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Abstract: With knowledge society at the top of public agendas, universities are increasingly becoming key institutions for economic growth and social development. The capitalist accumulation-oriented valorization of knowledge politically implies an artificial imposition of assessment and control processes involving the skills, competences, and knowledge of our societies. National governments keep a strategic power regarding systemic organization of collective intelligence, both protecting intellectual property and financing, controlling, and regulating education institutions, universities, and research centers. We suggest that research on the current global university transformation process should distinguish (1) the finance-centering process and the knowledge valorization instances, (2) the construction and expansion of knowledge-related political subjection mechanisms, and (3) the generation of new international knowledge and labor division forms.

Keywords: Knowledge Society, University, Mobility, Educational Policies, Educational Governance, International Political Economy

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Introduction

The continuous and exponential transformation of knowledge into capital, i.e., into a fictitious commodity, results in a fetishism process, where the exchange value of knowledge artificially increases, whereas its social use value decreases, as it becomes more private and restricted¹. This is the aim of neoliberal policies regarding knowledge society: to put a positive price on knowledge so as to turn it into a commodity, imposing artificial copyrighting or restricted access measures on the way it is accessed transferred or created. Capitalism becomes more cognitive, inasmuch as knowledge is a key element to leverage the financial valorization mechanisms of capital. This is no apparent change from the industrial capitalism typical polarization of knowledge ownership, though; however, it now entails the development of new mechanisms and devices whereby knowledge continues to be a command and dominion variable.

We are talking about new factors which differentiate humans from other beings, establishing hierarchies and ruling labor division. Therefore, the political projects based on knowledge-society which involve reforms in higher education institutions do not arise from the production system inner rationality (or natural course), but from the historical-political determinants of a neoliberal offensive carried out by global finance capitalist groups (Gallino, 2012, p.15). From a historical-political viewpoint ever since the nineties, OECD-member countries plan their political-economical agendas by sticking to the new growth and endogenous growth economic theories guidelines.

This liberalization should have resulted in increased efficiency in financial markets with a consequent payoff for productivity growth in the economy. However, the immediate impact of liberalization was that banks faced much greater competition and, in an effort to defend their market share, increased the riskiness of their lending portfolios (Jolley, 1995, p. 15).

In the first place, knowledge-based economy plans imply an emphasis on endogenous theory model patterns: the scientific system, public and private research centers, and higher education institutions have become the hallmarks of knowledge-based economy.

By subjecting education institutions and universities to the production realm, these policies encourage scholars and science persons to become entrepreneurial, thus stressing the structural transformation of society as a whole.

¹ As opposed to Lipietz's peripheral neo-fordism theses, Moulrier Boutang hypothesizes that we are moving from a production and exchange economy to a pollination and contribution one, where capital is making efforts to impose currencies and financial markets flexibilization globally (Moulrier Boutang, 2012).

Table1. Analytics of the knowledge economy.

<p>The rise of the sign or symbolic economy (knowledge capitalism) based on the combined logics of abundance and dispersal</p>	<ul style="list-style-type: none"> • unlike most resources that are depleted when used information and knowledge can actually grow through sharing, exchange and application; • capital in symbolic form of information can be speedily transferred in deregulated 24-hour virtual finance markets, allowing international currency speculation and increased geographical spread and mobility of FDI; • displacement of manufacturing industry from its old locations in the North to selected locations—Asia, Latin America—in the South and a dematerialisation of the industrial products (the weightless economy).
<p>ICT diminish the effect of distance making possible ‘action at a distance in real time’</p>	<ul style="list-style-type: none"> • the radical concordance of image, text and sound, and development of new information/knowledge infrastructure; • the emergence of a global media network linked with a global communications network; • the emergence a global Euro-American consumer culture and the rise of global edutainment giants in music/film/TV.
<p>Investment in human capital and key competencies as a source of value in knowledge based institutions, with an emphasis on knowledge being locked into systems or process</p>	<ul style="list-style-type: none"> • the technological transformation of ‘leading’ sciences which where the major developments in informatics and modern theories of algebra, computer languages, communication theories and cybernetics, phonology and theories of linguistics, problems of information storage, retrieval and data banks, telematics, problems of translation, are significantly all language based; • new legal, ethical and economic problems concerning knowledge creation, transmission and distribution highlighted in the emergence of international intellectual property rights regimes and the recent GATS agreements within the international knowledge system; • the promotion of new knowledge cultures and knowledge/technology transfer policies through the corporatization of the university, the encouragement of new public/private partnerships and the concept of lifelong education.

