The Concept of Factor Prices in Multisectoral Models

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"The Concept of Factor Prices in Multisectoral Models"
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In most IO models value added is decomposed into two categories which are usually wages and a residual called operating surplus. Both value added components contain various income components, i.e. wages proper, profits, risk premiums, interest, rents and royalties which are, however, conceptually different.

To start with, the classical view of the differences between market prices on the one hand and intrinsic, normal or natural values on the other hand as well as the related concept of long period positions are to be discussed. Following the classical tradition the analysis is confined to long run positions characterized by natural values. This enables us to draw sharp conceptual boundaries between wages proper, profits, risk premiums and rents.

To illustrate, two multisectoral models involving one or more natural and scarce (i.e. fully employed factors) are presented. First a simple model of intensive rent with n products, n+1 processes and one natural factor is developed and a graphical solution for that model is provided. Hereafter, a general model is presented which enables us to deal with all forms of income, i.e. wages, profits and differential rent (extensive, intensive and external rent) in a multisectoral economy. It is shown that such a model involves choice of technique, i.e. factor substitution and can, in general, not be solved by Linear Programming methods but requires more general tools of optimization theory. A LP-formalization is provided for a special case.