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Higher Education and the Professional Job Market[1]

La educación superior y el Mercado de trabajo profesional

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Abstract

The paper deals with the relationship between the professional job market and institutions of higher education, within the framework of socioeconomic globalization and regional decentralization processes. The discussion focuses on how this relationship generates flaws in the market due to the role played by higher education as an intermediary between job applicants and those offering employment and professional opportunities; and due also to the fact that higher education institutions have their own objectives, which differ from those of the market. The article states the need to acknowledge and overcome the limitations which the concentration of income imposes on Latin American students' access to this educational level and their continuance in it. The paper also stresses the need for a closer connection between academic and job practices through curricular changes and the certification of knowledge that will be useful on the job. This would allow a better correlation with the productive sector, in that it would improve the absorption of graduates.

Key words: Higher education, job market, economy of education.

Resumen

El trabajo plantea la relación entre el mercado profesional de trabajo y las instituciones de educación superior, en el marco de procesos de globalización económica y social y los de desconcentración regional. Se discute cómo esta relación genera imperfecciones de mercado debido al papel de intermediación que tiene la educación superior entre demandantes y oferentes de empleos y oportunidades profesionales, pero también debido a que las instituciones de educación superior funcionan con objetivos propios y diferentes a los de mercado. Se plantea la necesidad de reconocer y superar las limitantes que la concentración del ingreso imponen al acceso y permanencia de los estudiantes en este nivel educativo en América Latina, pero también la necesidad de acercar los procesos académicos a las prácticas del mundo del trabajo, a través de cambios curriculares y certificación de conocimientos laborales, que permitan una mayor vinculación con los sectores productivos, a través de una más adecuada absorción de los egresados.

Palabras Clave: Educación superior, mercado de trabajo, economía de la educación.

> Los asuntos de la vida son una parte esencial de la educación práctica de un pueblo, sin la cual los libros y la instrucción escolar, aunque muy necesarios y convenientes, no bastan para capacitarle para el mando y para adaptar los medios a los fines.
>
> John Stuart Mill

Introduction

This paper examines the much-discussed relationship between the professional job market and higher education institutions (HEIs), which act as catalyst intermediaries for the desires of those soliciting and offering professional-level job opportunities. For this reason the relevance of the HEI is analyzed with reference to the challenges that globalization and its economic, social, and cultural expressions impose on businesses, individuals and communities. The growing importance of knowledge in shaping new patterns of behavior and social organization has given a force never before imagined to markets, and thus, to economic criteria as an evaluator of social institutions. Consequently, the flawed nature of the professional market is explained as reflected in the HEIs, where applicants and employers interact.

Both adjusting higher education to the market, and its global signs together with the resulting diversification, are analyzed in the perspectives of the strong market potential of HEIs for meeting developmental needs. Starting with the solution of natural market failures, the role of institutions is outstanding both in constructing dynamics of equity, which mitigate social differentiation, and in opportunities of access to education and the professional job market.

Higher education in the challenges of globality

Higher education is facing important challenges. First, the societies of developing countries are suddenly changing along with the changes and economic, political and social needs of the developing world. However, one could hardly say that the forces of globalization come only from the momentum of developing societies, but neither could one say that these global changes have been made without considering these societies. However, as globalization has progressed, especially in economics—joining countries and markets together in large economic blocs—regions and communities have increased their level of response to national decisions which change their circumstances and environment. In view of that, and given the nationally-determined integrative agreements which modify and sometimes violate local conditions, there has been a growing desire for local self-determination and for recovery of the power to decide what is locally appropriate.

Second, the achievement of international consensuses has been piloting national changes during the eighties and nineties, and has allowed the markets to control the states through macroeconomic stabilization policies. It could be said that these have been years of enormous microeconomic dynamism between large international companies, top leaders of globalization, and profound changes in economic structures. This has led to the acknowledgment of macroeconomics as the force dominating development, and so, favoring the microeconomics of big business and growth. In this circumstance, two processes have coincided, with important results: the modernization of global enterprises and government institutions without local equilibrium; and government decentralization of core functions without giving up decision-making (World Bank, 2000).