Source: Stiglitz, 1999.

In the second place, from economicist perspective, funding higher education is still expected to yield greater profits than real interest rates (Schleicher, 2006). It is precisely these profits that move Stiglitz, a consultant with both the World Bank and the White House, to suggest that information economics entails something like a balance and welfare formula, in *Globalization and Its Discontents* (2002).

The standard models that economists had used for generations argued either that market worked perfectly -some even denied the existence of genuine unemployment- or that the only reason that unemploy-

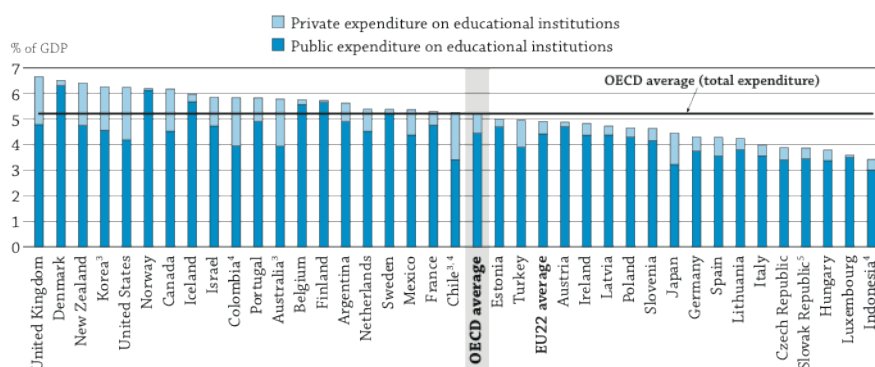
ment existed was that wages were too high, suggesting the obvious remedy of lower wages. Information economics, with its better analysis of labor, capital and product markets, enabled the construction of macroeconomic models that provided deeper insights into unemployment, models that explained the fluctuations, the recessions and depressions, that had marked capitalism since its beginnings (Stiglitz, 2002, p. XII).

Financial profits are the actual payoff of a clockwork organization of knowledge, as described by Stiglitz as early as in 1999, when he wrote the UNDP report headed *Knowledge as a Global Public Good* (1999).

He emphasizes the “financial wants” that force those countries embracing neoliberal reforms to promptly engage in restructuring and expanding their university systems. This is the actual meaning of Stiglitz’s words, when he states that “we now see economic development as less like the construction business and more like education in the broad and comprehensive sense that covers knowledge, institutions, and culture” (Stiglitz, 1999, p. 2). The World Bank has shifted from financing infrastructure projects to financing what he calls, a “knowledge bank”.

In the third place, as shown in the graph below, for all the neoliberal myth on the importance of a weak State apparatus, national governments keep a strategic power around public education investment.

Figure.1. Expenditure on educational institutions as a percentage of gdp (2014).



Source: OECD- Education at a Glance 2017 -Indicators- (OECD, 2017)

National governments participate in the systemic organization of collective intelligence, both dealing in intellectual property rights (whether controlling markets or favoring monopolization) and regulating education insti-

tutions, universities, and research centers. The deregulation myth paves the way for new regulation forms.

Governments will need more stress on upgrading human capital through promoting access to a range of skills, and especially the capacity to learn; enhancing the knowledge distribution power of the economy through collaborative networks and the diffusion of technology; and providing the enabling conditions for organizational change at the firm level to maximize the benefits of technology for productivity (OECD, 1996, p. 6).

State-run university financing focuses on using public expenditure to promoting competitive companies, or start-ups, that seek to increase their value in the financial markets, and definitively throw down human capital costs. This is why Stiglitz underlines the governments' unique power to regulate capital/knowledge flows. Despite the recent wave of education reforms, the proclaimed end of the comprehensive era and the advent of new public-private partnership forms², State-run formal education continues to be a major knowledge organization form. Far from weakening, the State takes on an even more strategic role, as the stakeholder citizens' knowledge. Mazzucato (Mazzucato & Dosi, 2006) studies how the State is still the main player in the knowledge accumulation process, and therefore, in the development of high added value industry. With the development of knowledge economy, stock market participation by institutional investors has grown so as to strongly influence corporate leaders, and now the same interests and goals are shared by institutional stakeholders and management alike. Knowledge economy has thus undergone a change that is in line with that of financial economy: the risks are increasingly run by the public sector, while the economic gains are reaped by the private sector. Finally, universities have become leading institutions in this particular economic and social production and reproduction system.

