PARTIAL AND GENERAL EQUILIBRIUM IMPLICATIONS
OF AN ALTERNATIVE APPROACH TO X-EFFICIENCY

by

Alberto Pompermaier

ABSTRACT

In this work a theoretical model is developed to investigate the impact of product market
competition on firm efficiency and resource allocation in unionised industries/economies.

The main assumptions of the model are: (a) the product market is monopolistically
competitive; (b) firms have Cobb-Douglas production functions; (c) firm unions affect
directly the level of employment within each firm; (d) the likelihood for a given firm to go
bankrupt increases with its level of inefficiency; and (e) the more competitive is the product
market, the more likely it is that an inefficient firm goes bankrupt.

It is shown that, in equilibrium, (i) firms are inefficient, in the sense that the technical
rate of substitution between labour and capital differs from the factor price ratio; (ii) when
product market competition is raised the gap between the technical rate of substitution and
the factor price ratio becomes smaller (that is, firms become more efficient). If labour
supply is rigid, (iii) allowing unions to affect employment (assumption (c)) raises
equilibrium employment but reduces output and welfare and (iv) increasing product market
competition raises output and welfare but lowers employment.