

GLOBAL CRISIS AND HIGHER EDUCATION WORLDWIDE: A SYNTHETIC REVIEW

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At no time in history has it been more important to invest in Higher Education as a major force in building an inclusive and diverse knowledge society and to advance research, innovation and creativity.
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Global crisis and education: widespread effects and some operational proposals

The outstanding progresses made in the field of education in the last few decades in all the countries, both developed and developing ones, are seriously threatened by global economic crisis, which has burst in 2008 and is still ongoing.

To this day, the most palpable widespread effect - by now stable -, which can be noticed in the majority of the countries, is represented by families and governments decreasing power of investing in education.

Moreover, a survey conducted in forty-three countries between 2008 and 2009 – which means right after the outbreak of the crisis – “on the impact of the Global Economic Crisis on education”, hinged on “education funding, infrastructure, human resources and official development assistance” (EI, 2009), shows that:

- the most serious effects of the largest proportions can be seen in those countries that mainly depend on international aids;
- also the countries that have experienced an extremely fast economic development in the last decade have suffered from the crisis, because their development immediately and severely sustained the effects of the system financial collapse;
- on the contrary, the most prosperous countries, whose economic system is built on more solid foundations, not only better resist to the impact of the crisis, but they also succeed in keeping targeted and wide-ranging education

policies and in achieving the greatest benefit throughout large-scale initiatives aimed at boosting the sector. Nevertheless, also their education and training systems suffer from the negative effects of the crisis, especially from the general decrease of the tax revenues and from the corresponding increase of the welfare spending.

In 2010 the UNESCO's *Education for All. Global monitoring report*, highlighting how much the current crisis emphasizes its global nature and the mutual interdependence between different countries economies, with worry states that the achievement of 2015 education goals is more and more remote, under the weight of a widespread poverty, economic stagnation and the severe budgets shrinkage adopted by governments, called to face the growing needs of the welfare.

In the poorest countries and more indigent classes the education level is in danger and the school desertion grows at a hectic pace: among the main causes, families poverty, decline in state support and lack of good schools have to be underlined.

Many international studies agree that letting education and learning decline in time of crisis, especially in the developing countries, could jeopardize the countries ability to be competitive again or to become so when the economic recovery starts in an irreversible way.

In the past, indeed, the countries that reacted more actively to the crises, with sharp programs of development and enhancement of the skills focused on unemployed and young people, are those which quickly gained the greatest benefits from the following recovery.

Moreover, in the previous crises was already seen by everybody worldwide - without any important differences between the several countries - that the better educated workers can better react to crisis repercussions for what concerns both the employment rate and the annual income, "because they are generally more able to adapt to the changing demands of the labour market and to the use of new technologies, and they are more able to use information to find jobs or other source of income during the recovery". On the contrary, less educated workers turned out to be weaker, because their skills are unsuitable, in addition to the fact that their reconversion and professional requalification is really very hard to put into practice (Barrera et al., 2009).

In order to optimize the commitment in the field of education during recession, which always means a lack of resources, it is felt the need of a close cooperation between all the moving forces, both at national and international level – especially between developing and donor countries – aimed at coordinating and combining efforts and investments, defining a rigorous scale of priorities.

Therefore, the attention to the effectiveness and the efficiency of actions and investments becomes a priority. The crisis could even represent an opportunity in order to improve education and training systems performance, reducing the dispersion and cutting the waste of resources, increasing aids effectiveness and efficiency, by making all the involved institutions feel responsible, as schools, political and administrative organizations.

In the past, some social policies already proved to be exceptionally effective when put to the test, on both the demand side and the supply side.

Among the first, conditional cash transfer programs (CCT), scholarships and academic insertion programs have to be pointed out.

The second ones, aimed at protecting and increasing the quality of education and schooling as much as possible, include non-repayable grants directed to schools and interventions aimed at assuring the teachers not only the ordinary payment of their wages, but also considerable incentives so that they actively devote themselves to teaching .

Therefore, while the recession goes on, it seems essential to keep investing in human resources development, just considering the crisis as a chance to carry out some key reforms, as:

- improving education sector mid- and long-term performance;
- improving teachers' performances and teaching/learning quality;
- increasing systems efficiency and effectiveness;
- promoting and supporting the updating, the enhancement and the improvement of the labour force skills;
- giving a constant support to policy makers, so that their action can be based on quality data and information, always up-to-date, reliable and deriving from tangible reality (Barrera et al., 2009).

Global crisis and higher education: an overview

In the last twenty years the HE has experienced a fast and unbroken expansion, playing a crucial role in globalization, at the same time acting both as a cause and as an effect: sure enough it has remarkably contributed to the integration in the global picture of developing and emerging countries.