Unlike Olssen and Peters (2005) and War's (2014) theses -that recognize and study the close links between neoliberalism and globalization, and neoliberalism and the knowledge economy as global projects- we want to focus on the neo-liberal offensive as a complex and conflictive process, that determines an international division of knowledge and in consequence new forms of dependencies (cognitive). We refer to the necessity of adopting post-colonial positions at the time of explaining the global transformation of university. Indeed, the political power of central nations and transnational corporations is strengthened by new regulations and international norms

² For instance, the UK Private Finance Initiative (PFI), the *Ley Orgánica de Universidades* (Act 6/2001), a Spain university-regulation act passed on December 21, 2001, during José Maria Aznar's second term; or the Gelmini reform in Italy (Act IT-133/2008), which reasserts the destructuring of public education and the full convergence with the private sector.

on migration, capital and knowledge flows. These regulations, for example, have restored and radicalized the peripheral and semi-peripheral countries' forms of dependence. Different countries become dependent on a hierarchy that arises from multiple domains. We intent to systematize that the theses of the neo-liberalism development (as political-economic project) concentrate new contradictions, in terms of autonomy and control (Fitzgerald, Youngs, & Grootenboer, 2003), and specially new organizational and occupational boundaries in the universities (Simpson & Fitzgerald, 2014). Nowadays, the financial value clearly has come forward in the transformation of university. Therefore, the key point of this article is a critical perspective of global transformation of university, questioning the rising adoption of financial wants.

We describe an active development of financial regulations as consolidate research, development and innovation systems linked to the technological change process; through internationalization and dissemination of higher education systems and return policies; through devaluation of competencies and declassification in the international labor market.

This article is, indeed, a reflection that aims to entail, at the same time, different rationales regarding the university transformation in its financial aspects; trough a comparative analysis of the knowledge-based economy literatures concerning the secondary statistic data of the main nations of reference.

In general we want to contribute in the field of Political Economy of Knowledge with a conceptual and methodological analysis about the transformation of universities under the following basic understandings: (1) the dynamics of the quasi-market model, the cognitive control process, and the building of qualitative parameters (normative political mechanisms); (2) the human capital valorization processes, and the growing number of empirical considerations on the nature of finance-driven capitalism (political-financial mechanisms); (3) the workforce differentiation and valorization policies (political-social mechanisms).

The university quasi-market: cognitive control and quality as a collateral for the investments incurred

Higher education has become the new star ship in the policy fleet for governments around the world. The public policy focus on higher education, in part, reflects a growing consensus in macroeconomics of 'new growth' or 'endogenous growth' theory [...] (Peters, 2003, p. 153).

Universities have been transformed so as to fit into the *quasi-market* model, which comprises, for instance, political mechanisms (government funding and cognition-based governance), and new socio-economic condi-

tions based on knowledge-society (labor market preeminence – social inclusion conditions). On the one hand, universities tend to enforce cost reduction, centralized coordination, process control, and decreasing actors' autonomy. Academic governance transformations clearly tend to enforce a finance-oriented and value-based management, which is attained, first, by "outsourcing service areas (campus services, ICT, marketing) and non-academic positions (relocation of large companies to lower-cost venues, selective service outsourcing), next, by flexibilizing routine instruction positions, and finally, by combining a group of permanent workers hired on a short-term basis with a small full-time nucleus staff, which is essential for the university brand-name and prestige maintenance (Edu-factory, 2010, p. 68). On the other hand, control has been increasingly centralized because of the interested commitment by national governments, which not only fund public education systems, but also define control (access) restrictions, to ensure the payoff of their investments. The line between public and private education has been progressively fading away for more than three decades, and ever since incentive policies were enforced, large corporations have been effectively involved in the university institutions governing processes. "The actors are not just vendors in the margins or [actors] doing business in specific and defined educational activities. Being involved in activities of advising, testing, management, reform and development of educational technologies, they increasingly play a role in or actually make up the educational core-business" (Simons, Lundahl, & Serpieri, 2013, p. 418). They turn into an institutionalized governance corpse (Gunter, 2011) which frenetically seeks to increase their output (degrees, project funding, patents, publications, etc.) for the knowledge markets, both providing innovation and technology, and assisting in the global expansion of the work market and of trading capitals.

