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Prof. Stefano Spalletti
Affiliazione: Università degli Studi di Macerata
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The Economics of Education in Italy (1960-1975)

An Outlook of Economic Planning

Stefano Spalletti*
University of Macerata
Department of Development Studies

Since 1960, Italian economic planning has been accompanied by studies on the corresponding development in manpower requirements and the means to satisfying them. A Svimez work in 1961 was the very first attempt to follow this issue. It certainly suffered from the absence of preliminary background studies, but equally opened the way to long-term social-economic forecasting. During the sixties, Svimez and Censis approached the question of wealth generation from investments in education more deeply, also contributing to the «Mediterranean Regional Project», the first major international experience of educational planning. The early utilization of the manpower forecasting approach directed scholars’ attention toward the economics of education, persuading some Italian economists to work in this field and to take the role of investments in human capital into a greater consideration.

1. Introduction

During the years in which Italy experimented with economic planning, the subject of education was a constant feature of scientific, economic and political debate. Prior to this period Italian economists had only occasionally taken the role of investments in human capital into consideration.1 From the end of the 1950’s to the middle of the 1970’s however, studies of the economics of education also began to multiply in Italy.2

The various contributions deserve to be taken into consideration by following two methods of analysis that obviously tend to be inter-

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1 For the period 1815-1905 the reader can consult Spalletti 2005. For the following decades a part of the research still has to be completed.

woven and to complement each other. One method takes a strictly scientific approach to the debate about education and a first reading can be effected without immediately taking the implications for planning economic development into account. However, this paper will focus primarily on such implications, given the more or less simultaneous development of the literature of economics of education and the attempts at economic planning carried out in Italy. In order to develop this kind of analysis, the effort to forecast manpower needs, developed in institutions like the «Associazione per lo Sviluppo dell’Industria nel Mezzogiorno» («Association for the Development of Industry in Southern Italy» - Svimez) and the «Centro Studi Investimenti Sociali» («Centre for the Study of Social Investments» - Censis), will be an important source.

2. Forecasting and Planning

At the beginning of the 1960s, the need to plan investments in the education sector began to be perceived.1 The task was not immediately faced simply by changing the method of economic analysis, a methodology that in the international context was quite developed and was also well known in Italy. Indeed no attempt was made to immediately keep the average or marginal relationship between human capital and national income under control. The choice made instead was to try to understand what resources could be devoted to human capital within a context of widespread social planning. Consequently, at the end of the 1950s, scholars with a variety of skills were faced with the task of resolving the problem of education, looking for solutions that were global and not only satisfactory within an individual branch of public activity. Owing to Gunnar Myrdal’s work, development was no longer conceived on the basis of the presumed supply and demand of the labour market, but it also involved a general programme undertaken by the whole national administration.2

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1 The ‘Progetto Gonella’, from the minister of Public Education in 1951, represented the last attempt at global reform of the Italian education system. It had its roots in Nineteenth century parliamentary tradition, as discussed in Spalletti 2003. The Svimez Report noted that this project still aspired to pedagogic and philosophical convictions that left aside «all the other economic, sociological, political and ethical factors to which it was instead necessary to assign an important role in the overall context of a reform of the education system»: Svimez 1963a, 427. The old tradition was interrupted in the second half of the 1950s and it was the studies concerning the growing need for workers, required for the industrial take off of the country, to determine a change in direction in the debate of the schooling system. In November 1958 the first ten year plan for the development of education was formulated. This document explicitly affirmed, for the first time in a political setting, the necessity to consider the development of education as an integral part of economic policy and as a trigger for growth. See Santamaita 1999.

2 Myrdal 1959.
At an international level models for forecasting investments in human capital already existed. In spite of this, models of economic planning that were explicitly related to the relationship between educational systems and the labour market were scarcely utilized in Italy during the period 1960-1975. The reasons for this can be linked to the difficulty in accessing adequate statistical documentation. Some work, however, was produced by institutions that conducted economic planning.

