

# Long-run Growth and the Standard of Life

## INTRODUCTION

Recent growth-accounting studies (e.g. G. Schwerdt and J. Turunen, “Growth in Euro Area Labour Quality”, European Central Bank, Working Paper Series, no. 575, 2006)) show that the Solovian residual, usually referred to as “total factor productivity growth”, accounts for a declining part of economic growth, while a significant and rising part is attributed to labour quality improvements. Quite apart from the chosen proxies for labour quality (education, age, gender, ...), all of these studies point to the increasing importance of the workers’ overall quality of life as an engine of potential, long-run growth. Education, health care, safety, a fair regulation of labour contracts affect positively the workers’ productivity: they are the cause no less than the effect of permanent economic growth.

Many prominent economists of the past, and among them the very founding fathers of liberalism, were fully aware of the central importance of the standard of life and social policies for long-run growth. More recently, the “capabilities approach” of A. Sen put the people’s standard of life at the centre of the problems of economic growth and to a similar effect led the renewed interest on the “economics of happiness” (e.g. Bruni and Porta, *Economics and happiness: framing the analysis*, Oxford University Press, 2005). On more analytical grounds, we may also mention the modern literature on endogenous growth.

The volume is divided in two parts: a historical part and a part devoted to some current issues. The historical part aims at showing that the arguments put forward by some prominent liberal authors of the past in favour of social policies are still very interesting and inspiring. Such arguments, and particularly those put forward by Adam Smith, John Stuart Mill and Alfred Marshall are presented against the background of the historical conditions of their time, and critically discussed, with an eye to contemporary concerns.

The second part considers some institutional and policy aspects which recur in current discussions. Labour market regulation, education, health, are some of the typical factors affecting the capabilities which define a “standard of life” and have an important role for permanent growth possibilities.

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## **ABSTRACTS**

**1.1 M. Pomini, “The debate on education financing in the Classical school”.** L’istruzione viene unanimemente considerata uno dei fattori più rilevanti per la crescita economica. Per questa ragione l’analisi degli effetti economici dell’istruzione, come pure delle sue complesse relazioni con la società, sia stata al centro degli interessi della Scuola Classica. I due autori che più di ogni altro hanno affrontato questo tema, pur da angolazioni diverse, sono stati A. Smith e J. S. Mill. Mentre il primo ha evidenziato principalmente le economie esterne associate all’aumento della scolarità, Mill ha considerato anche altri aspetti, come ad esempio i costi di transazione. L’aspetto notevole, comunque, è che, pur all’interno di una visione liberista dell’agire economico, gli autori classici erano concordi nel sottolineare come il settore dell’istruzione fosse uno dei pochi che non potevano essere lasciati al libero mercato, al gioco della domanda e dell’offerta. La questione del ruolo della mano pubblica nel campo educativo con riguardo alla crescita economica è tornata alla ribalta all’interno della teoria della crescita endogena. A partire dal saggio di Glomm e Ravikumar del 1992 è sorta un’abbondante letteratura che ha focalizzato l’attenzione sulle problematiche legate al finanziamento dell’istruzione obbligatoria e alle politiche scolastiche più idonee per favorire la crescita economica. Sono riemerse all’interno di questo dibattito alcune questioni tradizionali sul ruolo dello Stato nel finanziamento e nella gestione del settore formativo che erano già state considerate dagli autori classici. Lo scopo del contributo è duplice. Da un lato chiarire la posizione dei classici su questa importante materia, maturate in un contesto economico caratterizzato da una marcata disuguaglianza sociale. In secondo luogo, analizzare come queste problematiche siano state riprese e rielaborate, anche da un punto di vista analitico, all’interno di un importante filone della teoria della crescita endogena. Si tratta di verificare se la risposta che gli economisti classici hanno dato alla relazione tra l’investimento sociale in istruzione e la crescita economica sia la stessa che ritroviamo due secoli dopo nelle versioni analiticamente più evolute della attuale modellistica della crescita endogena. (ex 22)

**1.2 A. Opocher, “Does economic growth ultimately lead to a ‘nobler life’? A comparative analysis of the predictions of Mill, Marshall and Keynes”.** The writings of Mill, Marshall and Keynes reviewed in this paper share the same conception of output growth as something whose value depends on the conditions of life that it allows: as time goes on, and capital and technical knowledge accumulate, material production has a diminishing importance, whereas the conditions of work, the use of leisure, the quality of inter-personal relations, for potentially all members of society tend to become the real goal. Since there has been recently an increasing interest for “quality adjusted” growth accounting, for comprehensive evaluations of “human development” and more synthetically, for the relationships between wealth and happiness, it seems of some interest to look back at the authors who laid down the conceptual basis for an analysis of the complex relations between output growth and material, intellectual and moral conditions of life; and to examine on what grounds, precisely, they reached their conclusions and with what differences from one another.