Measures dealing with cognitive capital valorization in higher education systems, and in education systems in general, are paramount to this process, because they foster human capital valorization for an increasingly competitive and globalized world market. Such measures include quantifying the production (of skills), and tracking the flow of (coded) knowledge, by enforcing a monitoring system at admission (tests, applicability and selection standards), and later on, during the whole training process (for instance, by means of a credit-allocation system, which may be based on human and social capital specific categories). These reforms reinforce differentiated inclusion (restricted courses, minimum requirements, elitist universities, rankings) as part of a larger hierarchically-based reorganization design of the labor force. They are the passage from selective exclusion processes to differential inclusion ones. For instance, in the EU³, university reforms

³ Their primary normative purposes include (1) EU-wide curricula, allowing for the

since 1995 have consistently restructured higher education curricula (ISCED 5-6-7-8) into a three-cycle higher education system. These three cycles are measured and quantified by the ECTS⁴ (*European Credit Accumulation and Transfer System*). Quantification involves a workload to be fulfilled (made up of modules, course units, lectures, or work or lab practices) in order to achieve certain results. Attaining these results means recognition as workers with certain coded skills (first level) or as high-skill workers (second and third levels). Quality turns out to be a key element in the normalization of the basic pedagogical-formative risk. In line with this, the European Quality Assurance Register for Higher Education (EQAR) was created in 2008, to regulate and stimulate the Quality Agencies (QA) market in the European Union⁵. By creating the EHEA (European Higher Education Area) (Ketunen, 2008), i.e., by setting an additional set of regulations, the EU defines the criteria and measurements which would act as a collateral for investments. Quality benchmarks become in fact criteria and measures that ensure profitability for EHEA investments: global measures for the knowledge global market⁶. The methodological benchmarking goals suggested by them are in fact prescriptive for higher education systems (Santos del Cerro & Estarellas, 2010), and the universities' governances are forced to use specific selection and differential inclusion strategies.

Human capital approach: cost-sharing, differentiation, and downgrading

After the 70's crisis, the progressive dismantling of the welfare state systems, the privatization of strategic assets in western states, and the financialization of economies and companies, politicians, science persons, and large sectors of the civil society, along with groups of intellectuals, have agreed that knowledge and technology, and mainly communication technology, have become part of our everyday life, and are inescapably bound to

globalization of basic curricular skills; (2) Continuous downgrading of knowledge, through the multiplication of degrees and diplomas; (3) Longer-lasting curricula, fostering new financing flows to the corporation-university, the formation of a pedagogical debt, and the precarization of students/researchers

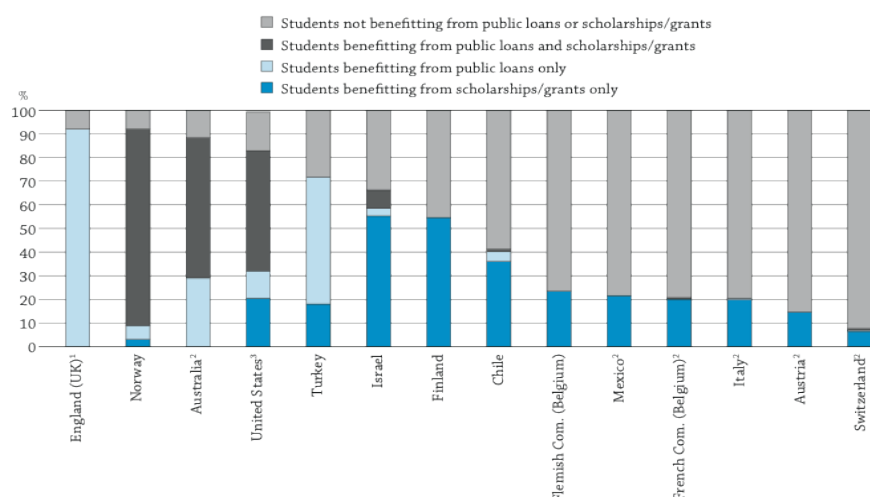
⁴ Sixty ECTS credits are allotted to one (academic) year of formal learning and the corresponding academic results. In most cases, a student's workload ranges between 1500 and 1800 hours per academic year, whereas one credit's worth ranges between 25 and 30 hours.

⁵ QA are mostly private mixed (for-profit & non-profit) organizations, that intervene in the public administration bodies deciding priorities for the educational system. ENQA, EUA, EURASHE, ESU, EI, and BUSINESS EUROPE are the European agencies that make up the EQAR Register Committee. The ENQA, in turn, is the lead agency and the networking node of the several national and international European agencies.

