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ON SOME DESIRED AND UNDESIRED SOCIAL AND ECONOMIC EFFECTS OF THE CLASSIC ELITE-MASS-UNIVERSAL MODEL OF HIGHER EDUCATION IN MARKET CONDITIONS: THE CASE OF SOME EU COUNTRIES

In the present world virtually all areas of human activities are, on the one hand, highly complex in themselves from the point of view of their essence, purpose, goals, constraints, procedures, etc. On the other hand, they are highly complex with respect to conceptual, spatial, temporal, etc. dimensions, and in their interrelations as they cannot be conceived separately, run independently of each other, assessed or evaluated just from particular points of view, etc. To say this in a colloquial way, a multitude of complex things are interrelated in an extremely complex way, maybe even beyond the human cognition and comprehension.

This all has a strong impact on the scope of interests and activities of many prestigious institutions, learned societies, strategic and policy making bodies and agencies, to just name a few. This concerns in particular all kinds of the most prestigious learned societies, like all kinds of academies of sciences (and arts) which gather prominent experts in various fields, not only with deep and narrow technical knowledge and skills but also thinkers, broadly perceived philosophers, people with

vision, etc. Such people can see much deeper and longer sighted than other advisors, strategists and policy makers, notably those who serve governments with their knowledge and expertise but whose perspective is by necessity related to shorter horizons.

Real Academia de Ciencias Económicas y Financieras (RACEF) is one of such prestigious learned societies that has always been concerned with issues and problems the importance of which is crucial to the society. The fact that the RACEF is focused on broadly perceived economics has played a very important role in this respect because it is obvious that economics concerns aspects that are of a key interest and importance to both individuals, social groups, organization, nations and countries, all kinds of groups of nations and countries, and –finally– the world as a whole. To address and solve problems that are important to the world we should start with an idea or concept, the biblical "word" with which and through which everything has begun, but then, sooner or later, we will end up with the necessity to face economic aspects which, in their very essence, are obviously concerned with social aspects as all what we, the economists, intend and do is ultimately meant for the benefit of the human beings.

The above mentioned very essence of extremely important and useful from the social point of view activities of the RACEF have been clearly reflected in a visionary initiative of a deep analysis and exchange of view and ideas related to those issues that has materialized in the organization of the IX International Session on *Revolution, Evolution and Involution in the Future of Social Systems* held in Barcelona on November 10, 2014. The Session gathered many prominent scholars and researchers in many areas who have presented their view on diverse issues, problems, aspects, and also some solutions, related to the topic of the Session.

This paper is a longer version of the author's presentation at that Session, and it is concerned with the author's recent interests and observations on what is going on all over the world, but notably in various countries of the European Community, in particular the so called new EU countries.

To be more specific, this paper is concerned with higher education in the sense of the education that is above the secondary school (high school), or – what might be a better description – which is at the college level education. However, we will make some comments on other levels of education, both below and above that level.

The importance of education has been obvious and important since the very beginning of the mankind though, evidently, the education as such has been meant in a different way as the needs of the society has been constantly changing over time. However, the importance of education has always been considered crucial for the development of the society, even by early rulers, sometimes very cruel and autocratic, but they have also been always aware that any loss of talents can be detrimental; of course, those talents should have worked for them but this is another story.

In most countries of the world, notably in those of the EU public expenditures on education is a considerable part of the state budget. A good source of data may here be the reports by the World Bank (cf. http://data.worldbank.org/topic/education). Basically, they consider mostly the total expenditures on educational institutions, public and non-public, educational administration, and some subsidies as the percentage of the total government expenditures. The World bank Web site contains also many other useful data on education, at different levels, including the college type level that is of interest to us.

It is quite obvious that in virtually all countries, notably those in the EU which belong to best developed countries, there is much interest in the effectiveness and efficiency of those educational expenditures which are under a close observation and scrutiny by all "agents" in-

volved because those means are public and their spending must be rationalized and well justified. One should also be aware that as the scope of educations goes towards more and more specialized, of a "high tech" type areas which require specially trained instructors and laboratories, the costs can go up sharply, even skyrocket.