**2.1 M. Pomini: “Endogenous growth and educational systems”.** L’istruzione viene unanimemente considerata uno dei fattori più rilevanti per la crescita economica. Per questa ragione l’analisi degli effetti economici dell’istruzione, come pure delle sue complesse relazioni con la società, sia stata al centro degli interessi della Scuola Classica. I due autori che più di ogni altro hanno affrontato questo tema, pur da angolazioni diverse, sono stati A. Smith e J. S. Mill. Mentre il primo ha evidenziato principalmente le economie esterne associate all’aumento della scolarità, Mill ha considerato anche altri aspetti, come ad esempio i costi di transazione. L’aspetto notevole, comunque, è che, pur all’interno di una visione liberista dell’agire economico, gli autori classici erano concordi nel sottolineare come il settore dell’istruzione fosse uno dei pochi che non potevano essere lasciati al libero mercato, al gioco della domanda e dell’offerta. La questione del ruolo della mano pubblica nel campo educativo con riguardo alla crescita economica è tornata alla ribalta all’interno della teoria della crescita endogena. A partire dal saggio di Glomm e Ravikumar del 1992 è sorta un’abbondante letteratura che ha focalizzato l’attenzione sulle problematiche legate al finanziamento dell’istruzione obbligatoria e alle politiche scolastiche più idonee per favorire la crescita economica. Sono riemerse all’interno di questo dibattito alcune questioni tradizionali sul ruolo dello Stato nel finanziamento e nella gestione del settore formativo che erano già state considerate dagli autori classici. Lo scopo del contributo è duplice. Da un lato chiarire la posizione dei classici su questa importante materia, maturate in un contesto economico caratterizzato da una marcata disuguaglianza sociale. In secondo luogo, analizzare come queste problematiche siano state riprese e rielaborate, anche da un punto di vista analitico, all’interno di un importante filone della teoria della crescita endogena. Si tratta di verificare se la risposta che gli economisti classici hanno dato alla relazione tra l’investimento sociale in istruzione e la crescita economica sia la stessa che ritroviamo due secoli dopo nelle versioni analiticamente più evolute della attuale modellistica della crescita endogena. (ex 22)

**2.2 Thomas Bassetti, Education and poverty in a Solow growth model.** La letteratura economica sulla crescita ha ormai da tempo riconosciuto l’importanza del capitale umano nel promuovere e sostenere la crescita economica di un paese. Secondo questa letteratura, gli individui possono accumulare capitale umano essenzialmente in due modi: investendo in educazione o accumulando esperienza sul posto di lavoro. Tuttavia, anche per la difficoltà di misurare l’acquisizione di esperienza sul posto di lavoro, la letteratura macroeconomica si è concentrata principalmente sull’investimento in educazione. Seguendo quest’impostazione anche noi formuleremo un modello in cui l’accumulazione di capitale umano avviene attraverso l’investimento in educazione. In particolare, nel nostro lavoro, mostreremo come l’accumulazione di capitale umano possa seguire delle dinamiche non lineari. Partendo da un’equazione di accumulazione di capitale umano alla Lucas (1988), sotto ipotesi piuttosto plausibili, arriveremo ad una funzione di produzione del capitale umano di tipo logistico. Successivamente, ipotizzando individui omogenei, passeremo ad una funzione aggregata di capitale umano, funzione che verrà inserita in un modello di crescita alla Solow. Come vedremo, questo modello soloviano “modificato” sarà in grado di spiegare l’esistenza di “trappole della povertà” nel percorso di crescita di un sistema economico. Una delle principali implicazioni di questo modello sarà quella di supportare le politiche di sostegno all’educazione al fine di consentire ai paesi meno sviluppati di uscire dalla c.d. “trappola della povertà”. L’ultima parte del paper verrà infine dedicata alla verifica empirica delle nostre intuizioni teoriche.

**2.3 D. Gualerzi: “Structural dynamics, Capabilities, and the standard of life”.** A fundamental aspect of long run development is the evolution of consumption. Quite obvious as this is it has rarely been discussed in the theoretical growth literature. This can

be seen examining how consumption is dealt with in Endogenous growth models. This theme is instead a central aspect of both Pasinetti structural dynamics and Sen capabilities approach. In particular, in the case of Sen the constant reference is to issues of social justice and social welfare; in the case of Pasinetti, the focus is on what is necessary to maintain full employment. These two approaches then provide an analytical structure that helps to frame and study the question of an evolving standard of life in the context of long run development. The paper compares and contrasts these two analytical structures approaches and discusses the implications of their dynamic approach to consumption for the analysis of the standard of life; it then examines how that feeds back into the analysis of long term growth. This feedback highlights the central role played by learning processes and that, in turn, opens up the possibility of discussing current trends of transformation, based for example on the spread of information technologies.

