# Summary of articles

*Races of Research and Development between Firms with Different Incentives to Innovate*, by Flavio Delbono and Vincenzo Denicolò.

In this paper we study a one-shot game of R & D between two firms which differ in their incentives to innovate. We analyse this problem when the R & D technology displays smoothly decreasing returns as well as when increasing returns in the form of indivisibilities prevail. In the first case we show that the magnitude of the ratio between the discount rate and the productivity of R & D expenditure may be a critical parameter in ranking firms' probabilities of winning the race. In the second case, we prove that the firm with the higher profit incentive invests in R & D at least as much as the firm with the higher competitive threat. We then apply these results to a homogeneous duopoly under Bertrand or Cournot competition in the product market.

*Journal of Economic Literature* classification number: 621.


*A Macro Disequilibrium Model for Switzerland*, by Peter Stalder.

This paper presents a disequilibrium model for Switzerland, focusing on the production sector and the associated spillover effects. Firms' decisions on output supply, labor demand and investment are analysed on basis of a vintage approach, involving pressure of demand, profitability and relative prices as determinants. Macro relationships are derived by aggregating over micro markets on which regimes are allowed to differ. In the resulting nonlinear macro structure the response of output and employment to demand-side and supply-side factors varies through the cycle, depending on the regime-mix (measured by survey data). Inventories and unfilled orders act as buffer stocks, modifying the dynamic link between current demand and output.

*Journal of Economic Literature* classification numbers: 212, 824.


*Keynes' Aggregate Supply Function and the Principle of Effective Demand*, by Rodolphe Dos Santos Ferreira and Philippe Michel.

The principle of effective demand decomposes in two distinct propositions, one pertaining to the analysis of actual, the other to the analysis of equilibrium states. The authors suggest that Keynes' apparatus of ag-

gregate supply and demand decomposes correspondingly in two pairs of aggregate functions. They thus extend to the supply side a duality which had already been noticed on the demand side. Such an extension leads to a reconsideration of the debate between two conflicting views of the aggregate supply function which originated in Patinkin's contributions. The authors' argument emphasizes the role of aggregation over optimizing producers, and the status of intermediate goods and imperfect competition.

*Journal of Economic Literature* classification numbers : 023, 031.

### *Ratios de fonds propres et comportement des Banques*, by Patrick Artus.

The effect of the existence of a minimum capital requirement for banks on the riskiness on their assets and on their portfolio structure is analyzed. Those effects depend in particular on the way bank's behavior is represented : as a firm facing a bankruptcy risk or as an economic agent making an optimal portfolio choice. They also result from the design of the minimum capital rule (is it differenciated according to the degree of risk of the various assets or not ?) and on the way the interest rate on bank deposits is fixed.

*Journal of Economic Literature* classification numbers : 311, 312, 314.

### *Non-Wage Labour Costs and Productivity Shifts in an Efficiency-Wage-Hours Model*, by Jan Beyer Schmidt-Sørensen.

The efficiency-wage-hours model allows for efficiency effects from both wages and working hours. It is shown that it is essential for static-comparative results to distinguish between working hours per worker and the number of workers in an efficiency-wage-hours model contrary to the basic efficiency-wage model. The wage rate and working hours increase with increasing non-wage labour costs while the employment level decreases. This yields the possibility to influence these variables by means of government action. There does not only exist an efficiency wage but also an efficiency working time. Both are invariant with respect to changes in productivity.

*Journal of Economic Literature* classification number : 821.