The economic crisis, therefore, befell on a sector that was experiencing a steady growth since long time before and that was going through an advanced stage of strengthening at international level. In such a way it:

- cast doubt on working and career prospects of graduated people, which were more favourable and steady compared to other social clusters with a lower education level;
- sensibly reduced the available resources intended for the HE, since both governments and private funds had been drastically cut down, as well as the wealth of the families that, due to a general decrease of their incomes and due to unemployment, less invest in education and training;
- caused the impoverishment of many universities, which lost their investments due to the bank collapse, often riskily running into debts;
- jeopardized and, sometimes, even compromised the means of helping the students (loans, scholarships, grants) due to providers bankrupt;
- caused significant cuts to international aids, especially made by bilateral and multilateral agencies, together with a clampdown on programs and personnel recruitment. Furthermore, in the most severely affected countries, radical wages cuts, programs close up and merging were witnessed, till the entire restoration of the HE system.

From a brief evaluation of the researches carried out right on the impact of the crisis on HE, besides some persistent criticalities, everywhere concrete indications showing the dynamism and the vitality of the sector emerge. Two reports of the 2009 - both written under the aegis of the UNESCO - are enlightening.

The Quick Survey on education underlines how the crisis has favoured the birth of new models of university financial autonomy,

based on a marked diversification (cost sharing, cost recovery, tuition fees, loans for students, fund raising, etc.), able to make university less dependent on government budgets.

In Varghese's opinion (2009) its fast growth in the wider context of globalization just made the HE desert the traditional government monopoly, becoming "a market-determined process" in an irreversible way.

Indeed, a widespread awareness still persists and even strengthens in everybody's convictions - institutions, civilized society, families and individuals - that is that HE and research represent a key-bulwark against the crisis, giving their crucial contribution to the growth and to the economic competitiveness. In this way "higher education is now seen as part of the solution and is being included as an element in recovery plans and stimulus packages" (Varghese, 2010).

Nevertheless, the global crisis didn't altered the main current changes and trends, but only accelerated them.

In the global market, the increase of employment opportunities for the tertiary educated and the general demand for highly skilled labour forces caused the HE standardization, characterized by private sector success and transnational scale achievement, both expressed by four different things: e-learning, institution mobility, students' mobility and teachers' mobility.

Today in university, most of all, who produces skills that are useful in the global labour market is generally recognised and, for this reason, almost everywhere, a HE systems reorientation is ongoing, aimed at adapting them to the market new requirements, focusing now on more usable branches of learning, such as engineering, ICTs and English.

In this way, especially in an international scenario of long lasting crisis, the competition between education providers, both public and private, both national and international, has become violent.

The public sector stepping back is understandable, not only because of governments funds massive slashing, but also because it is reluctant to focus on industry and economy needs.

So, financing is increasingly guided by demand. This trend in practice means that, on the one hand, students' freedom to choose study programs is growing and, on the other hand, the role played by private and industrial sector in financing is becoming more and more crucial.

Therefore, the private sector rise and the growing role played by transnational HE have to be considered critical and deeply interlaced phenomena, which, on the one hand, are intensified by the crisis going on, but, on the other hand, greatly suffer the consequences of it.

So it is felt the urgent need of a vigorous action on HE taken by the State, that has to plan and regulate the sector no longer as a simple financier - prevalent or exclusive - or as a controller, but as a facilitator or supervisor.

Just so, on many sides it is felt the need for the governments to establish roles and set up a regulatory framework at a national, local, and international level, in order to guarantee a suitable reshaping of the whole sector during the standardization process, as well as a harmonious development of private and transnational segments, HE quality and fairness, by expanding the access from a structural point of view and by preventing the risk of an exacerbation of imbalances and inequalities.

As a consequence, just in conjunction with the crisis, the State, as a financier, should concentrate its limited resources on the support of the most underprivileged groups and on definite critical areas, making greater efforts to regulate the whole sector, without dangerously leaving it at the mercy of market law.

Public responsibility has indeed increased since HE became the greatest driver of growth and innovation in the knowledge economy. Many studies on the subject all agree in stating that considerable investments in human resources, which especially means in education and HE, still produce remarkable benefits both at individual and social level, even during a great recession time.

On a personal basis, they assure higher profits and better professional prospects all life long.

From both an individual and a social point of view, on a whole, among those who received a better education, a higher welfare can be noticed, as well as greater savings and consumption, together with a better health, and lower expenses for the sanitary assistance. At last, at a social level, a long-term connection between HE and social and economic development can be found, with a significant rise of competition.