As part of a balanced-budget fiscal policy, central governments have restricted their presence to the macroeconomic level, limiting it to meeting the needs of regional development and fostering the rise of local governments as principal promoters. Nevertheless, in the context of centralized collection and limited regional allocations, the decentralization of the functions of national centers to the sphere of regional entities has made these functions mere processes of deconcentration which have extended the core functions without letting go of the decision making. On the one hand, this can allow one to understand the difficult role of cities and regional administrations in meeting the challenges of an economic specialization facing the need for infrastructure resources and a skilled workforce. On the other hand, there is the escalation of conflict and the difficulty of government in the regions; this is closely associated with the rise of individualism motivated by the maximum operation of private interest, as the source of interactions in the commodities and service markets.

It can be argued then, that this new context has given place to a third challenge, concerning the need to institute a new kind of individualism and promote a more participatory political action, with more actors in the fields of public assets, human capital, and hence, of higher education. This dichotomous area of global development is promoting a series of upstream values pertaining to the importance

of equality, the protection of the weak, freedom as autonomy, rights with responsibility, authority with democracy, cosmopolitan pluralism and a certain philosophical conservatism that redeems the past and history as a source of precautionary action (Giddens, 1999).

Higher education in the global market perspective

With the economic globalization and institutional changes that have allowed broader mobility of firms and capital, terms of trade have changed substantially, from inter- to intra-industry, reaching trade and outsourcing components—a third of world trade during the nineties (World Bank, 2000). This environment of free trade has permeated the influence of public decisions on higher education, especially in regard to regulating study plans and programs and their influence on vocational training. However, these overall directions have overlooked the importance of local development, particularly in terms of appropriate institutions for assimilating better practices (Ruiz Duran, 2000). This is particularly true of the market's rise as a regulatory principle, not only relating to economic exchanges, but also concerning the way modern societies and training institutions, such as HEI, think and act.

The market as a social relationship that permits and regulates trade between economic and social actors, sustains its efficiency with voluntary action, i.e. in its ability to choose agents concerned with a range of options perceived or known. This efficiency is greater when there is more voluntary and conscious action. However, it should be noted that this relationship can foster innovation and competition in existing practices, as long as no one has the ability to affect prices individually; if existing investments can be mobilized between activities and localities; and if the persistence of the offerers is sustained in activities efficiently carried out. However, the market may fail to act when goods and services are not properly delivered to the customers by those who have the responsibility to do this. The most common market failures are often found in flawed competition, when the most dominant agents or participants are less competitive, and when they impose excessive costs within the market. These failures also occur when the information between the goods and services—offered and provided—is inadequate, or when the relationship between demand and satisfaction is subject to delays (Stevens, 1993).

For all these reasons, it can be said that the professional job market is flawed by nature, insofar as students as job applicants, and employers offering positions, although relating to each other in the market, must interact for the interpretation of the employers' needs and the development of applicants' characteristics, through institutions of higher education. The flaw comes from the fact that training through higher education is traditionally a slow, independent process, which, in making its decisions, incorporates information which will be validated some years later. The long time lag between selection, education and delivery of professional labor market skills generates mismatches of qualifications, and uncertainty as to the usefulness of these investments. The theory of human capital as a theory of

demand for education and training which emphasizes those aspects of investment surrounding these decisions, points out that individuals choose their optimum periods of schooling, comparing in value the present cost of their investment with the benefits they will derive from it in the future.

Costs, individual decisions and public spending on higher education

The costs of higher education for families include not only the direct costs individuals spend on tuition, books, transportation and food, but also the indirect cost that equal, in general, the value of the time spent studying. Given this cost structure, higher education can be seen as an efficient public investment, contrasting with the inability of individuals to make private investments, which because of their cost and the social distribution of income, cannot deliver their educational services to the necessary extent. In this sense, higher education, which in an efficient market is a competitive commodity, excludable and divisible, as a public commodity is a non-competitive product, whose consumption does not reduce that of other merchandise. It is a commodity non-excludable and indivisible—indivisible, because one cannot split it up for sale. Therefore, higher education can be seen as an efficient public investment when it impacts the growth of private benefits for those who invest in the formation of human capital, because it generates positive externalities[2] for businesses and individuals, and reduces time delays and uncertainty against the delivery capability of private training options.

