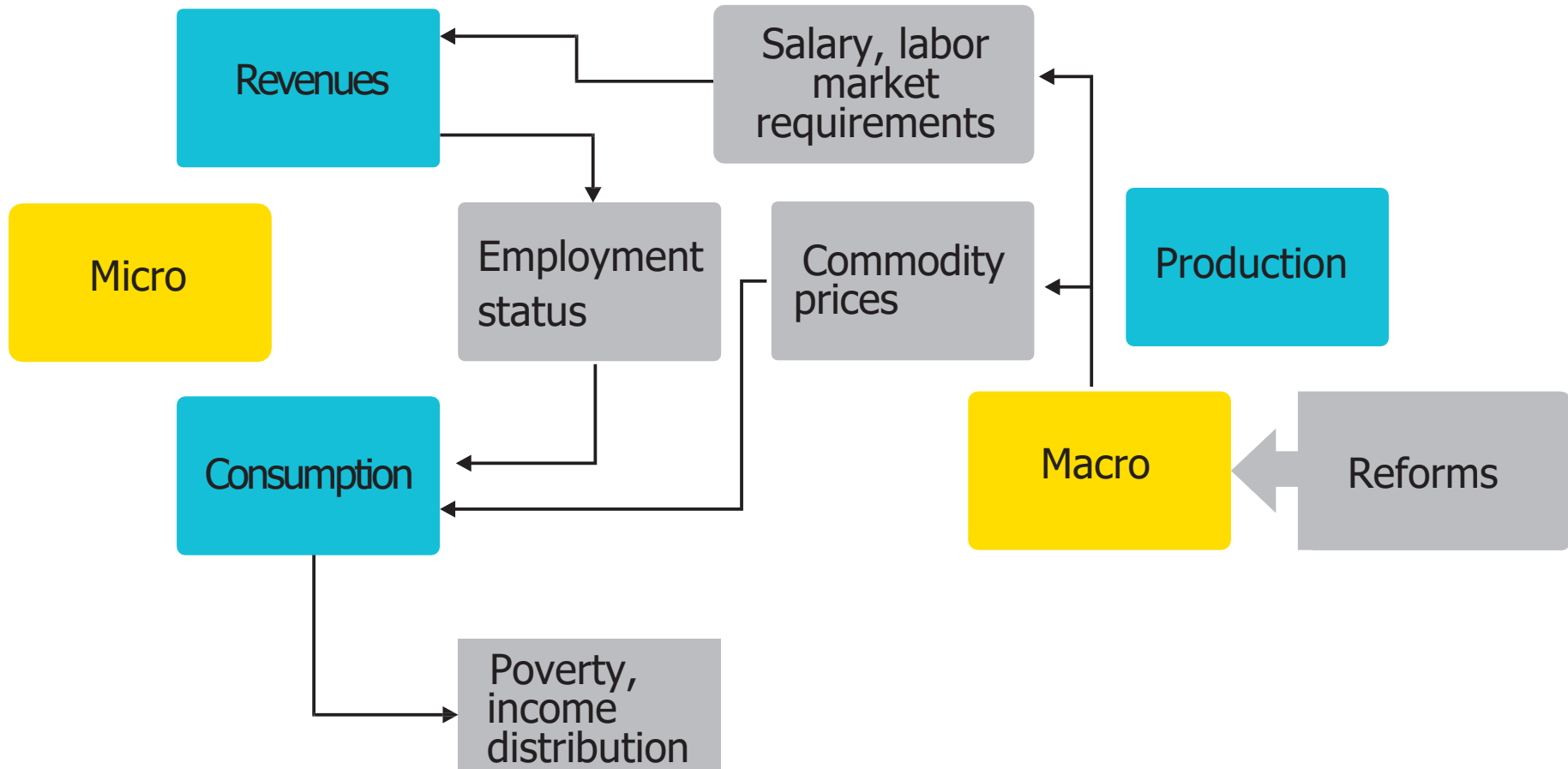
SOFTWARE SUPPORT OF THE MODEL

General Algebraic Modeling System (GAMS)



STRUCTURE OF THE MICROSIMULATION

MODEL





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