The main body of research was carried out from 1960 to 1970 and involved a nucleus of work that produced satisfactory results by referring to the so called manpower forecasting approach. One can refer to a group of studies characterized by a similar methodological approach, coming from a common source in terms of institutions and researchers. This nucleus formed with a Svimez research focused on the problems related to the professional composition of the labour market and made hypotheses regarding its transformation during the course of the fifteen year period 1960-1975. The study aimed to identify the needs of qualified manpower, both managerial and professional who had particular know-how and non-specific human capital.

After reformulating the same work with wider objectives in 1963, a second important phase of this branch of research came into being with the foundation of the «Centro Europeo dell’Educazione» («European Centre of Education» - cede) and of Censis. The activity of these research centres focused considerably on the role of the school and of training in general, allowing them to produce further forecasts. In particular, the model that was called Formez-Censis had a certain impact. It was formulated in 1966 by a sizeable working group, including the contribution of unesco, although the main contributors were Censis and cede. This model was part of the «Progetto Regionale Mediterraneo» («Mediterranean Regional Project») of the oecd. Under the aegis of the latter organisation, forecast analysis and planning were carried out, focusing on segments of the market that had the relative necessity for qualified personnel to contribute to it. The experience of scholars of the calibre of Giuseppe De Rita and Gino Martinoli pushed this branch of research towards a new attempt to estimate ‘social demand’ in Italy for graduates in the human sciences.

Other work, that probably had a lesser impact, such as that of Censis in 1974, mark out the period of this nucleus of research that accompa-
nied the period of economic planning. However other analyses revolving around essays on the performance of investments in education can be mentioned.¹

2. Forecasting, planning and education at Svimez

It is not disparaging to sustain that Censis developed out of the necessity of Svimez to set up a specific unit to face the consequences and the problems connected with economic development from a sociological point of view. The reasons for such a choice, referring to the words of De Rita, the person responsible for this area of Svimez studies, are not to be found in pre-established scientific directions. They are rather to be attributed to an attempt to tie the economic culture to the social reality. This scholar, Giorgio Ceriani Sebregondi, began to cultivate this intention as editor of a magazine entitled Cultura e realtà (Culture and Reality). As De Rita noted, the emphasis placed on the conjunction ‘and’ could be interpreted in different ways.²

Created and managed at first by Sebregondi himself, the sociological unit of Svimez began to operate in 1955 and a decisive contribution was made by De Rita. The beginnings were difficult because not all the economists that worked at Svimez, including Pasquale Saraceno,³ fully acknowledged its usefulness. In a climate that was not exactly encouraging, Sebregondi’s great enthusiasm provided the impetus. The work was geared towards researching the «centrality of the social aspect in economic development» and towards monitoring it through a special organization, the «Istituto di Studi per la Congiuntura» («Institute for the Study of Economic Conjuncture» -isco), and through the Annual Report of Censis. In this context the contribution of the statistical-social analysis of the renowned statistician Alessandro Molinari emerged and the sociological unit of Svimez began to work on the problem of the school and on education as a variable in relation to economic growth. In particular, as underlined again by De Rita, an initial and decisive impulse came from the chapter entitled «Professional Training» contained in the Vanoni plan of 1955, in which the research unit led by De Rita actively participated. It attempted to ascertain which role economic planning could have in the processes of social change in general and in the education sector in particular.

In terms of procedure, the awareness of some theoretical elements that could function as a guide was helpful. The frame of reference,

¹ Among these one can point out the work of Erba 1966, Padoa Schioppa 1974 and even earlier, the concise evaluation derived from the ‘institutional’ model carried out by a research Commission on the state and development of public education in Italy, at the instigation of the Ministry of Public Education. See Ministero della Pubblica Istruzione 1964.
² De Rita in Censis 2004, 8.
³ De Rita ibidem, 9-10.
however, was not that of American exponents of the economics of education who, in 1955, had produced contributions that were still pioneering. The ‘inspiration’ did not arrive from professional economists either but was instead in the form of a brief text distributed by an Italian engineer in order to find a motivation for the regulation of research. The author of the text, a report entitled «L’automazione e la necessità di un’adeguata preparazione culturale in Italia» («Automation and the need for a satisfactory level of education in Italy»), was Gino Martinoli, probably the first Italian scholar to urge the necessity of placing the training activity at the heart of an evaluation of the needs for qualified personnel and to indicate, indirectly, the need to plan for services, specifically dedicated to education.