As already mentioned, our interest in this paper will be higher education, at a college level, and something above, which might be called an university level, a something below, which would concern the education at an above secondary (high) school level though not exactly at a college or university level.

We will use in our analysis as a point of departure some general works on higher education, notably very interesting works of the late Martin Trow from the University of California, Berkeley who died in 2007. Martin Trow was the author of an extremely important study from 1973, written for the OECD (Organization for Economic Cooperation and Development) on the changing nature of the American higher education over the decades. Basically, that study concerned the transition of the higher education from an elite one, meant for a few chosen ones. to the one serving the "mass market" like it is the case today in virtually all countries. The reason why we have chosen as a point of departure the works of Trow is twofold. First of all, the top American universities dominate all university rankings and are in the forefront of top research, for various reasons like the access to the best students from all over the world, the availability of best teachers and researchers, a higher interest in innovative solutions by companies and institutions, a better functioning of the venture capital, etc.

Second, in particular because of profound social changes that occurred after the World War II, and to some extent after the Vietnam War, the American higher education system had to undergo deep changes which were, by the way, followed by necessity by similar, albeit not always to the same extent, changes all over the world. In our work we will basically use the original Trow's writings – for a comprehensive treatise we recommend: Trow M. (2005) Reflections on the transition from elite to mass to universal access: forms and phases of higher education in modern societies since WWII, in. P. Albach: International Handbook of Higher Educaton, Kluwer, Boston, pp. 1-66..

To start, let us first mention that the university system in virtually all countries of the world has a very old tradition. To concentrate on more modern times only, and on the European roots and tradition, we can well say that the tradition is some 1,000 years old.

Basically, a university, as meant today, is some institution of higher education which is supposed to serve more gifted young population to learn some non-vocational, more sophisticated and intellectually challenging skills, and which, after the end of a certain period and exams, is supposed to grant some degrees of proficiency that confirm the acquisition of a certain knowledge and skills, and also a certain "intellectual flexibility" as opposed to just technical skills.

However, if we go deeper, we can say that the very term "university" stems from the Latin "universitas magistrorum et scholarium" which can be translated as a community of teachers and scholars. Quite obviously, there were rules that have regulated the entry and being part of the university community as in the case of any professional or learned societies, or even guilds. An extremely important aspect has always been the autonomy of the university, and its freedom, which has usually been granted, and at least theoretically guaranteed, by the founder, usually some civil rulers like princes, kings, etc., or church.

That system has worked since the early 11th century, and it is usually assumed that the oldest European universities, which have operated along the above mentioned lines, and the relation to which will

be employed in this paper, were (the date of their foundation is given in the brackets; obviously, in many cases is dates are approximate, and one can find in various sources various dates): the University of Bologna (1088), the University of Paris (ca. 1150), the University of Oxford (1167), the University of Modena (1175), the University of Vicenza (1204), the University of Palencia(1208, later disappeared and reemerged as the University of Valladolid), the University of Cambridge (1209), the University of Salamanca (1218), the University of Montpellier (1220), the University of Padua (1222), the University of Naples Federico II (1224), the University of Toulouse (1229), the University of Siena (1240), the University of Valladolid (1241), the University of Northampton (1261), the University of Murcia (1272), the University of Macerata (1290), the University of Coimbra (1290) to name a few. In Central and Eastern Europe one can mentionCharles University of Prague (1348), Jagiellonian University in Cracow (1364), the University of Vienna (1365), the University of Pécs (1367), the University of Heidelberg (1386), the University of Leipzig (1409), the University of Rostock (1419), Uppsala University (1477), the University of Copenhagen (1479), again to just mention a few.

In next centuries hundreds of new universities have been founded all over the world, and for a good source of information we can refer the reader to http://en.wikipedia.org/wiki/List_of_oldest_universities_in_ continuous_operation. In our context, it may be worthwhile to notice that among those universities that are very high in all rankings, and which are relevant to the topic of this paper, some top American universities were basically founded, for obvious reasons, in ca. the 1600s and later, and we can mention here: Harvard University (1636), Yale University (1701), Princeton University (1746), Columbia University (1754), the University of Pennsylvania (1740), to list a few.