Symmetrically, university dropout costs turned out to be fairly high, both on a personal and family base and on a society as a whole base.

Main trends

Standardization, privatization and the problem of financial support

Generally, despite the current crisis, the demand for HE is going to further increase: the enrolments at university keep on rising everywhere indeed, both in Europe and in Asia, because the students and their families consider university education a safe investment in difficult times. So, an outstanding increase of HE is expected, especially in Asian and Pacific regions, for several reasons: the ceaseless demographic pressure and a continuous development of secondary education; better job opportunities and a higher income for graduates.

But the expansion of the tertiary education will unavoidably mean higher costs. And, because of the decreased availability of state resources, first of all this will imply a further rise of university taxes. Already remarkably increased in Asia, these taxes are spreading and quickly establishing themselves in all of Europe, also in public universities. At the same time, the private sector will gain importance in HE services supply. Therefore, the impending danger is represented by an extreme dependence on the market, which could produce and/or worsen problems of costs, quality and equity, all exacerbated by government resources slenderness. So, there are two core issues in the international discussion about HE: how should it be financed? Which role should the State and private sector play?

Based on the experience made during the previous financial crisis in Asia (1997), have been formulated some essential advices stressing the main cruxes of the matter: financing models sustainability; diversification of income flows and, therefore, of financing sources; a suitable allocation of costs; the support (subsidies, loans, etc.) to poor and more vulnerable students; the strategies – national, regional, interregional – aimed at attract international students; a tighter connection between academy and business.

In general terms, the rise of tuition fees for the most appealing courses - the most demanded by the market - critically penalize all those disciplinary sectors that could be useful from a cultural and social point of view (ex. liberal arts, anthropology), but that are totally outside the market logic and the industry interests. Also here, therefore, the government is called to take part in order to

heal the greatest disciplinary imbalances.

Universities, for their part, have to adopt a new way of financing, based on an adequate and reliable public financing and on a strong diversification of the income structure, in order to mitigate the risks of sudden unilateral changes.

In the logic of financing sources diversification, the above mentioned options have become vital; therefore, what grows is the importance of private financing (especially fund raising) and of the services that represent valid complementary sources of financing, that is to say lifelong learning (LLL) and vocational education and training (VET), both pillars of the future and contemporary knowledge society.

In the modern pervading learning dimension, indeed, HE tends, on the one hand, to pass uninterruptedly to LLL, creating and strengthening a long-lasting relationship with students, and, on the other hand, to merge with VET, becoming an economic growth main instrument and establishing a privileged relationship with the world of production.

In order to protect the weak segments, the introduction and/or the increase of tuition fees have to become part and parcel of the general restoration of the system, ensuring the support to students through a full range of solutions (loans, grants and scholarships), shaped according to the type of study and social backgrounds.

In all the countries, concerning the students' loans, the toughest problems are those related to cost recovery. Australian model represents a good practice; on the contrary, the "graduate tax" proposal – a lifelong surtax on graduates' income – is a great matter of discussion, because the "repayment black hole" risks causing emigration and brain drain.

In order to be successful, new kinds, methods and organizational financial structures anyway need universities to benefit from a greater governance and decision-making autonomy, which let them manage fixed costs, still high, without being too strict, and remodulate funds allocation in a flexible and evolutionary way, together with the essential budget arrangements.

In fact, in front of the significant reduction of the state funds intended for universities and in front of the traditional financing deficiency, some global trends can be noticed: the increasing diversification of financing sources, together with research and development activities aimed at generating earnings (counselling, patenting, entrepreneurial and commercial initiatives); the focus

on transparency and efficiency; the performance orientation; more accountability, hiving off and autonomy needs; the entrepreneurship enhancement and the attention to the market.

Consequently, it is now clear why, among the main strategies adopted by HE institutions, we can find, as already seen, the introduction of university taxes, a greater commercialization of university services, policies deregulation, the search for alternative financing sources. The most reliable new financing ways all use more transparent financing models, product oriented processes and methods, based on performance indicators and on market led mechanisms. Concerning financing tools, in the developed countries many reforms are in progress, and, besides the traditional fees payment system, new ways based on performances are becoming popular.

In the developing countries the reforming process seems to be more turbulent, chaotic and traumatic, going with a persistent worry for the quality of teaching and research.

In the first, therefore, either hybrid systems - where funds come at the same time from public and private sector (UK) - are gaining ground, or systems consisting of many different components, because coming from government-university agreements grants, together with university taxes; they are partially based on performances and partially deriving from competition (Australia).