Martinoli highlighted how a developed process of automation was connected to the availability of qualified workers and that the scarcity of the latter was a problem to be posed in relation to the insufficient development of school facilities. Such intuitions, even if logically coherent, posed an even greater problem, since they presupposed a strict correlation between scholastic education and professional roles. Martinoli himself claimed that the problem of such a relationship led one to think of the ideal situation being one that favours a system that supplies flexible training, to enable people to learn and re-learn during their whole working life.

The next opportunity to bring education closer to economic planning, after the first real awareness of the problems had begun to develop, occurred towards the end of 1958 when the government, presided over by Amintore Fanfani, appointed Giuseppe Medici, the Christian Democrat agrarian economist, as minister of Public Education. The latter was entrusted with the sociological unit of Svimez. The first contacts between De Rita, the new minister and his head of research Giovanni Gozzer, the professor and pedagogue, were immediately productive. A decision was taken to carry out a forecast of the needs of the managerial class by 1975. This study was needed to plan the future needs of training and to look at a reform of the school curricula. Together with the appointment of the formerly Christian trade-unionist Giulio Pastore as Minister for the South in March 1959, the sociological unit of Svimez tried to come up with a development plan regarding the human factor in the Mezzogiorno. This plan considered the financing of professional training in the educational structures and the strategy of intervention required in the «poli di sviluppo» («poles of development») existing in the South.

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1 Presented on the occasion of the first conference on automation, Milan, 1956.  
2 Martinoli 1961, 310.  
3 Svimez 1963a, 433.
In spite of these early studies no definition of a long-term programme of development of school and extra-school facilities emerged. The parallel action of economic planning was missing, a problem that was demonstrated by the fact that the ten year plan of 1958 transformed itself, in 1962, into a mere provision of resources to be distributed to the schools in the three year period from 1962-1965.¹

The research on forecasting and planning (until 1975) carried out by the sociological group of Svimez between 1959 and 1960 captured the attention however of the oecd (producing for Svimez itself a work contract involving the «Mediterranean Regional Project»). An important study began in 1959, at the end of which two Svimez commissions were nominated: one charged with the task of studying the transformation of the professional composition of the labour force in the following fifteen years, with the aim of identifying the needs for the qualified personnel necessary for the development of training activities; the other, the Rossi Doria Commission, with the responsibility of studying the reform of the school curricula.

The first Commission, presided over by Martinoli, was composed of De Rita, Gozzer, Isidoro Franco Mariani, Gastone Miconi, Mario Milano, Tommaso Salvemini, and Pietro Longo. The results of its work tied together more closely the activities of professional and cultural training with the characteristics of the development process. The Commission of study began by establishing that education planning meant hypothesizing a plan of economic development. It was necessary therefore to predict the growth that would take place in Italy. It would change the distribution of factors of production and the variables that adjust professional training to supply and demand in the labour market. Therefore, as was the case for industrialists, some of those responsible for training systems had to estimate the needs of the «consumers of the products offered by the school». To achieve this objective it was necessary to begin with the job of making people aware of the benefits of the products supplied by the system of training.² It was even more necessary, at the starting point of a phenomenon as complex as economic development, to interpret scientific progress as a springboard for social transformation.³ An element that must be underlined in the Svimez

¹ Ibidem, 434.  
² Martinoli 1962a, 13.  
³ Regarding this point however there seems to be an inconsistency when looking at the haste in which Martinoli himself urged the establishment of a development plan without waiting for the economists to supply future directives about economic development. At least fifteen to twenty years would have been needed until reform and provisions regarding the school could be activated in order to «exercise appreciable influence on customs, on the specific and general cultural level of a significant portion of the active population, thereby stimulating the economic-productive system» (see ibidem, 21-31).
analyses was the attempt to attain an economic equilibrium that was socially balanced with the qualitative needs of the lives of workers, an equilibrium made easier by a wide ranging level of education for all citizens. The predictions of the need for adequate human resources for work had therefore to follow the planning geared towards controlling the development process, not only in the sense of economic transformation, but also in terms of the harmonious evolution of society.  