⁶ ENQA has been moved following the experiences of the *International Network for Quality Assurance Agencies in Higher Education (INQAAHE)*, the *International Association of University Presidents (IAUP)*, the *Council for Higher Education Accreditation in the United States (CHEA)*, the OECD and the UNESCO.

economic growth and social development (Hawken, Lovins, & Lovins, 1999). In the 90's, support is given to the hypothesis that economic progress would be conditioned by specialization and a clear division of labor, which would be dependent upon the knowledge available. In short, the idea of progress depending on the growth in human capital and technologies was repeated once again (Becker & Murphy, 1992, pp. 1137-1139). This human-capital-theory-driven approach is a key factor in the decision-making processes both by educational governance and global institutions, such as OECD, UNESCO, and the European Commission.

Figure 2. Average tuition fees charged by public institutions related to the proportion of students who benefit from public loans and/or scholarships/grants at bachelor's and equivalent level (2015-16).



Source: OECD- Education at a Glance 2017 -Indicators- (OECD, 2017).

Cost-sharing is an example of the financial transfer of education costs from the State to the students and their families' economies (Agasisti, 2007, p. 23-24; (Engelen, Fernandez, & Hendrikse, 2014, pp. 1088-1089)⁷.

⁷ The first model, the Scandinavian one (Finland, Sweden, Norway, Denmark) ensures universal access to higher education through State-financed very low tuition fees and very large percentages of scholarships or public loans to students. In the second model (United States), it is students that mostly endure the burden of education financing, by paying high tuition fees, although there is a large percentage of students receiving scholarships or public loans (79%). The third model, which is similar to the American one, is that of Japan, where university education financing is almost entirely supported by students; tuition fees are high and a very low number of students receive scholarships or public loans. The fourth model is that of some European countries, including the Mediterranean ones (Italy, Spain): scholarships and loans are not granted to a large number of students, although tuition fees

Adults completing tertiary education benefit from substantial returns on investment: they are more likely to be employed and earn more than adults without tertiary education (OECD, 2016, p. 118)

This experience is not new for the Anglo-Saxon countries: there, education is an economic investment, the risks of which are run by the student. The loans help the student acquire valued skills and abilities during their education, which will have to be sold in the labor market. The financialization of the university system entails a transformation in the financing forms of the student's individual career, since graduation involves a quantified private yield, and a wage differential. Allured by the incurred debt, chasing merit as a chimera, they get well inside exploitation: affordability always being at risk, costly university tuition fees and the threat of indebtedness act as disciplinarian rods. Debt, in fact, becomes part of the students' everyday life, as a highly coactive element. It impinges the didactic contents of syllabi, the time they are allotted to obtain results, the quality of the job they are entitled to expect, and the possibility to make decisions regarding their own future. Education risks thus become financial derivatives: investments bet on the entrepreneurship and employability of students, who are turned into active assets in academic capitalism (Mars, Slaughter & Rhoades, 2008).

Under the credit system, a person's résumé is worth not only because of the fact that he or she has been trained at a higher education institution, but mostly because of which institution they have studied at. A degree is being appraised on the basis of the university position within the education market hierarchy (Roggero, 2007).

Corporate ranking and QA benchmarking tools used by universities become mechanisms for differential inclusion in a context where social stratification and differentiation are the rule. Corporate-like rankings of institution reputations and metropolitan universities are two good examples of this.

(1) Rankings are constructed considering the institutions comparative edge, as measured in terms of social capital rather than knowledge quality parameters (Attanasio & Capursi, 2011).⁸ Clarke, in *The impact of higher education rankings on student access, choice, and opportunity* (2007), analyses the effects of University rankings on the increase of socially, culturally, and ethnically stratified access to university education (Rinaldi et al., 2009, p. 11).

are clearly moderate compared to other countries. In these cases, low tuition fees ensure universal access to higher education (OECD, 2011, p. 46–49).

⁸ Cf. Dill and Soon, in *Academic Quality, League Tables, and Public Policy: A Cross-National Analysis of University Ranking Systems*. The authors compare performance indicators from five league tables.