However, all the universities mentioned above, those founded in the medieval times and those founded much later, maybe even until the 1980s or even the early 1900s, or even more, until World War II, have clearly been what Trow, and also we in this paper, call "elite universities". Those universities were meant for students who, on the one hand, have come from privileged social classes who have had financial means to cover the tuition fees and other expenses for their children. Of course, this rule has had some exceptions because even young people from poorer families have sometimes found their way to higher education, mostly by becoming monks or other clergymen, but sometimes by finding benefactors. On the other hand, those universities have set some rules, sometimes strict, on intellectual capacities of the students. By no way this has been a mass type higher education. This all has been meant for the elite, either ruling or intellectual, very small in size but powerful.

As a natural consequence, the elite type of higher education has implied a limited access to that type of education that has therefore been considered a scarce good or resource. As aspirations of societies, and all their classes, have begun to grow over the centuries, even those people who – by old standards – have not been meant to have access to scarce and limited resources due to their social status or insufficient financial resources, have started requesting a fair and just distribution of goods, including a just access to higher education. This has basically been the very essence of all kinds of workers', peasants', socialist, communist, etc. movements. They have finally led to democratic societies, with much more limited restrictions on what people can achieve or gain regardless of their social status.

One should mention that though, for obvious reasons, such demands have not been met with a widespread acceptance by the ruling elite, more and more members of that elite, notably some statesmen and business leaders, have come to a natural conclusion that the society cannot afford to waste talents, both men and women, no matter from which social class they are, and cannot continue the policy of a limited access to scarce resources that would, sooner or later, lead to social unrests.

This all has become evident in particular in the first decades of the 1900s when one could clearly see that conflicts of interests between the then world powers, exemplified by Russia (then Soviet Union), the Austro-Hungarian Empire, Prussia (then Germany), the Otoman Empire, Japan, the British Empire, etc. would ultimately lead to global scale military conflicts, maybe wars. This had materialized twice, mainly as World War I and World War II, and had completely changed the power structure in the world, notably with the USA emerging as the main economic and military power.

For our purposes it was World War II that had been the turning point. In fact, it could be said that it had changed the higher education scene in virtually all industrialized countries, notably starting in the USA, by changing the very essence of the university systems, curricula development, emphasis on research, etc. The American universities had come out of that period as leading higher education institutions.

What has happened as a result of World War II in the higher education field is worth a long treatise by itself, and we cannot provide in this short note a deeper and comprehensive analysis. Basically, the needs of war have triggered a forced refocusing of the functioning of universities, their financing, founding new schools and departments, etc. Just to name a few, funding has been directed to those universities, schools and departments, even research groups, who have been able to "produce" solutions to be useful, initially for the victory over the Nazis, then for the development of new technologies needed to cope with Soviet military developments because Cold War has started practically immediately after the end of World War II, and finally for an increase of competitiveness and innovativeness of the American economy in general. This has implied the funding of research at many, notably top, American universities, which has led to their dominance in all rankings. A notable effect has also been a visible shift in the structure of enrolment to the universities as more and more students have been choosing maths, physics, technology, economics, management, etc. all which have provided much higher chances for well paid jobs, at the expense of humanities, social sciences, etc. Unfortunately, in recent years this trend has been reversed for native American students but, fortunately enough, there has been a high influx of high quality foreign students, notably from China or India, who have been interested in all kinds of technology related studies.

Coming back to more general aspects. As we have already mentioned, the higher education was a scarce good before World War II, and in most societies there were no more than 3-5 % of young people who got higher education degrees. However, World War II, in particular its worldwide character and a successful defeat of the Nazis by worldwide collaboration, had triggered extremely deep social and political changes. Hundreds of thousands of people came back from war, with increased aspirations, and they had started to knock to the doors of all kinds of schools, notably universities. Moreover, the war – with all its high tech developments, progress and need for more sophisticated solutions, and tools and techniques – had clearly indicated that the American, but also other economies, notably in Europe and the Far East, would soon need a highly qualified workforce, beyond the usual secondary school level.

This has clearly called for a fundamental change of the university system: from the elitist one of the past, of a relatively low scale, to the new, mass access type, open to more and more young (and not only young) people, not only from privileged classes. Obviously, this new system would need radical changes, notably related to the transition of either free or semi-free higher education or a proper system of scholarships to make it possible for all candidates to be able to complete their studies. This all has been considered crucial for the implementation of the policy "we cannot afford to loose any talent", and hence to be competitive in an increasingly competitive world.