The Svimez scholars consequently began to formulate some hypotheses regarding income increase, productivity and employment over a fairly long period for the economy. It corresponded to the time necessary to allow a transformation of the educational structure. The hypothesis of the growth of the three above mentioned variables was formulated by taking into account the experience in Italy of the previous decade and the objectives proposed by the ‘Vanoni Plan’, identifying «reasonable targets that the economic-productive activity of our country could reach at the end of a pre-established period of time».  

The economic objectives imposed a plan for the school system that: i. carried out a needs based evaluation both to ascertain the global cost to be directed towards education and to establish how this financing should be distributed amongst the different kinds of educational organisations, and taking into account the transformation predicted within the economic and professional field; ii. globally reviewed the educational structures, given that a notable investment may not produce lasting and positive effects if they are not accompanied by a process of modernization of the educational institutions, given that in modern society social mobility is made easier by scholastic education; iii. provided and diffused «a basic attitude towards education, more in tune with the functions that an individual is expected to carry out in a society that is developing».  

The most important conclusions reached by this work were summed up by Martinoli with some significant data: the prediction that in 1975 only 165,000 graduates would be able to meet the needs of economic development. The outlook was therefore worrying, so much that Martinoli concluded: if «the overall growth in the number of graduates, directed to greater or lesser degree towards the economic-productive

1 Svimez 1961, 1-7.
2 Ibidem, 6.
3 Regarding this point in particular, Francesco Vito underlines that planning the training system does not mean viewing teaching only as a tool for economic progress. «Probably we will never succeed in estimating even approximately what percentage of costs for education should be conceived as consumption and what should be seen as an investment [...]. What is important is not to forget that the learner should also be seen as a human being who should be helped to develop all of his capacities, placing value on all of his personality and not simply on the abilities that are connected to the production of material goods» (see Vito 1963, xiv).
activities of the country should decrease because of the need for headmasters, teachers, professors etc. in the schools and universities, it is to be presumed that economic development would in turn slow down, which would invalidate the initial premise from which our work began.¹ As Martinoli himself admitted in 1978, these forecasts were overestimated.²

In terms of economic analysis, the Svimez research at the beginning of the 1960s represented an attempt to deal with the problem of school planning from a particular economic viewpoint, a strategy that was focused on four fronts: purely scholastic, sociological, techno-industrial and economic. This strategy sprang forth from the discussions at Villa Falconieri in Frascati, near Rome, in May 1961, during a significant international meeting that laid out the guidelines for the forecasting «of scholastic development in order to plan intervention». The Svimez research, taking into account successive improvements leading up to the 1966 version, aimed therefore to establish an optimum level of public expenditure for education. However it did not succeed in making acceptable predictions for the medium to long-term period because, in spite of having core ideas that could be appreciated for their straightforwardness, there seemed to be a high level of conjecture that referred too much to the international scenario and to ideal or typical reference points. Indeed Svimez managed to predict the magnitude of the GDP of 1975 more or less correctly, but did not have the same success with the level of productivity and unemployment. In other words, there was a miscalculation of the size of the variables, from which arose an insufficient estimate of the future need for human resources. The calculations were based on a priori classifications, mapped out to produce an overview of the professions – and of the relative levels of education – and to draw up a functional connection between professional training and the needs of the development process.³

The methodology adopted by the research was clearly influenced by the approach of Parnes, in which the estimated GDP was divided up in order to predict the average relation between labour and product. The employment structure was therefore related to that of education under the guidance of parameters obtained from the specific scholastic level required for every occupational category. The results did not manage to

¹ Martinoli 1962b, 59.
² See Barbagli 1974, 325 and 372-373. See also Martinoli 1978.
³ See Vollono 1966, 257-265. The most well-known classifications of the 1960s were made by Parnes 1962 and by Harbison 1962. The former was used in the «Mediterranean Regional Project». Parnes 1962 was translated into Italian by the Office for Study, Documentation and Planning at the Ministry of Public Education. Introductory notes were supplied by Gozzer and Gioacchino Forte. See Parnes 1964.
bring out the fact that education is a variable that influences and is influenced by technological progress, an element that remains, in the main, absent from the basic analysis. As Scarpat also noted, only by including such a strategically important element in the planning model could more long term results have been obtained.1