In the second, instead, governments keep on acting as the main financing source, if not the only one, which is something that makes big troubles, especially in Africa: for example a great number of enrolments, the lack of funds and the poor quality of education. Some extreme trends are spreading, as an exaggerate politicization of the policies on HE (as in Malaysia) and an increasing privatization of education.

In Asia, especially Eastern Asia, the number of students is rising at hectic pace. In the Arab countries great deficits are reported: lack of researching expertise, heavy genre discriminations and an awful use of resources. In South Africa the drastic state funds cut corresponds to a large scale introduction of university taxation (Ahmad et al., 2012).

Ultimately, market-friendly and customer-provider models, nowadays rising, represent key challenges for the typical core features of traditional HE, which has a mainly public origin: academic freedom and accountability, quality and access, certainty of funding

streams and sustainability (UCU, 2011).

In this framework, the State has to play the crucial role of guarantor, trying to balance the two HE prevalent trends, standardization and privatization, paying a great attention to quality and to its social facet, as public responsibility and equity.

Above all, broadly speaking, territorial, socio-economic and disciplinary equity - the most penalized issue in the market - should be essential in public policies: governments, indeed, have to guarantee the access to HE to underprivileged students from a socio-economic or territorial point of view, helping study fields that are not supported by the market and monitoring the quality and the efficiency of all HE institutions, both public and private (Varghese, 2009).

Transnational mobility

Concerning the impact of the crisis on transnational mobility, students' international mobility keeps on rising, a constant trend since the beginning of the millennium: USA and Western Europe (UK, Germany, France e Holland) are still the favourite destinations, now together with Japan for the Asian area.

China, the "giant", still remaining the main sender of international students, today successfully favours the return mobility and, thanks to Chinese and medicine, increasingly attracts foreign students, setting itself up as a regional and global education hub.

Also Korea, thanks to its strategy aimed at internationalizing teachers at home, is successfully increasing return mobility.

Nevertheless, student mobility flows are still quite unbalanced, from Asia to Europe and, more generally, from the South to the North of the world: once again the crisis didn't changed this trend, but only strengthened it.

Students' mobility worldwide gives rise to a real competition aimed at attracting the best students, becoming part of that "global war for talent" that represents a fundamental constituent of globalization. Moreover, the long since ongoing "battle for brains" has helped the large-scale adoption of rules for visa concession and, more generally, of immigration policies that make the skilled workers admission easy.

Students mobility also represents an excellent way of raising HE quality. In addition to students physical mobility, some competing kinds of transnational mobility are increasing and their

1. In Asian countries, for example, since many years ago several USA and UK branch campuses have been establishing.

programs (with distance education) and institutions (thanks to the establishment of foreign campuses branches)¹ successfully cross the national borders.

The English-speaking countries of Asia and Pacific (Australia, Malaysia, Singapore and Hong Kong) set themselves up as regional hubs for HE. Moreover, in India new universities are opening at a hectic pace, in order to keep young people within the country.

To the increase of students' transnational mobility corresponds a predictable rise of scholarships and government grants demand.

Symmetrically, universities dependence on international students rises, both in order to meet the need of an increasing internationalization and due to economic reasons, so to say, due to fee payments. In order to ensure a well balanced transnational mobility in the long term, some policies seems essential; on the one hand, policies meant to promote it by favouring visa concession and, on the other hand, the ones conceived to avoid the brain drain, guaranteeing the sustainability of the aids destined to the students with a most disadvantaged backgrounds (Varghese, 2009) (Asia-Europe Foundation, 2010).

HE worldwide: lessons learnt and experimental solutions

USA, the acknowledged leading country

As many other countries, due to the crisis, USA experienced an impressive fiscal contraction, which led to a dramatic and long lasting decrease of public budgets, both at a single states level and at a federal level. As a result, the funds devoted to HE have been radically cut down.

HE has been subjected to heavy cuts and still is, because universities anyway have the chance of recovering funds, thanks to the introduction and the increase of their services fees, which is an option that would be impossible for other public intervention areas. Currently, since state incomes are experiencing a slight increase, the prospects seems improved, even if only a little; however, it is going to take many years for the state financial availability to reach pre-recession levels. The future HE horizon will always bear the marks of current transformations, in an irreversible way, permanently taking a totally different shape compared to the past.

Most likely, state allocations will not rise in the short and medium term. Sure enough, the harsh competition for the meagre available resources, far-back already in progress, will not fail, because social state most pressing needs are going to last for a long time, caused by the crisis going on: on the one hand, there is an increasing sanitary and pension expense that will not be financed anymore; on the other hand, we found the objective difficulty to further rise taxes, which have been incessantly growing since 2008.