(2) Next to top-ranked universities, an ever-increasing number of the so-called metropolitan universities crop up. These institutions need to obtain ever more private resources and exponentially resort to cherry picking practices (Vignoles, Galindo-Rueda and Feinstein, 2004), or diversify their offer, by creating new curricula and courses that increase their residual claim. Multifarious university postgraduate and specialization courses are created to attract an ever-increasing number of customers-students. This exponential increase in the number and variety of degrees involves, in fact, a downgrading of the acquired abilities and skills, and of the graduate degrees within the labor market (Roggero, 2007, p. 5). Thus, metropolitan universities are not meant to house the elites of knowledge. Even though, in Fordian terms, they may be seen as fostering mass-education, they are actually tools from regulating labor value by instituting a lifelong learning market. This market, where both new and old jobs need academic degrees is the new home to a precarious, downgraded subject.

Mobility university policies as corporate national interests

Universities and research institutes take a leading role in the fight for the recruitment and exploitation of human capital. According to McKinsey Quarterly, the “fight for talents” is attested by the increasingly high percentage of higher education students who are enrolled outside their citizenship countries, rising from 2% in 1950 to 2.3% in 1970, to 3.8% in 1990 (OECD, 2012). In 2016, 6% of the higher education students in the OECD countries were international students. Based on demand/supply curves, a deficit of talents is expected in U.S. and Australia (US: 0.8; Australia: 0.5) for the period 2011–2021, and the EU shares a similar talent deficit trend (Oxford Economics, 2012). These values cannot indicate a convergence in the development of a knowledge-based economy; on the contrary, they express multi-scale competitive strategies in higher education, science, and technology, arising from complex articulations between higher education governance, global economic (and especially financial) policies, and state interests. Indeed, one of the strategic goals of Australia educational policies ever since the 1990’s has been to increase the number and diversity of foreign enrolments, in order to economically develop education into a specific knowledge-based industry, to which purpose it entered international agreements with student-supplying countries and generated specific immigration policies. Australia might be seen as a success knowledge valorization and exploitation case. Indeed, “from 1990 to 2003, Australia’s share of the global market in cross-border degrees grew from 1% to 9%” (Margison, 2007) and by 2014, 18% of all higher education students in Australia were international students (OECD, 2016).

Table 2. International student mobility and foreign students in tertiary education (2014).

	Share of international or foreign students by level of tertiary education	Rate of growth of the number of international or foreign students between 2013 and 2014				
	Total tertiary education	Short-cycle tertiary programs	Bachelor	Master	Doctorate	
	(1)	(2)	(3)	(4)	(5)	(6)
Australia	18	13,3	13,1	40	34	6
United States	4	2,0	3,5	9	35	7
OECD total	6	3,0	4,9	4,9	27	5
EU22 total	8	4,5	6,1	6,1	22	4

Note: Countries using the “foreign students” definition is not taken into account in the OECD and EU22 totals. 1. Data on short-cycle tertiary education refer to foreign students. 2. Year of reference 2013. 3. Total tertiary education excludes doctoral students. 4. While international students include only students who moved to a country with the purpose of studying, foreign students comprise all students who have a different country of citizenship than the country in which they study; these data are not comparable with data on international students and are therefore presented separately in the table.

Source: OECD, 2016.

Meanwhile, US higher education and domestic research policies are aggressively undermining the global market of doctoral education. In 2014, 35% of US doctorate or equivalent level students were foreign. In sum the United States has more foreign doctoral students than the rest of the world put together. This US leadership in the market of doctoral education can be accounted for by the capital flows which finance US universities and research centers both domestically and abroad. This leadership explains how US attracts talents from the EU: about 64%, 53% and 62% of S&E students arrive from the UK, France, and Germany, respectively (PhD graduates in the USA), as estimated from the labor market force of the USA.

Thus, we have seen how the EU, –along with massive immigrants’ selectivity policies– have elaborated a series of measures for the faster recognition of academic qualifications, in order to facilitate the privatization and the competitiveness between the higher education centers.

Table 3. Percentage of European Temporary Residents Receiving S/E Doctorates in 2006 who were in the United States, 2007 to 2011, by Country of Origin.