In this model, the offer function (O) for higher education reflects the behavior of public and private costs of education, including transaction costs involved in its administration, supervision and regulation. In this case, the expected behavior would be that as funding grows, so does enrollment. The case of demand (D) expressed in the behavior of enrollment in higher education institutions, reflects the value that students attach to greater skills and knowledge, including the personal satisfaction that these signify for whatever reason. This would indicate that the demand for higher education behaves in direct relation to the benefits expected from it, whatever they may be, taking into account not only the value of economic returns associated with the diploma, but also personal satisfaction.

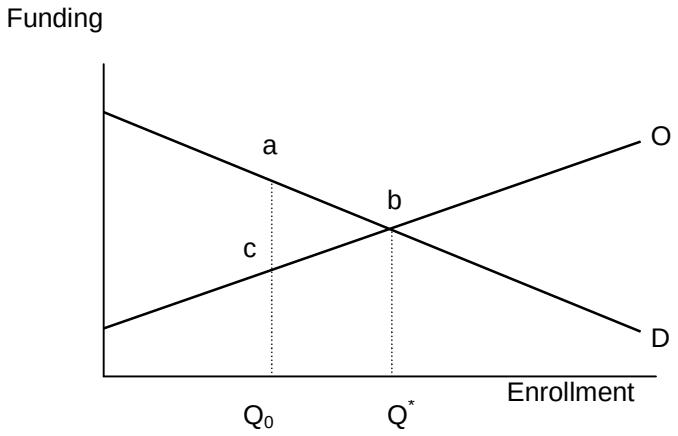

Figure 1. Educational expenditure and demand for higher education.

We can see in the graph that if higher education is Pareto efficient,[3] since its allocations do not affect those of other agents and sectors; and if they have no cost, or if it is minimal, the benefits of new investment and government allocations that stimulate increased enrollment from Qo to Q* would be QoabQ*, because it is the area under the demand curve. In this case, the benefits would be greater than the costs, which would be QocbQ*, as the area under the supply curve, and net profit would be: abc.

This approach suggests that a Pareto optimal efficiency condition as observed in Qo, can be modified through an additional allocation of resources to increase enrollment. However, the new level Q* is a potentially new Pareto optimal; there must be established the need for a Kaldor-Hicks compensation test, which states that a policy can be considered social welfare if it has the potential to make someone feel better without making another worse. This could be managed if the winners of the higher education opportunities through new investments and allocations could compensate the losers while still winning for themselves the benefit of the private advantages of education.

Nevertheless, this compensation test, in considering only criteria of efficient equilibriums between offer and demand, including compensation from winners to losers, does not ask if the current distribution of resources and opportunities is appropriate in terms of equity. This suggests that even in the best of cases, the allocative efficiency of public resources in higher education, while encouraging enrollment and credentialing, can scarcely state equity objectives if the socio-economic structure in which it is inserted is not considered; and if there is not applied, therefore, an outline of measures and opportunities that offset previous structural inequalities (Williams, 1993).

Moreover, assuming that individuals make their decisions about access to higher education based on the economic benefits they observe today, the expectation of

benefit decreases over time as the satisfaction of labor demand causes other individuals who made the same decision to find their earnings reduced.

Relevant empirical studies indicate that at first, with the growth of free education, the demand for higher education abates the costs and facilitates the decision to study. However, with a limited expansion of educational opportunities and indications of negative future benefits in the market, decisions to study would be associated more with the parents' educational level and economic status, especially with a need for another type of compensatory attention to the higher-education applicants, according to their school achievement, social background and expectations (San Segundo and Petrongolo, 2000).