For this reason, the typical HE financing model seems unsustainable (Eckl & Pattison, 2010).

From USA comes a loud call to “combat the ‘Culture of can’t’”, addressed to all the people who hold key positions in education and HE world, as principals, managers, reformers and policy makers. Inaction, indeed, is often justified by “statutory, regulatory and contractual barriers”, which would not allow really incisive reforms. In fact, the real enemy is a mindset that hinders the change; on the contrary, the education leadership power is remarkable and could be effectively enhanced by two different means: adopting a successful legal strategy, thanks to a steady collaboration with lawyers, and establishing a tight cooperation and partnership with wide sectors of the most active and dynamic part of the civilized society: national networks, local business communities, philanthropic organizations, etc. (Hess & Downs, 2013).

Asian and Pacific countries, the emergent leaders

While local contexts are very different, in Asian and Pacific countries the impact of the global economic crisis on HE has generally been much less heavy compared to other countries.

The reasons of their greater resistance are manifold.

First, lessons learnt during the Asian financial crisis of the late 90s have been successfully exploited. In fact, the past Asian crisis favoured radical reforms within national HE systems, so that as from 2000 their structures and organizations have been gradually adapted to the globalization process, based on:

- the reduction of State role in HE and the increasing resource diversification;
- a market-friendly approach and a considerable stress on private sector’s growing importance.

Therefore, these policies made HE systems less dependent on government budgets, emphasizing their autonomy.

Second, since 2008, among the three options for financing HE public systems in time of crisis – reducing public funds, raising them, keeping them unchanged – Asian and Pacific countries for the most part have chosen to increase government funding through stimulus packages, in order to powerfully enhance education, HE, research and innovation; or, more rarely, they have chosen to maintain their previous levels of funding.

In fact, it is thought that only in this way the most inauspicious consequences of the economic crisis can be avoided. “Thus... higher education is now seen as part of the solution and is being included as an element in recovery plans and stimulus packages” (Varghese, 2010).

The amount of the fiscal stimulus packages for 2009 is (in US dollars): Australia 26 billion, China 795 billion, Indonesia 6.1 billion, Japan 125 billion, Malaysia 1.9 billion, New Zealand 290 million, Philippines 6.5 billion, Singapore 13.7 billion, Thailand 3.3 billion, Vietnam 1 billion (UNESCO Bangkok, 2009; 2012).

Thereby, it was chosen to focus resolutely on investments in HE, as common strategy to effectively combat the crisis, recognizing that HE is integral to economic competitiveness.

In 2009, in order to promote cooperation on tertiary education policy issues among eight countries that widely share “trends and discontinuities, commonalities and diversity, challenges and opportunities, successes and failures, as well as ongoing undertakings and experiments in various systems of education”, the Educational Research Institutes Network in the Asia-Pacific (ERI-Net) was established by UNESCO in China, Hong Kong, Japan, Korea, Malaysia, New Zealand, Philippines and Thailand (UNESCO - Bangkok, 2012).

The first research studies on the impact of global crisis on higher education of the region carried out by ERI-Net confirm, both generally and in detail, the trends outlined above.

In China government financing has been and still is the most funding for HE, because this is considered a key priority for the country. Here, the crisis at the same time has represented a challenge and an opportunity for HE system: thanks to its pressures national education landscape started to be modernized through a medium to long term reform program and a development plan 2010-2020.

Public funding for HE will continue to grow, but it will be tried to give room to private sector, encouraging private donations.

While Hong Kong and Malaysia present similar features, since within them repercussions of the world recession on HE have been weak, Japan shows a characteristic dichotomy: the impact of the international crisis is very severe on national economy, nevertheless HE seems to suffer very little from it in the three essential areas (funding, enrolment and graduate employment).

The Korean HE policy is certainly the most paradigmatic in the whole region: in fact, the beginning of the crisis immediately gave rise to an incisive government action to support HE, due to the rise of scholarships and student loans, the massive introduction of job creation programs, and a large scale fee reduction to meet lower household resources. In the face of a future over-supply of HE places, the Korean government continues to work on several front lines: a further increase in public intervention, an effective organizational restructuring of universities (mergers), quality improvement and access enlargement to marginalized people.

New Zealand has been characterized by high public funding to universities and polytechnics until 2008. The crisis has rapidly made HE more selective and expensive: as from 2010, the focus of government financing has been concentrated not only on enrolments, but also on results; greater selectivity in funding student support services has been introduced and enrolments of foreign students have been actively promoted.