Country/Region	2001	2003	2005	2007	2009	2011
Greece	110	60	55	53	53	47
United Kingdom	84	74	67	69	66	64
Germany	130	67	66	61	56	53
Italy	126	64	61	59	59	57
France	107	64	62	62	56	62
Romania	163	90	88	87	84	83
Spain	54	55	52	44	47	47
Other EU countries	269	55	50	50	50	48

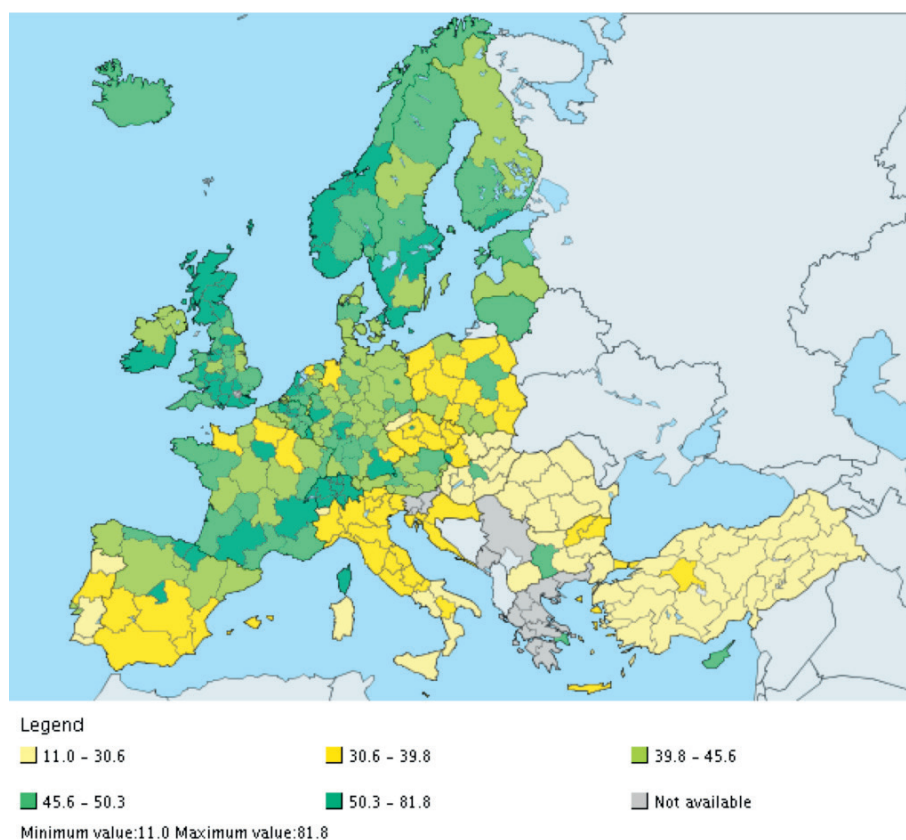
Source: Oak Ridge Associated Universities, 2014.

The goal is to “enable universities and their partners in industry to offer a more open and challenging working environment to the most talented students and researchers, thereby making them more attractive to Europeans and non-Europeans alike”. To amplify the students’ mobility mechanisms is one of the first causes of qualified emigration, and for this reason higher education centers compete to attract the best students, to have the “best academics and researchers, to recruit them by flexible, open and transparent procedures, to guarantee principal investigators/team-leaders full research independence, and to provide staff with attractive career prospects” (European Commission, 2006, p. 10).

University corporatization has derived from a series of higher education system reforms which have included the enforcement, since 1995, of a number of cognitive-capital-based measures necessary for the valorization processes of capital/knowledge. The EHEA (European Higher Education Area) is a political tool of the European Commission which, promoting mobility as a motto, further stratifies the laborers’ market, leading to an increasingly uneven spatial division of knowledge and labor (Maniglio, 2016). Such global strategy, at the same time, fosters and intensifies interregional competition mechanisms. Member states aggressive set their research funding goals, striving to capture the best researchers, intensifying excellence and differential inclusion mechanisms, and favoring intra-European brain migration (which has been massive since the first term of the programs Comenius, Erasmus, Leonardo da Vinci, Grundtvig). Knowledge division and the resulting economic, social, and territorial dependence in Europe is a clear

consequence thereof. The map below shows the distribution of highly qualified science and technology professionals in Europe.

Map 1. Human resources in science and technology % of active population.



Source: Eurostat, 2017.

This distribution has been reinforced by intra-Europe flows of highly skilled professionals, which have resulted in a brain drain from the Southern regions towards the central European countries and even out of the EU (US and UK). A recent research on the concentration of “minds” in Europe shows the case of Greece, where “73% of the emigrating people have a postgraduate degree, 51% a PhD, and most have studied abroad in some of the world’s best universities. The main destinations of current Greek emigrants include the UK (31%), US (28%), and Germany. Italy loses many highly skilled professionals too, mainly to the US (34%), UK (26%), and France (11%), the main

reasons being the lack of research funding and better economic conditions and career opportunities abroad” (Wende, 2016, p. 79).