Liaison and absorption as challenges for higher education

Higher education is a project that does not stop with study and professional training. Graduates indeed need to secure an opportunity to complete their education productively. Discussion of this suggests that the intermediary role higher education plays in the professional marketplace, while positive in terms of the opportunity of access to education, has problems in the way it organizes the educational process so as to facilitate transition to the world of work. Consequently, when the graduates are not incorporated into productive activities, higher education is questioned not only as a means of social mobility for individuals, but also as a space for interaction between job applicants and employers. This occurs because each of the higher education institutions, as a productive and social unit, has its own objectives (Mungaray, 2000).

The problematical correlation between educational and productive systems gives rise to a differential and deficient absorption (Muñoz and Márquez, 2000). This situation requires of higher education a permanent effort directed toward institutional adaptation for connection with its productive milieu, to the extent that its role as intermediary allows greater flexibility and innovation. With great frequency, however, the proposal of different and untestable objectives with their environments does not allow it to be part of the innovative dynamic of the global world, nor a space for proposing innovative practices and social problems which, sometimes, society itself, deeply differentiated, cannot propose (Castells, 2000).

The malabsorption problem has different origins. As to the academic-university position, there are problems of curriculum design that reflect the educational institutions' objectives and assessments of their environment, concerning the needs of education and training. From an economic standpoint, both education and training produce increases in productivity and positive externalities for the rest of the productive and social activities. In fact, training has turned out to be a short-term palliative for the problems that curricularly-organized education cannot solve, to bring the needs of the professional labor demand closer to the nature of the supply (Ruesga, *et al*. 2000).

An additional problem at this level arises from the concentration of enrollment in certain areas, primarily economic-administrative, since in principle, these seem to have no potential for generating adequate income for those enrolled, nor added value for their employers. At this level, higher education is often limited to providing general elements for incorporating graduates into jobs offered by employers (Brennan, 2000), assuming that the graduates need more specific training for the job. However, within educational institutions there is seldom any reflection about the organization of economic and industrial activity in which graduates will be inserted. Less common is the continuous analysis of market behavior in which firms of different sizes participate, and it is virtually impossible to articulate a differential dialogue with the various economic and social actors that contextualize their development. Consequently, it is hard to see that the flawed competition which characterizes the performance of employers in the globalizing environment generates externalities that inhibit investment in specific types of training. It might be said that the double competition faced by investors in the labor market and the sales market in a global business environment has reduced the possibilities of offering training complementary to the university education. However, the problems of attitude and job mobility among graduates of higher education further accentuate the entrepreneurial attitude, since they have no incentive to stay longer than is justified by the investment in specific training (Alba and Tugores, 2000). This has changed the meaning of what employers' expect from higher education because in global conditions they would rather invest in the generic training of a small number of workers, rather than offer specific training to a larger number.

On the structural side, the problems of income distribution prevent equal access opportunities from actually being differential, the opportunities being concentrated in families with higher incomes, to the extent that higher education does not have differential policies that establish access quotas by social origin and economic status. As an example, according to Muñoz and Márquez (2000), the coverage rate for higher education among young people aged 20 to 24 years belonging to the highest quintile of income distribution in Latin America is 47.7%, very similar to the median for developed countries, which is 50.5%. In contrast, that of youth of the same age in the lowest quintile is 16.3%, below the Latin American average, which is 18.4%. So then, if as shown by Ruiz Duran (1997), per capita income is positively correlated with the coverage rate, the important but relatively low growth rate of higher education coverage in Mexico, which in 1999 reached 18%, is surely associated with the fact that between 1980 and 1997 the Mexican per capita income, measured in 1987 prices, remained virtually constant in going from U.S. dollars of 1947 to 1910.

Prospects of higher education compared to the professional market

A clear explanation, without any implication that the task is easy, is that quality as the goal of higher education should be an inclusive process, and therefore innovative. If quality is sustained in highly scholastic teaching, then achieving it

depends on funding in large amounts. Space for innovation is found in the management and agreement of a few, and its results are only observed as concerning small segments of the labor market. If, on the other hand, quality is based on learning, then achieving it will depend on the relevance with which this learning is organized, and the participation of all the academic bodies involved to take care of more segments of the labor market. Orientation toward teaching directs academic and scholarly activity toward its own interior based on promoting teaching in staff meetings. Orientation toward learning proposes that academic and university activity be linked with its environment through creative teaching that articulates staff meetings with creativity, and professional spaces on the basis of research and extension. If excellence is the fulfillment of the needs of the environment (Mungaray, 1999), then the criteria of the working world and the world of higher education must be addressed directly in consensual curriculum designs that would overcome the duality between scholars engaged in academic activities and the designers of educational policy, but also the duality between these and the designers of economic and industrial policy.