If it is true that in the Svimez research a correct theoretical approach was missing, it is also necessary to make further reflections on the connection between the planning of education and that of the national economy. In June 1963, in the Frascati Conference organized by Cede, Svimez underlined once again the uneven relationship between industry and educational training, characterized by a process of industrialization at a nascent stage (Southern Italy) and by another area undergoing a phase of advanced transformation (Northern Italy). Owing to this diversity, Svimez tended to interpret the problems of educational training in the South as a part of a general process of global intervention, dealing with the starting up of industrialization in that region. The situation was different in the North, where a more mature economic system expressed needs for qualified personnel at all levels.2 Gozzer made a parallel between the stage theory of economic development of Rostow and the stages of scholastic development.3 In Frascati, Saraceno confirmed that the development of the economy and of education were not separate themes, and Novacco’s conclusion was: «The real problem is not so much that of planning education, rather it is of the planning in general of our economic development, a general planning process in which education represents a particular aspect».4

3. Planning and Education at Censis

It was again the sociological unit of Svimez to draw up, in the winter of 1962-1963 a part of the Saraceno Report. Many chapters of the document includes parts that specifically deal with school and professional training. The Saraceno Report however represents a painful moment in the life of Svimez. There were months in which Saraceno began to think that he did not have complete control of the institution, thus, at a certain point, he decided to cancel the units which boasted the greatest degree of autonomy. The unit dedicated to the regional economy, managed by Novacco, disappeared as well as that of economic devel-

1 Scarpat 1967, 416. 2 Svimez 1963b, 164-165.
3 Gozzer 1962, 42-78. The contributions of Martinoli 1962b and Gozzer 1962 were the only ones to be cited by Giuseppe Ugo Papi, the well-known economist, at the 1966 International Economic Association conference. See Papi 1966.
opment, which was under the guidance of Claudio Napoleoni, another well-known economist. The sociological unit survived, even if it was downsized to a certain extent. Having carried out a futile attempt at reunification, on 23rd November, De Rita, Martinoli and Longo decided to break off from Svimez to set up Censis.

Censis did not abandon the idea of continuing to clarify the relationship between the labour market and human capital. Convinced that the best opportunities for Italian economic development, in 1964, came from the combination of these two elements, Censis immediately brought up the problem of the link between scientific research and planned economic development.¹ The role that the scientific research covered was feasible presupposing that the industrial economies depended in large measure on: i. the results of the research activity itself; ii. the diffusion of new scientific knowledge; iii. the effective application of this knowledge. The latter point was the decisive one. Although the research permitted the identification of the best technical and economic combinations, the decisions of the economic operators remained decisive, as did the possible impetus of public action in transferring results to production. The connection of scientific research with the policy of economic development required therefore an articulate interaction that had, as its source, long term planning. Clear indications were needed from public action regarding the road that the various sectors and the production structure had to take, and general guidelines for the development of some sectors that were lagging behind were also required.

From the first analyses of education, research and development at Censis a positive attitude towards the economic planning that had been concluded in Italy started to develop, but this same attitude was critical of its inability to draw out a long-term outlook. Owing to this myopia regarding the long term future, alternative inroads, according to Censis, could have pointed economic planning towards a phase of ‘pre-development’; that is, to conceive «public intervention, geared towards creating the indispensable conditions, that when the choices necessary for each sector are carried out, could in the short term give rise to planned scientific activity that promotes development».² Translated into more practical terms, it represented a hope that, in the short run, research could set up clear practical guidelines for public action, aimed at promoting an increase in the technological level of these sectors, explicitly identified in the national economic plan. These sectors were: agriculture, the construction industry, machine tools, the health sector, and the sector of public sanitation.