**2.4 G. Mariutti: “Something new under the sun – The structural evolution of learning and wealth since the First industrial revolution”.** The aim of this paper is threefold. First, it tries to collect in systematic form some empirical evidence on the composition of a) economic production (sectoral composition of output) and b) human knowledge production in particular as it appears the skill composition of the labour force and in the the educational system. (in particular in the composition of university departments and students by academic field); Second, it tries to show from this evidence that in the long-run structural change is an important dimension of both system a) and b), and that the two systems do not change one independently from the other, but rather that they co-evolve. Third, the paper tries to outline some regularities (stylized facts) of this new dimension in a multisectoral model of economic growth with non-proportional dynamics. In so doing, it singles out two structural components in the process of economic growth: the intrasectoral component which acts within each sector and allows the raise of productivity through time; and the intersectoral component which acts –through the movement of the labour force – across sectors. It is the interplay of these two components that produces, in an economic system, the overall rate of growth. Too much writing on economic growth takes place in a historical and empirical vacuum, or creates factual artifacts in which events convenient to the author's interpretation are plucked selectively from the record, or, conversely, ready-to-use statistical databases are plugged into ready-to-use software applications to squeeze from them some unquestioned synthetic indexes. This is to a larger extent true also for writings on economics A more comprehensive knowledge of the empirical evolution of the economic and educational system is preliminary to the urge to make correct theoretical generalisations. This paper tries to make some steps in this direction. (Ex 50)

**2.5 R. Balducci: “Change in consumer preferences, income inequality and endogenous growth”.** The article examines the effects on growth of private or public investment in health, schooling and culture; briefly education. Such expenditures exert an effect on the growth rate through the positive externality in the productivity of the capital stock, while the substitutability between education and private consumption modifies the saving decisions and a higher growth rate may be obtained. It is interesting to investigate the different effects on economic growth of two different regimes: public financed education expenditure and private investment in education. Are they effectively equivalent? The answer generally is no. The reason is that – unlike private investments – universalist public education has an important positive externality on the economic system's

efficiency but it does not create sufficient incentives (through income differentials) to shift consumer preferences in favour of education. (Ex 30)

**2.6 A. Vercelli: “Health, globalisation and sustainable development”.** This paper aims to explore the main channels of influence through which the recent process of globalisation has affected the health of people, exerting an important influence on the sustainability of world development. To this end we try to identify the principal, direct and indirect, empirical correlations between the main features of globalisation and different indices of health; we proceed then to a preliminary discussion of their causal contents. The indirect correlations run in both directions. This feature turns out to be particularly important since the feed-back between the main intermediate variables (income growth, income inequality and environmental degradation) and different aspects of health plays a crucial role in determining the sustainability of world development. (Ex 51)

**2.7 T. Fioroni e L. Zanelli: “Health Expenditure, Economic Growth and Inequality: Private versus Public System”.** In this paper we analyze how different health spending systems can affect economic growth and inequality. The main idea is to develop an overlapping generations model in which individuals live for three periods and have an endogenous probability to survive to old age depending on health spending. Health is assumed to be a durable capital stock that is demanded as consumption commodity, since it increases individual’s utility, and as an investment commodity, since it determines the total amount of time available for market and non-market activities (Grossman, 1972). Moreover, health is a superior good; it implies that, as people get richer and their consumption rises, they devote an increasing share of resources to health care (Jones and Hall, 2005). In this context, we compare the implications of a private and public health system for economic growth and inequality in developed and developing countries. (Ex 8)

**2.8 D. Dottori: “Health Funding, Inequality, and Economic Growth”.** An overlapping generations model `a la Glomm and Ravikumar (JPE 1992) is set up to compare in terms of economic growth rates and income distribution two regimes of health funding: private and public ones. Health is not only a component of human capital but it also yields directly utility and - by enlarging lifespan - it reduces future discounting thus affecting the propensity to invest in human capital accumulation. In the private system health expenditure is chosen in a decentralized way, whereas in the public regime it is provided by government and funded through an income tax, with agents voting over the tax rate. Endogenous poverty and low development traps are shown to may arise. Inequality turns out to decline faster under public regime, whereas in the private one it may be nondecreasing. Private system generally results to bring about higher growth rates, but when income distribution is enough uneven public system may feature higher growth rates.