In the Philippines the recent exaggerated growth of private component – that lives for the most part on university fees – is observed. A considerable drop of public funding, mainly addressed to public HE institutions, has been noted since 2010. The Philippines still count substantially on remittances; however, in order to produce high skilled workers, it is urgent to upgrade national higher education offerings to international standards and to enable graduates to compete in the global labour market. To that end, there's the need to adequately finance HE, substantially increasing public funding.

Finally, among the varied range of HE institutions in Thailand, the private sector clearly prevails. In 2010 funding for HE significantly decreased: once again, the crisis has highlighted the necessity of an overall structural reform of tertiary education, which considers both education quality and administration efficiency issues.

Europe 2020 and the EHEA: the difficult way of European Union

The crisis has hit the European Union hard, right after the most audacious enlargement in its history, condemning it to a decline which, up to the present, would seem unstoppable.

For a long time, within EU documents the key role which HE can play in the European redemption has been stressed and the need to intervene in education and training – and in HE in particular – redesigning and renewing them, and making a significant long-term financial commitment to them, has been repeatedly underscored; in this respect, EUROPE 2020 - A strategy for smart, sustainable and inclusive growth (2010), an agenda aimed at achieving in the Old Continent “a smart, sustainable and inclusive [social market] economy delivering high levels of employment, productivity and social cohesion”, is exemplary. In order to provide a smart growth, i.e. “strengthening knowledge and innovation as drivers of [...] future growth” within the wider global economy, it recommends to act promptly on education and training, through measures coordinated at the European level. At the basis there is full awareness of the crisis severity and the bitter realization that “a quarter of all pupils have poor reading competences, one in seven young people leave education and training too early. Around 50% reach medium qualifications level but this often fails to match labour market needs. Less than one person in three aged 25-34 has a university degree compared to 40% in the US and over 50% in Japan. According to the Shanghai index, only two European universities are in the world’s top 20.” More in detail, within the “Flagship Initiative: Innovation Union” the critical importance of the connection among education and training, research and entrepreneurial world is underlined, together with a commitment, stated by the European Commission, “to promote knowledge partnerships and strengthen links between education, business, research and innovation”. Moreover, within the “Flagship initiative: Youth on the move”, intended “to enhance the performance and international attractiveness of Europe’s higher education institutions and raise the overall quality of all levels of education and training in the EU”, Europe 2020 reaffirms the urgency:

- to promote the European dimension of HE and its internationalization;

- to modernize the entire sector;
- at last, to support and bolster the recognition and validation of non- formal and informal learning, youth employment and business initiatives.

At national level, the member States are requested to ensure adequate investments in education and training, to enhance their quality and the relationship between education, training and the labour market, and to foster the entrance of young people into the world of work.

Although the current crisis has frustrated all the efforts and progresses made since the middle of '90s until 2007, cancelling de facto them completely, the Europe 2020 Strategy represents the last stage of a long path, started in 1998, aimed at strengthening, qualitatively improving, and homogenizing the varied universe of EU education and training in a European perspective.

The Recommendation on European cooperation in quality assurance in higher education(1998), targeted “to enable higher education institutions to implement their plans for improving quality and for integrating graduates into the labour market more effectively”, was the starting point, preliminary to the Bologna Declaration, made in the following year. The Bologna Declaration started off the Bologna Process, “designed to introduce a system of academic degrees that are easily recognisable and comparable, promote the mobility of students, teachers and researchers, ensure high quality teaching and incorporate the European dimension into higher education”, and thus founded the European Higher Education Area (EHEA).

In line with the Lisbon Strategy, aimed at making the European Union “the most competitive and dynamic knowledge-based economy in the world”, at the beginning of 2003 a Communication from the Commission recommended to adequately invest in education and training, “an imperative for Europe”, where States have to ensure sufficient resources for the whole sector, substantially increasing funds and managing them in the most effective way.

In the same year another Communication from the Commission is focused on the heterogeneity of the European university landscape and on the impelling urgency that it acquires a steady and unitary character, coping with the new challenges: the growing demand for higher education and training; the internationalization of knowledge, i.e. of education, research and innovation; a closer and

more proactive cooperation between academy and industry; the multiplication of places of knowledge production; the two opposing and complementary current tendencies in scientific knowledge, i.e. diversification and specialization on one side and disciplinary hybridization, convergence and contamination on the other; the rise of new expectations in a knowledge-economy and -society. In the wake of this document, the Communication from the Commission of 20 April 2005 stated again the following needs:

- to substantially raise the quality and the attractiveness of European universities, overcoming the fragmentation of the academic system, its isolation from business and then the gap which separates it from the labour market;
- to guarantee to European universities autonomy in preparing programs, and in administration and resource management, in order to carry out a real governance reform, essential to their modernization beyond the excessive national regulations;
- to provide the sector with sufficient long-term funds.

