MARCO VIVARELLI

SUMMARY OF CURRENT RESEARCH PROJECTS

Understanding globalization, employment and poverty reduction
The aim of this research project is to study, through theoretical and empirical contributions as well as country case studies, the impact of globalization – namely increasing trade, FDI and technological transfer - on employment, income distribution and poverty alleviation in developing countries. It is a DFID-UK sponsored, three years research project (total budget: US$ 1,339,078) under my scientific and organisational supervision at the International Policy Group unit of the International Labour Office - Geneva (Director: Dr. Eddy Lee). The first stage of the project was mainly theoretical and econometrical and its outcome was: Lee, E. – Vivarelli, M. (2004) (eds.), Understanding Globalization, Employment and Poverty Reduction, Palgrave Macmillan, New York. (see website: http://www.palgrave.com/products//Catalogue.aspx?is=1403941491). The second stage of the project is based on country studies and monographic contributions from five national research teams in Ghana, Kazakhstan, Morocco, Nepal and Vietnam; in each of the five selected countries a research team from a leading local research institution in economics and social science has been identified to carry out a country study according to a common table of contents and using a common analytical framework. The five research teams are currently working under my supervision through on-field visiting, meetings in Geneva, and distance refereeing.

The employment impact of innovation
While in the past I mainly focused on the aggregate and sectoral employment impact of innovation, nowadays I am mainly working on microdata at the firm’s level. In particular, applying GMM-SYS to an employment equation augmented for technology and using a unique longitudinal dataset of 575 Italian manufacturing firms over the period 1992-1997, I found a significant - although small - positive relationship between innovation and employment. This project is funded by the Catholic University. For further details, please refer to the on-line working paper: Institute for the Study of Labor (IZA, Bonn), # 730: Piva, M.– Vivarelli, M. (2003), Innovation and Employment: Evidence from Italian Microdata (http://www.iza.org/), also forthcoming in the Journal of Economics.

Co-evolution of technological and organizational changes and their impact on skills
Differently from previous empirical works based on US and UK data and showing that technology can be considered the main cause of the skill bias, I show that – in a middle-technology country such as Italy – the up-skilling is more a function of organizational change, which in turn may be linked to technological progress. This result has important consequences in terms of human resource management and industrial policy. This project is in collaboration with Warwick University, UK and Bologna University, Italy and it is funded by the Italian Ministry of Research (MIUR). For further details, please refer to the on-line working paper: Institute for the Study of Labor (IZA, Bonn), # 934: Piva, M. – Santarelli, E. – Vivarelli, M. (2003), The Skill Bias Effect of Technological and Organisational Change: Evidence and Policy Implications (http://www.iza.org/), also published in Research Policy.

For a theoretical approach to the link between technology transfer, skill bias and income inequality in the developing countries, please refer to the CSGR (Warwick University) working
Cooperative R&D
This research line is addressed to studying the determinants of the decision to enter into cooperative R&D relationships, conditional to the antecedent decision to carry out in-house R&D. This requires a microeconometric methodology able to take into account sample selectivity. Some of the results from this research have important managerial and policy implications; for instance, a public subsidy seems to facilitate both in-house R&D and the entry into a cooperative partnership, while long-term credit appears to be positively associated with a firm’s internal R&D, but not with the decision to engage in cooperative R&D. This project is in collaboration with Nottingham University, UK and it is funded by Nottingham and Catholic Universities.

Entry and post-entry performance of newborn firms
Using longitudinal data and controlling for sample selection, we tested Gibrat’s law, taking into account both the entry process and the role of survival/failure in reshaping a given population of firms over time. In common with most of previous literature, we rejected Gibrat’s law, since smaller firms tend to grow faster than their larger counterparts; however, a convergence towards Gibrat-like behaviour over time can be detected: in fact, after market selection, the resulting “industrial core” of well-established and most efficient firms does not seem to depart from behaviour consistent with the Law of Proportionate Effect. This project is in collaboration with Indiana University, US and Bologna University, Italy and it is funded by the Max Planck Institute (Jena) and by the Italian Ministry of Research (MIUR).

The role of demand in promoting innovation
This research project studies the role of demand in promoting innovation at the firm, sector and aggregate levels. This project is in its start-up phase and involve different Italian universities under the coordination of CESPRI – Università Bocconi (Director: Prof. Franco Malerba). This project is considered of national interest and has been funded by the the Italian Ministry of Research (MIUR).
My unit at the Catholic University will investigate the role of demand – controlled for other determinants of innovation such as the “technology push” and the “induced bias”– in determining R&D investments at the level of the firm. Panel GMM analyses will be applied to a database comprising more than four thousands Italian manufacturing firms (source: Mediocredito Centrale – Banca di Roma).