¹ Censis 1964, 110 and 128-134. ² Ibidem, 133.
If research widened scientific knowledge and required its effective application to the economic world, this therefore brought advantages in increasing public and private wealth. In 1965-1966, Censis decided to delve deeper into the question of wealth generation from investments in education. The initiative represented an important, early phase in the debate on the economics of education. The publication of two scientific collections from an international source accompanied this development: *Education as Investment* (1966) and *Residual Factors* (1968). It was little more than a translation, but there were articles that in future years were to become classics in the field. Therefore it was significant that in the middle of the 1960’s attention shifted towards the fundamental elements of this area of study. Indeed, Censis insisted that:

Human resources in economic development, the concept of human capital, the view of education as an investment or as a form of consumption, the costs and the funding of intervention in the field of training, forecasting the needs of personnel, the definition of the social demand for education, the contents and the techniques of school planning and the calculation of the wealth creation potential of investments in education [were] some examples of fields which interested those dealing with the economics of education, along with those that worked outside traditional disciplinary boundaries, trying to highlight the problems of training and that of economic development.¹

Given this range of intentions, the Censis research proposed to evaluate the wealth creation potential of education through so called estimates of ‘residue’. The attempts to understand the residue factor within economic theory referred both to neoclassical and to post-Keynesian thought.² The analysts at Censis adopted two different calculation techniques of the residue, but both postulated the use of an aggregate production function of the Cobb-Douglas type. After completing the calculations, Censis claimed that the residue factor was responsible for between 70% to 94% of the growth of Italian GDP between 1960 and 1961.³ Not all of this increase was due to education and progress in research but there was no doubt, as confirmed by some foreign academics, that both variables contributed significantly to economic growth.

¹ Censis 1969, 258. The research, defined as accurate by Lenti 1967, 162, fn. 34 had already been published by Censis in 1966.
² The former overcomes «the limits of the production function, abandoning the hypothesis of its linearity and introducing the residual factor together with traditional labour and capital». The latter, «denying the possibility to distinguish between shifting the function or movements along the production function, [attempts] to substitute a function of technological progress for the production function». See Censis 1964, 92.
³ Censis 1969, 312. For a detailed presentation of the data and of the models utilized see also pp. 245-370. It was also calculated that, for the period 1951-1961, 68% of the increase of GDP could be attributed to «that group of factors or agents that hide themselves behind the expression ‘residual factor’» (see D. Vampa, *Misure della produttività in Italia*, Roma, CNP, 1965, draft, cited in Censis 1964, fn. on p. 92).
According to Censis therefore, increasing the potential of human capital was key to the development of Italian society. The growth of human capital was in the hands of the school, that was the most recognized and consolidated training tool in the country. However the institutional evolution of the school itself, since the 1950’s, was characterized by an increase in quantity of the school population, without enjoying a parallel process of innovation of the content and methods of teaching. Such a dysfunction generated an unhealthy relationship between the characteristic of the training phase and the needs of professional activities required by the market. The activity of planning therefore had to avoid the separation between training and the market.\(^1\)

However Censis was aware that the economic perspective, even if it was not the only way of approaching the question, would determine new problems. If the objective of society was to create economic potential, geared towards growth, the training system could not be selective in nature, or be a school for elites, as has been the case in Italian history. The school system rather, had to contribute to gathering together available energy in order to direct it towards creating a «global reserve of skills».

The sociological history, narrated by Censis, relates a greater and more acute difference between form and reality, i.e. how the school system functions and the training process works. Bonetta’s severe judgement helps us to understand why Censis, already in 1968, judged the school plan to be too ambitious in its proposed expansion of the scholastic structure and too out of touch with the global context of the school population and the impact of transformation of technological progress.\(^2\) In other words, according to Censis, «planning [had] always been conceived as if the fundamental nature of quality processes of communication were a constant: and as if the only variables were that of demographic pressure, the social demand for education, the channels through which such demand would be managed, the infrastructure necessary to deal with new flows etc. […] The direction of the new wave of education planning for the next decade seemed to be characterized by the study of development and its relationship to innovation, that is the relationship between planning, technology and means».\(^3\)

The centrality of the school with a planning process that revolved around the transmission of technological progress was therefore reaffirmed. This was a clear indication of a precise conception of economic development, according to which the education deficit in Italy