Such a transition to mass education has had many aspects and has manifested itself in various ways. First of all, the growth rate of the number of students has increased rapidly, doubled in the 1960s and 1970s during just some 5 years. This has obviously implied a sheer growth of the number of students and universities. These changes alone have already revolutionized the higher education system because no well established system can stand such dramatic changes over such a short period. Moreover, those changes have changed the very essence of the university life, notably in the sense that due to a high number of students, which has not been followed by an adequate increase in the number of teachers. Moreover, there has also been a change in the age structures of teachers (who have become much younger than in the past), the traditional relations between the students and professors used to play the role of mentors, have also changed, with a danger of a lower quality of education.

To give some quantitative estimates, the percentage of young population enrolled in higher education institutions, which in most developed countries was at the level of 4-5 % just after World War II, increased to ca. 10-20 % in the 1960s-1970s, reaching ca. 30% in the beginning of the new century, and constantly growing, with the goal set at 50% or more for a not so distant future..

A natural question that arises is whether this mass type higher education system is all what has been conceptualized, discussed and even implemented. Of course not, because higher education, being such a serious matter, with such a strong economic and social impact and importance, has triggered much research and deep analysis of present and future trends. Basically, what can be seen is that there may be a next phase of development that can be called a universal access education. It has much to do with the Internet and Web technologies that make the access to information and knowledge to everybody, practically free of charge, from any place, at any convenient time, etc. This concept, which is closely related to e-learning, distant learning, etc. is obviously the future. However, since it involves many highly specific issues, that go beyond the topic set for the meeting, we will not deal with it in this paper. An interesting element of that mass type higher education system that practically dominates all over the world, is the system that is being implemented in Europe, and is called the Bologna Process. It was launched in 1999 by the Ministers of Education and university leaders of 29 countries, and then further developed to include 46 countries, not only European. Basically, the Bologna Process does not aim to unify particular national educational systems but to somehow coordinate their development into a really interconnected and unified higher education system. From the practical point of view, it does not try to unify the national and university systems, because this would not be possible taking into account century long tradition of so many European universities, but to improve and facilitate processes of recognition of degrees and academic qualifications to increase mobility of students and professors, and in that way facilitative a free movement of humans in the European Union countries (and maybe also beyond) which is one of the principles.

The Bologna Process system introduces basically a three cycle degree higher education system for:

- Undergraduates, i.e. who get Bachelor (BA, BS, Engineer, etc.) degrees,
- Graduates, i.e. who get Master (MA, MS, Diplom-Ingenieur., etc.),
- Doctoral graduates, i.e. who get Ph.D. degrees.

An important aspect is that the countries who have signed the agreement have done a huge effort to adjust their higher education systems, curricula, etc. to follow the rules. This is clearly a positive effect.

As one can clearly see, the Bologna Process is a sign of a mass type higher education system, maybe in its extreme version. The system has very many advantages, and clearly reflects needs and aspirations of the modern European society, notably young people. Moreover, from a political point of view it may be attractive as it somehow "promises" to so many young people the access to the "elite" in the sense of being able to enter a relatively small circle of top graduates in quite a natural and straightforward way. However, as it is always the case, there are some critics who raise various undesired effects. There have appeared many serious analyses of pros and cons of the Bologna Process, which have led to some positive changes.

We will not deal in detail with these analyses because of a lack of space. Just, from my personal point of view, the three cycle system is a good idea but up to the two first cycles, i.e. up to the usual bachelor and master levels. In my opinion, the doctoral (PhD) level is very specific and should be considered separately since, to be really effective and efficient, it should proceed much more personally in a "student – mentor" relation and not as the usual university type lecture, labs, projects, etc. system.