Therefore the development line of the European policies seems unitary. Also in the Old Continent the crisis has only made more pressing the reform of HE and, more generally, of education and training universe, greatly heavy with rigidities and divisions inherited from the past.

OECD voice in the middle of the crisis

The outbreak of the crisis immediately produced, between 2008 and 2009, a dramatic increase of unemployment rates within the OECD countries.

Nevertheless, in the OECD studies – relative to the previous years and published in 2009 – it was already pointed out that among persons with tertiary education the employment rates held high and their earnings generally remained much stronger, compared to people with lower levels of education.

In fact, between 2008 and 2009, in an only year, in most OECD countries among individuals with a poor educational background the risk of becoming unemployed – already high – rose on average

more than 2 percentage points, from 2.8% to 5%.

On the contrary, in 2009 across the OECD countries the average employment rate among the 25-64 years-old graduates (83%) was higher by 27.6 percentage points compared to people without an upper secondary education (56%) and by 9.5 compared to individuals with an upper secondary or post-secondary education (74.2%).

Moreover, during the crisis the earnings advantage for tertiary educated people has steadily remained high. Within 14 OECD countries with comparable data their average earnings had been much higher compared to average earnings of persons with an upper secondary or post-secondary education: in 2008 by 56% and in 2009 by 57%.

Conversely, the average earnings for people without an upper secondary education in 2008 and in 2009 had been constantly lower by 23%.

The OECD more recent (2012) data confirm these trends: the crisis even seems to have aggravated the gap. That is to say the impact of the crisis on individuals' living standards clearly depends on their educational levels.

Thus HE seems to ensure a definite competitive advantage, to mostly provide a more stable employment and a higher income, also and above all in the long-lasting economic uncertainty and financial instability. Evidently, for persons with higher educational levels – especially tertiary education – it is much easier to match their skills and competencies with the demands of an increasingly liquid labour market: they are more protected compared to other weaker groups.

Simultaneously, in the last decade an extraordinary expansion of higher education can be noted, especially in the rapidly-developing G20 countries.

The “global talent pool” has been radically changing, with a crucial shift in the distribution of shares of young graduates: compared to the past decades – dominated by the United States and developed countries – in 2010 China was the first with 18% of 25-34 years-olds with a tertiary degree; in the second place there were the USA with 14%, in the third place the Russian Federation and India each with 11%, and Japan followed with 7%.

Therefore, the share of graduates from Europe, USA and Japan has fallen consistently and the fastest-growing countries have made the greatest gains.

Based on the most recent estimates, the number of HE/tertiary graduates will continue to grow until 2020 across most OECD and G20 nations and the rapidly-developing countries will continue to increase their shares. Besides, the role of these countries “will continue to expand over the next two decades” (World Bank, 2013).

In fact, according to OECD, “China and India will account for 40% of all young people with a tertiary education in G20 and OECD countries by the year 2020, while the United States and European Union countries will account for just over a quarter” (OECD, 2012a).

The present and future growth of the “global talent pool” is motivated not only by the main HE incentives for individuals and families mentioned above, i.e. the higher employment rates and the larger earnings premiums; but also by the global knowledge economy, constantly expanding to the detriment of traditional national economies built on mass production. In fact, the global labour market, as dominated by the knowledge economy, probably will continue to absorb the increased supply of higher educated workers, due to the strong and stable demand for human resources highly skilled and educated in science and technology fields. This trend has been continuously increasing for the last decades and it can be reasonably expected to increase also in the future (OECD, 2012a; 2012b).

From e-learning to MOOCs: the technological answer to the crisis

The e-learning and, more generally, the massive use of ICT in education and in knowledge spreading, on the one hand represent an extraordinary opportunity to guarantee to universities a real internationalization and transnational mobility; on the other hand, by allowing great savings, they also allow a real democratization of culture and education.

European Union, for example, in order to overcome the sector weaknesses, actively took part in e-learning and ICT with E-learning 2004-2006 program, “for the effective integration of information and communication technologies (ICT) in education and training systems in Europe”.

All the more, during a crisis, e-learning and ICT represent a versatile and effective solution to deal with the increasing deficiencies and structural difficulties, first of all financial ones.

Starting from the Eighties, the development guiding principle goes from virtual to networked university to open one: "for all, and for the whole life, without discriminations, without walls, integrated, technologically advanced, cooperating with several different society economic actors, public and private, as a consortium and in network" (Baldazzi, 2009).