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\(^1\) Censis 1968, 45-52.  
\(^3\) Censis 1968, 52.
had to be strenuously tackled. Such a vision of economic development also transformed itself into a model of civil progress. The school was a subsystem within a more general social system in which the performance of other subsystems (economic, political, religious, family, cultural, scientific) had to work organically, referring to each other.\textsuperscript{1} \textsc{Censis}, more than the sociological unit of \textsc{Svimez}, focused on the refusal to be reductive when dealing with social objectives, «a refusal that not only rejected the hegemonic claims of anthropology and psychology as well as economics, but counterattacked to the point of bringing into doubt the validity of an exclusively economic study of economic processes in favour of a more comprehensive and penetrating sociological point of view».\textsuperscript{2} The planning process, undertaken in Italy after the II World War, on the other hand, had chosen the path of ‘economism’, misunderstanding the relationship between social factors and planning for economic growth. In this sense, according to \textsc{Censis} itself, the lack of appeal of this period of planning can be attributed to an approach that was «oriented towards engineering», «aprioristic» and «enlightenment-minded»; and this determined its failure.\textsuperscript{3}

It was not the quality of the technical contribution regarding planning to fire up criticism of \textsc{Censis} during the economic planning of the 1960s. It also was not due to the heightening of the effective imbalance between planning and its execution, due to governments being distracted by other choices. It was instead, on an examination of the writings of that period, the lack of a sociological point of view, internal to the planning process that led to the greatest problems. This can also be demonstrated by the only partial agreement regarding «Progetto 80», simply because it heralded new methodologies that seemed to go further than the ‘Government of Plans’.\textsuperscript{4} \textsc{Censis} took as a good omen in «Progetto 80» the political and economic will to no longer conduct «planning for the society of the 70s by following the same guidelines of past experience». It was true that education planning, like that of economic planning, had undergone a notable decline in credibility owing to the antithetic relationship between the needs of the school and «the traditional manner of conceiving and activating planned intervention», which was removed from social needs.\textsuperscript{5} Planning, however, remained an essential element of school policy and \textsc{Censis} was still prepared to support it on the condition that it did not legitimize political interests.

\textsuperscript{1} \textsc{Bonetta} 1998, 18. \textsuperscript{2} \textsc{Censis} 1990 17. \textsuperscript{3} \textit{Ibidem}, 44-58. \textsuperscript{4} The ‘Government of Plans’ is an image of the role of governments that viewed the government as being prolific in the planning phase, without executing many of these plans. \textsuperscript{5} \textsc{Censis} 1971, 491.
and agreements, however pluralistic they may be, as they were dispersive in terms of serious planning.¹

4. Other Forecasting Studies

On the same lines as Svimez models (and then those of Censis), one can find the studies of Forte 1967, Cacace and D’Ambrosio 1968 and a new contribution from De Rita and Martinoli 1967.² The former three scholars established forecasting models (in 1980) for graduates, assuming that the education of this category of workers constituted a particular theme regarding the production function of GDP. Education represented an additional factor of production to which specific technical coefficients could be applied. Both models used regression equations frequently in order to predict the future relationship between employed graduates and the total number of employed. The estimates concluded that the needs of this class of workers were less pressing than predicted by the analysis of Svimez.³

Thanks to the research conducted by the «Centro Nazionale di Prevenzione e Difesa Sociale» («National Centre for Prevention and Social Defence» - CNPDS), De Rita e Martinoli also had the opportunity to face afresh the problem of the demand for graduates, coming this time from university courses geared towards the social sciences. In response to the predictions of Forte, who forecasted the number of 200,000 graduates unemployed in 1980, the two scholars justified the different predictions made by Svimez by referring to the need to take numerous social changes into account. Indeed it was not enough to predict labour demand only in terms of professional activity that is possible to categorize and it was not of interest to place emphasis on production activity that was exclusively polarized around industry. A higher number of gradu-

¹ The ingovernability of the key elements of intervention in education (public expenditure, personnel and facilities) was reaffirmed by De Rita in 1974, in a moment of strain in the relationship between economic and school planning, in a period that arrived «after a wave of enthusiasm about the possibility to control, orientate, and give sense to long term objectives of the economic system and the education system». See De RITA 1974, 1272. In spite of this criticism at the beginning of the 1970s, the opportunity to reject a kind of planning that was hardly efficient for a complex society seemed to have arrived. It was necessary rather to move towards a project that was clear of the confusion caused by sectors and sub-sectors, looking to general strategies of public intervention. This approach would have given the economy few key aspects to deal with. These aspects would be to reaffirm in the planning process for training (no longer exclusively the responsibility of the school): the right to study, innovation of the training system and its contents and a new training policy for teachers. Along with this, there was a quite new, warning note that «if planning is a integral part of the school policy it is unlikely that it can be carried out in all its details within a general economic plan» (see CENSIS 1971, 497).