That "old fashioned" way of collaboration between a professor and a PhD student would certainly contribute to a higher level of PhD dissertations and a better preparation of the PhD students, notably for research and an academic career. Clearly, it is more time and effort consuming and could limit the number of PhD holders. However, it might be a positive effect because it is difficult to imagine how national economies could absorb such a number of PhD holders who enter each year the labor market. The number of positions at universities seems to be not only limited but shrinking, and the same often applies to research positions in industry. Moreover, there are only a few countries, exemplified by Germany or Austria, in which it is normal to have PhD holders in business, banks, public administration, politics, etc. After that brief presentation of the transition from the elite to the mass type higher education, we can briefly summarize our personal opinion about the pros and cons of the present, almost universally accepted and implemented mass higher education system.

Basically, the main advantage seems to be that more and more young people can enroll in a higher education type institution. This concerns both top universities or some less prestigious, more vocational type institutions. In most countries these people can choose between public (state, governmental, etc.) schools or private schools. In some countries there are the public institutions only and in other ones there may also be non-public (private) schools which in some countries can be good, often even better than public ones, and in some countries they are considered a second tier education. Anyway, there is a choice, and no talent is lost.

This mass education has also played a positive role in shaping proper governmental policies because in the situation of so many schools and students governments has had to, first of all, include an adequate share of the budget for education, and second, to develop a proper system of scholarships and other subsidies to support students from poorer families, and also those who are exceptionally talented. In general, it can be said that the transition to the mass higher education has considerably raised the human capital and social capital.

Of course, while speaking about pros, but considered at a different level, the mass higher education has certainly helped policy makers and politicians alleviate many social problems related to a lack of job opportunities for young people that is a real plague in many countries of the European Union. This policy of delaying the entry of young people to the labor market is however a temporary solution that just postpones the problems, not solves them.

There are clearly many cons with respect to the mass higher education. First, that rapid and unprecedented development of higher education possibilities, which has created so many diverse possibilities for young people, has clearly lowered the overall level of education. This is due to many things exemplified by an enormous growth of the number of students without a corresponding increase in the number of teachers and well equipped facilities. This has led to too large student groups, notably in labs and projects requiring specialized equipment. The financing of higher education institutions has become by necessity tighter and tighter, and for alleviating these problems authorities have constantly promoted and developed a system in which additional money from sources ranging from governmental research funding agencies to commercial and industrial companies has been the only source for expenditures beyond the standard, minimum cost financing of teaching and maybe some basic research.

On the other hand, the proliferation of non-public higher education institutions which have been allowed in many European Union countries over the last decades, has resulted in the offering of education in fields that have not needed much financial resources, labs, etc. They have been attractive to the young people, like humanities or social sciences, but have not guaranteed employment for the graduates. So, strangely enough, getting a possibility to get higher education, could have implied more frustration due to higher ambitions and little chances of fulfilling them. In general, the higher education systems in virtually all European Union countries have been blamed for not responding to the needs of business and the labor market.

One should, in our opinion, somehow rethink the argument that such a rapid expansion of higher education is a real necessity because of needs of the so called knowledge based economy that will determine the future of the world, treating all countries alike. It is not exactly true as the "real" knowledge based economy will probably occur and lead to tremendous profits in just a handful of best developed countries. In the majority of countries, not only in the European Union, the economy will remain mixed, that is, there will be what may be meant in a broad

sense as a knowledge based economy, but the bulk of economy will be traditional, using "knowledge" but not really being "knowledge based". This should be taken into account while developing higher education policies, and advocating - for temporal political benefits a higher and higher percentage of the young population to be enrolled in higher education institutions. Notice that there are many countries who have practically liquidated an old system of either more vocational, technical skill oriented "lower level" higher education institutions, have not paid any attention to the development of modern high school level institutions, and even - consciously or not - discouraged young people to enter schools of less than a higher education type levels. These countries have tremendous problems with the unemployment rate among young people. On the other hand, Germany, the strongest and best developed European Union economy, manufacturing more high tech products than any other European country, and who can well be called a knowledge based economy, has not abandoned the old and good system of vocational schools exemplified by the "Hauptschule" at the lower level and the "Fachhochschule" at the higher level. Germany has the lowest unemployment rates among young people, up to 25 years of age (less than 8% as compared to even 40-50% in some Southern European countries). At the same time, one should mention that Germany has many top universities as well. Maybe such a mix is what the European Union economy does need and which should be followed by other European Union countries.