

The household sector will be in equilibrium when the marginal costs of (discretionary) sources of funds are all equal and these in turn equal the marginal returns from (discretionary) uses of funds. Maximization can also be stated in present value terms by discounting the future returns from durable goods and financial assets ⁽²⁶⁾. Costs and returns necessarily include implicit values such as household benefits from nonfinancial expenditures and additional money holding and the « cost » (disutility) of earning income.

Many of the transactions in the flow of funds are nondiscretionary variables and thus outside the optimization process. Financial uses include taxes, debt repayments, and financial sources include debt retirement. Financial sources may be nondiscretionary if they depend on the amount of credit made available by lending sectors. The great bulk of nonfinancial expenditures (« necessities ») and contractual financial uses such as insurance premium payments may be nondiscretionary. For this reason, the number of decision variables may be considerably less than the number of potential transactions.

b. The Business Sector.

The challenge presented by the business sector is to reconcile production, investment and financing decisions in a single flow-of-funds statement. The closest approximation is in Vickers who solves the problem as one of combining the income statement with the balance sheet ⁽²⁷⁾. Vickers formulates a constrained objective function in which the profit function is constrained by the sources of funds on the balance sheet. The Lagrange constraint in this function sets money capital availability (equity capital and debt) equal to money capital requirements. The latter are the money value of the physical assets associated with inputs, and the working capital requirements (cash, accounts receivable, inventory) associated with output levels.

Applying a flow-of-funds perspective to the Vickers model, the money availability constraint should be stated in flow rather than stock terms. The flow-dimensions of the profit maximizing function (based on the income statement) would now be consistent with the restated Lagrange constraint. The Lagrange constraint in flow terms equates changes in paid-in equity

⁽²⁶⁾ Wm. J. HOCTER, *A Theory of Household Asset Selection*, Staff Economic Studies, no. 20 (Bd. of Gov. of the Federal System, Washington, D. C., 1966), pp. 5ff.

⁽²⁷⁾ Douglas VICKERS, *The Theory of the Firm: Production, Capital and Finance* (New York, 1968), esp. Chaps. 7, 8, and 9.