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LABOUR PRODUCTIVITY PROGNOSIS IN ENTERPRISES

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The authors review the main prognosis model types used in studying labour productivity, as well as some statistico-mathematical methods for previewing labour productivity evolution.

In this line, two main orientations are outlined, as concerns the working out of econometric models of labour productivity:

— determination of the quantitative influence of material factors upon labour productivity, on the ground of dynamic series;

— determination of the quantitative influence of subjective factors, admitting the stability of the action exerted by the material factors.

The authors arrange in three type groups the models with the help of which labour productivity prognosis is worked out:

— developing trend models, characterized as being of little interest, since they do not emphasize the cause-effect ratio;

— symptomatic models, also of little interest, since the factors taken into consideration are not phenomenon's cause, but merely parameters or economic indexes, strongly correlated with the phenomenon;

— causal-descriptive models, characterized as being the most suitable for such studies, since their endogenous variables are effects, and the explanatory ones — causes, succeeding this way to emphasize the *contribution* (our underlining) of each influencing factor to the phenomenon dynamics.

As concerns the procedure to be used in multiple previsions of labour productivity, the authors recommend *the unloaded prevision procedure* (authors' underlining), by means of which prognosis is established at the mathematical expectation level of the prognosticated variable, at the respective time period. In connection with this procedure, the authors dwell upon prognosis admissibility conditions and upon its efficiency criterion.

After the presentation of the methodological and theoretical problems, a few econometric models, connected with labour productivity, are presented; they are worked out by using the example of a machine-building enterprise of national interest. The data series covers 10 years (1956—1965), and the explained variable is the productivity per worker, explained by: time, previous periods' productivity, endowing with per capita fixed funds, per capita installed power, and per capita electric energy consumption for production.

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