## MEASUREMENT PROBLEMS OF TFP PERFORMANCE IN AN UNSTABLE ECONOMY: ARGENTINA 1990-2004

"A Case of the Tyranny of Methodology"

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## SUMMARY JEL: 04-03-E2

The aim of this study is to examine the main souces of growth in Argentina for the period 1990-2004 in order to identify the prevailing growth profile: either extensive, which is associated to factor acumulation and utilisation, or intensive, based on productivity gains.

The study proposes a methodology for identifying gains in Total Factor Productivity (TFP) in a strict sense which involves the positive shift of the production function; as opposed to the apparent or residual TFP, which involves a real cost changes due to short run fluctuations in relative prices and cyclical changes in factor utilisation but not necessarily linked to changes in the long run growth.

The paper presents a methodology in order to identify the strict TFP in an unstable economy like Argentina, adapting the main recommendations of the recent economic literature on productivity measurement, the experience of OECD, EUKLEMS group and IVIE and others and using consistently a database from Argentina's National Accounts.

The main results of applying this methodology for the Argentine case in the period 1990-2004 are:

The strict TFP performance had less procyclical behaviour and substantially lower trend than the apparent TFP. Similar conclusions are obtained for the labour productivity adjusted by labour intensity.

The growth profile of the Argentine economy appear to be extensive during the whole period 1990-2004, biased to capital accumulation and utilisation during the nineties and biased to the labour input after the 2002 devaluation.

These results for Argentina are analogous to the evidence found by Young (1995) and Timmer and Van Ark (2000) for the NIC's countries.

Doubts arise on the ability of the Argentine economy to generate the productivity gains in a strict sense (independently of composition and quality effects and cyclical changes in factors utilisation) needed to achieve a sustainable long run growth.

This conclusion is based not only in what Young (1995) called the "tyranny of numbers", by assessing strictly the consistency of the country statistical information, but also a consequence of the "tyranny of the economic cycle, macroeconomic and methodological consistency".