Distance education universities represent the first stage of this extremely rapid transformation: open universities able to offer HE, to train professional skills, to produce knowledge and to spread digital culture in an aware perspective of international cooperation. Then, thanks to Web 2.0, the wiki-ized university was born, "half encyclopaedia and half cognitive platform", an utopia at hand, open to all those people who want to learn thanks to an informal learning without credits (Staley, 2009)

Last link in the evolutionary chain, in the open educational resources perspective, today seems to be represented by MOOCs (Massive Open Online Courses), online courses of mass higher education, free of charge and open to everybody. The current economic crisis predictably decreed its success, first in USA and then in Europe.

Become popular since 2011, they want to introduce a new teaching/learning model and, at the same time, a revolutionary economic paradigm, rapidly rising in the world - alternative if compared to the traditional one, residential and academic - able to exploit the internet resources, its universal and equalitarian vocation, its open and flexible nature. Their diffusion looks like irresistible; indeed, they are adopted by universities of excellence all over the world: in USA, by Khan Academy of Salman Khan in Coursera, connected to Stanford University, by Udacity, and by edX, created by Massachusetts Institute of Technology and Harvard University; talking about Europe, in 2013 a Roman university, La Sapienza, joined Coursera² network and a German start-up, Iversity, is importing the model into community countries, by means of a competition that also has Siena University among its protagonist competitors,.

European Commission, as far as it is concerned, supports the first pan-European MOOCs initiative, OpenupEd³, which the EADTU (European Association of Distance Teaching Universities) launched in 2013, together with 11 partners, mostly open universities: it offers

2. <http://www.lastampa.it/2013/02/26/cultura/scuola/la-sapienza-corsi-online-per-diffondere-nel-mondo-le-eccellenze-dell-universita-italiana-kVDhCxXslATJxBzbdkxxK/pagina.html>

3. <http://www.openuped.eu/>

4. <http://www.openuped.eu/>

5. In spite of several criticisms and some public dissent, for a few months the California State has been moving in this direction; it is carrying out a reform in order to extend to MOOCs the same credit recognition granted for courses with fees.

6. http://www.repubblica.it/scuola/2013/04/22/news/universit_online_usa_contestate-57269429/?ref=search

a wide range of MOOC, covering many subjects, in 12 languages. This “silent revolution in HE”, exactly because connects many universities – often top universities – to a very large demand by learners all around the world, builds a bridge from informal learning to formal education systems.⁴

MOOCs allow the access to free online courses and prefigure a further decisive development: the access to complete and free online curricula, that could allow to get a degree by recognised institutions⁵. Most likely, the certification will keep on being with fee, but the way of getting it could soon become totally free (Mazoue, 2013).

The MOOC model, for its no-limits scalability, tries to combine the low cost with an extremely wide access opening.

Nonetheless, there is not only light.

Sure enough, despite recent progresses, teaching/learning quality still represents the real crux of the model. And this seems to have an inextricable connection to other severe criticalities, still unsolved. In the first place, there is the extremely high percentage of dispersion, so, against a great number of enrolled students, about the 97% permanently leave the courses⁶; moreover, learners have no obligations and no fixed middle steps are scheduled, which is something that obviously raises quite important doubts on the assessment and consequently on the possible title certification.

In the second place, poor relationships also count, and not only the lack of communication and dialogue, so to say the “Socratic method” between teachers and learners, but also the lack of a cultural exchange, as well as collaboration and sharing among the students. And some more, the univocity of teaching relationship, which exacerbates the limits of the traditional frontal lesson, often making the teacher a sort of star of the web, in practice jeopardizes the effectiveness and the innovation approach of the courses: the educational contents – mostly videos – are one-way supplied, by one single teacher to thousand or even million students. In such a way, learners and virtual learning communities vanish from sight: what is totally missing is the web social dimension, the involvement and the active participation of the learners to the learning process and to contents creation, together with interaction, adaptivity, personalization and individualization of educational paths (Jacobs, 2013).

In other words, socio-constructivism main achievements are totally

missing, together with 2.0 didactics, that defines the e-learning of our time.

In prospect, MOOCs, once the initial enthusiasm has faded, could carve out a relevant, long lasting niche and an important role in the knowledge democratization perspective, more than in the field of HE and e-learning in the strict sense of the word, within the scientific and cultural diffusion and outreach.

Probably, giving up extremisms and the easy euphoria towards technological innovations, at a global level, a mixed solution will prevail, a solution that should integrate HE traditional model with the galaxy of technology enhanced learning, in a well balanced way; a solution that, at the same time, will be highly flexible, which means able to work at a local level in a plurality of ways and practices, dynamically adapting to the needs and peculiarities of each single State, or of the widest supranational region.

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