³ A comparison on the data and on the quality of the forecasts carried out by Forte, Cacace and D’Ambrosio and Svimez-Censis are in TRIVELLATO 1977, 316-319.
ates that would offer their services in many other areas of production should have been predicted therefore.\(^1\)

Examining studies that have adopted different approaches, while making similar predictions, the work of the Commission on the state and development of public instruction in Italy (1963) reveals itself to be of interest. It perfected a sub-model of equations, already utilized to forecast the number of school teachers necessary to deal with the need for economic development. The most interesting part regarded the attempt to «connect the plan for scholastic development to the economic development of the country».\(^2\) The operation could be tackled, hypothesizing a demand for a qualified labour force in function of the GDP. The results were in line with what emerged from the Svimez work in 1961, but they placed greater emphasis on the need to reinforce the number of teachers, especially in Universities. The model belonged to a number of works of research on the optimal interconnection between the economy and ‘schorlarisation’ and it was correctly described as being a model of maximization of gross production in function of the parameters of composition of the qualified labour force and of sub-model parameters related to the scholastic system.\(^3\)

The above mentioned Svimez model, that of the Ministry of Public Education and that of the Formez-Censis were structured according to analytical-causal relationships. They were lacking in sophistication and used fairly rigid hypotheses on predictable development as a starting point. The manpower forecasting perspective gave credence to hypotheses regarding social change and their conclusions expressed quantitative analyses quite far from the transformation of economic processes. It is therefore possible to agree with accusations that complain about the shortcomings of these models, preferring the relationship between function and objective to be more adequate in order to capture the multiple aims historically assigned to training systems.\(^4\) On the other hand, the economics of education was appealing not only for the efficiency of the labour market but also for the role that training plays in income distribution and on social capital, as well as on the internal efficiency of the use of public resources, devoted to the school and the University.

In 1974 the rates of return approach followed by Fiorella Padoa Schioppa\(^5\) advanced research towards a higher level of sophistication, so much that at least it appeared to be an adequate analysis to forward a more articulate debate on the planning of the training system. The results of this research pushed its author to develop in detail the components of

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\(^1\) De Rita and Martinoli 1967, 7-11.
\(^2\) Ministero della Pubblica Istruzione 1964, 50.
\(^3\) See Trivellato 1977.
\(^5\) Padoa Schioppa 1974.
the demand for education. Through a simplified model of the Walrasian matrix, Padoa Schioppa contrasted the costs for the attainment of the education good and the private benefit derived by the subject that utilizes such a good. The analysis did not turn out to be completely innovative since it drew on a part of the methodological character of the work of Schultz and Becker on the concept of human capital, as well as on the ‘Mincerian’ model that focused on income differentials. However it supplied a model on the demand for education that was quite extensive for the literature of the early 1970’s.

Conclusions

The theoretical approach towards the economics of education that matured in the 1960’s, with the contribution of the American studies, was to be found in Italy in a few publications between 1960 and 1975, in the most important national periodicals and in some volumes of a certain interest. This occurred in years in which the full process of industrialization was accompanied by attempts to appropriate the scientific culture. Firstly Svimez, then Censis, permitted the country to overcome some of the characteristics of the first educational training system of post-fascist Italy, still subject to the classical humanistic tradition and to the influence of the Church in the domain of education.

Given this new context, the economics of education in Italy felt the necessity for public expenditure to train certain workers and to establish the numbers needed. In this way an interest for the study of forecasting and planning was born. This can be seen form the Svimez research in 1961. In the context of traditional planning of educational systems today the model utilized outside the confines of Svimez seems however to be of more interest.

Slowly the Italian training system began to be more solidly involved in studies on social change. Facing pressure from different directions, with the transfer of the role of research from Svimez to Censis, the problem of the educational planning abandoned, in part, a certain political dimension, leaving more space for sociological research.

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1 A large part had the aim to supply an interpretative profile for the levels of education for young Italians in function of the differences of wealth and social class.
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Edited by
Riccardo Faucci

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