

The economic base theory is based on the distinction made between basic and non-basic economic activities. The first type of activity is oriented towards export, which is assumed to be the main factor in creating or supporting a wealthy economy. The second type of activity serves a local market and it primarily constitutes services for local residents. This theory assumes that an investment in basic activities will have a positive income and employment effect on non-basic activities, thus benefiting the local economy. The main limitation of this theory is that it overlooks the role of imports. It does not take into account that the beneficial effect of an investment in basic activities can be limited by the leakages of expenditure in the form of imports. Other limitations concern the difficulty of defining the distinction between basic and non-basic activities, and the difficulty of selecting and defining the study area.

The regional trade multiplier theory considers that an investment of a certain amount into an economy will increase the income of the economy, determining an increase in consumption. In turn, this increase in consumption is transformed into someone else's income which will be again spent. This chain of effects will take place several times before the effect of the initial injection ends. The termination of these effects is due to the three main leakages that this theory takes into account. These are: savings, taxation and imports. For instance, an initial investment in the construction sector will spread to other economic sectors such as manufacturing and industry, because of goods and services bought from these sectors by the agriculture sector

Input-output models trace the impact of an investment in one sector of the economy through the income and employment repercussions in all the other economic sectors. Input-output analysis can be used as a descriptive tool. This breaks down an economy into its sectoral components and gives information on the transactions taking place between them. The main problems related to the use of input-output analysis are data limitation and the assumption about the constant coefficients.

Input-output analysis is a descriptive tool and also gives an insight into those industrial sectors which produce the highest economic effects as a result of investment. Economic base analysis and regional multiplier analysis are based on a highly aggregated approach which does not give account of specific economic sectors and inter-industry relations. In the light of these considerations, the rest of this section will give a closer insight into input-output analysis.

Input-output analysis is one technique which can give, at the appraisal phase, an insight into an equitable distribution of the economic effects caused by development programmes. The first practical work on input-output analysis is due to Wassily Leontief. The aim of this technique was the analysis of the structural interdependence within an economy. According to Richardson, input-output tables perform two main functions.<sup>22</sup> On the one hand, they provide a descriptive tool for highlighting the relationship between input and output, and between industries and sectors of an economy. On the other, they offer an analytical approach for measuring the impact of a change in final demand on the output and income of an economy.

A conventional input-output transactions table is divided into four quadrants (Figure 6.3). The first records the intraregional transaction taking place within an economy between the several economic sectors. The second quadrant shows the sales by each sector to the final demand which indicates the ultimate destination (i.e. consumption, export) of production for each economic sector. The third quadrant contains the cost of inputs to the economic sectors of an economy. The final quadrant represents the utilization of primary inputs by final demand.

The first, top left-hand quadrant shows the interaction of the processing sectors. The purchasing sectors are shown across the top of the table, while selling sectors are listed down the left side. The horizontal rows indicate the destination of the output of the sector in the left-hand column to all other sectors named on the column headings. In

**Figure 6.3** Simplified input-output transaction table.

TO FROM	Purchasing sectors	Local final demand			Export	Total gross output
	1 . . . . . j . . . . . n	House-holds	Private invest-ment	Govern-ment		
i	$X_{i1}$ . . . . . $X_{ij}$ . . . . . $X_{in}$	$C_{i1}$	$I_{i1}$	$G_{i1}$	$E_{i1}$	$X_{i1}$
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.
i	$X_{i1}$ . . . . . $X_{ij}$ . . . . . $X_{in}$	$C_{i1}$	$I_{i1}$	$G_{i1}$	$E_{i1}$	$X_{i1}$
.	.	.	.	.	.	.
.	.	.	.	.	.	.
.	.	.	.	.	.	.
n	$X_{n1}$ . . . . . $X_{nj}$ . . . . . $X_{nn}$	$C_{n1}$	$I_{n1}$	$G_{n1}$	$E_{n1}$	$X_{n1}$
Labour	$L_1$ . . . . . $L_j$ . . . . . $L_n$	$L_C$	$L_I$	$L_G$	$L_E$	$L$
Other value added	$V_1$ . . . . . $V_j$ . . . . . $V_n$	$V_C$	$V_I$	$V_G$	$V_E$	$V$
Imports	$M_1$ . . . . . $M_j$ . . . . . $M_n$	$M_C$	$M_I$	$M_G$	-	$M$
Total gross outlay	$X_1$ . . . . . $X_j$ . . . . . $X_n$	$C$	$I$	$G$	$E$	$X$

this first quadrant all endogenous sectors are included, the term 'endogenous' referring to sectors which are shaped by the internal structure of the economy.

The second, top right-hand quadrant contains sales by each sector to the final demand. This is the autonomous sector. Changes which occur in the final demand spread their effects to the rest of the table. It is basically composed of four columns which indicate exports, government purchases, gross private capital formation and household.<sup>23</sup> The export column shows the level of export of each sector during the period examined by the table. The government purchases column represents the level of purchases by government from each of the sale

sectors. The gross private capital formation show the quantities of sale purchased by buyers who use them for private capital formation. Finally, the household column shows the purchases for private consumption from each of the selling sectors.

In the third, bottom left-hand quadrant, the payments sector shows the cost of inputs for each of the purchasing sectors. Usually, five basic rows comprise this quadrant: gross inventory depletion, imports, payments to government, depreciation allowances and household. The gross inventory depletion row shows the amount of stored final goods or raw materials which have been used by the sector named at the top of the table. Similarly, the imports row shows the amount of imports