In a society where learning is a factor of equality or of difference, higher education needs to evaluate and accept the role which labor plays in learning. In real terms, the dynamism of the professional market and the affluence of so many private service providers, in recent years, are indicators that facing the employment world, higher education is only one option, with graduates with better job opportunities and higher defenses against unemployment. The importance of their impact, in fact, would do as much as possible to maintain a monopoly regarding certification. To the extent that economic globalization is dominating the behavior of companies, differentiating them by sectors and regions, and the segmentation of professional markets requires more rapid responses of more specific training within university education, the competition for the certification of skills and qualifications will be accentuated. It is probable that higher education will always have reasons not only to remain as it is, rather than change the direction of the services it offers, but also the professional market where it has been located as an imperfect intermediary will place sanctions by means of the revelation of those acting through it. Perhaps the eventual question about the matter is whether higher education can be maintained as it is without recognizing every type of learning, and not only what the universities can now offer. Moreover, we might ask, would it be possible to learn—through an uncomfortable but conveniently dominant mediation between job applicants and employers—how to take a participatory and responsible position as a supplier of professionals for those who need them?

The market as a competitive relationship that stimulates technological change, the need for learning and liaison, requires models of higher education efficiently oriented toward the market and the differentiations it generates or accentuates. This link should provide young people seeking education with innovative opportunities for enrollment; it should also give students innovative opportunities for social and professional relationships. This assumes a higher education structure promoted and supported not only by students, faculty and university authorities—which in itself would be important—but also the open participation,

with rules, of all the social and economic agents who represent the corporate employment sectors of all sizes and government levels. In principle, this would enable the HEIS to act with greater efficiency as a space for mediation and coordination between job applicants and employers. This can be achieved the very moment that, guided by the best economic and social practices in the global environment, they can at the global level, take their place before sectors and regions as providers of professionals with generic and specific training sufficient for employers as employee-seekers. To achieve this, a reorganization of the academic processes would be sufficient. However, other processes of innovation are needed in the areas of administration, funding and evaluation; these would allow not only greater efficiency, but would also permit current leadership to carry out institutional duties with social efficacy.

In the framework of a predominantly economic globalization, although a globalization with social and cultural impacts, nations and regions are not producing according to their resources, but according to what their institutions allow (Ayala, 1999). Consequently, while investment levels make development possible, the institutional environment is a necessary condition. Therefore, the different roles that higher education institutions play in countries is associated with the various public policies and institutions forged as negotiations and long-term arrangements which economic and social agents are able to establish, not only to reduce the costs of the transaction for society, but also to reconstruct the logic of social and community commitment toward development. In the context of globality, the benefits can reach regions and people, if in higher education, as Professor Palacio points out (J. Palacio, personal communication, January 20, 2001), immediacy is combatted with a historical perspective on things; passivity with a responsible activity, and individualism with cooperation and solidarity.

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[2] This refers to all those factors not included in the planning of costs and revenues of the businesses, but which have a positive impact on their development. One clear example is the benefits that businesses obtain, when due to the quality of education and training activities of HEIS, their levels of innovation and increase productivity are increased without additional cost to the companies (Pass *et al*., 1991).

[3] In 1906, the engineer Vilfredo Pareto wrote his *Manuale di Ecomomia Politica*, which stated the key aspects of the theory of general equilibrium. He argued that since individuals face inequalities in terms of utility costs, it was impossible to improve the welfare of some without simultaneously reducing that of others. Under conditions of unequal wealth distribution, Pareto efficiency is when an assignment for the welfare of some, does not affect others (Pass *et al*. 1991).