Conclusions

Thompson (2012) questioned the theoretical, political and economic consensus on the “new” knowledge economy, which he termed as endless “inflated claims”. He stated that such consensus was an optimistic discourse devised for the states to adapt themselves to financial markets, as evinced by the change of regulations and economic interventions therein. From the standpoint of knowledge politics and economy, we consider these approaches (supported by the World Bank, OECD, UNESCO) as part of an institutional “monocropping” policy, which take but a generally positive stance toward the impacts of the knowledge economy policies.

Institutional monocropping rests on both the general premise that institutional effectiveness does not depend on fitting with the local sociocultural environment, and the more specific premise that idealized versions of Anglo-American institutions are optimal developmental instruments, regardless of the level of development or position in the global economy (Evans, 2004, p. 33).

International organizations, corporate national interests and academic consultants (institutionalized governance) have already discovered what they consider to be the best policies for pursuing development and growth, i.e. fostering knowledge economy. In contrast, we should rather see these processes as a neoliberal offensive (Gallino, 2012) which, in effect, is carried out with the aid of finance and trade liberalization, industrial uprooting and fragmentation, and a constantly moving and recycling human capital –take, for instance, the expansion of the tertiary sector, or the polarization and precarization of the labor market. With knowledge society at the top of public agendas, universities are becoming part of this neoliberal offensive, and a major action field for new financial capital valorization processes.

The discourse on university *commoditization* or *corporatization*, then, seems to be highly reductionist, for domestic education systems depend mostly on funding by state-based corporate national interests (Maniglio, 2016). Indeed, university public funding has not disappeared, although the role of the State has changed. It has turned from direct producer into buyer of produced services. The State, thus, is becoming more of a stakeholder in the citizens’ cognitive capital, since the workforce formation and reproduction conditions are key elements in capital financial valorization. The wealth of nations lies, thus, in societal mechanisms of segmentation and valorization that take place beyond the walls of companies. Within knowledge-based economies, these institutionalized governance forms cause the universities

to become strategic actors, because they impose key measures which tend to use knowledge organization for the sake of capital valorization. In fact, by quantifying and controlling knowledge flows and productions, by imposing benchmarking checks both at admission and during the whole training process, such policies contribute to the exploitation of social relationships and the private appropriation of knowledge. In this organizational and organic revolution, the concerned institutions produce and socialize knowledge, clearly dealing in abilities, skills and creativity, producing at the same time abundance (of degrees, diplomas, certificates) and scarcity (since no degree seems to be enough), and establishing particular regional and domestic development patterns. Periphery and semi-periphery governments are orienting their public education budgets and making efforts to attract foreign investments, both in the form of global corporations and global universities, while implementing curricula based on the standards of knowledge society. The migration-promoting university policies are fundamental to the neocolonial process. While sounding the horn of an ideal world, with citizens unrestrictedly traveling around with knowledge as their only boundary, they promote the liberalization of the global work market (Beigel, 2013; 2016; Cusicanqui, Domingues, Escobar, & Leff, 2016). Dependence goes on growing and producing new inequality structures. In this line, it would be appropriate to focus on the post-colonial studies, that help us overcome the interpretative trap about the present global transformation of university, that tends to misunderstand the possibility of overcoming the boundaries with the irrelevance of the space category and spatial conflicts.

In this process, universities are being organized into semi-autonomous cells interconnected at several levels. The relationship between these actors in the governmental process is not only hierarchical, but polycentric and mutually dependent. Every university is different because each one must try to embrace at all costs the widest possible range of knowledge fields, even those seemingly uncontrollable critical, creative, autonomous ones. The lines of flight of a knowledge seem to be construed in this space-university as lines of inclusion: financial capital does no longer allow for an outside, but only for an inside, which is determined by the various dimensions of exploitation in the international division of knowledge and labor.

References

- Agasisti, T. (2007). I quasi-mercati nell'istruzione universitaria Un modello interpretativo per un confronto europeo (p. 1-38). Politecnico di Milano, Dipartimento di Ingegneria Gestionale.
- Attanasio, M. & Capursi, V. (2011). *Statistical Methods for the Evaluation of University Systems*. Springer.
- Bartlett, W. & Le Grand, J. (1993). *Quasi-markets and social policy*. Macmillan.

- Becker, G. S., & Murphy, K. M. (1992). The Division of Labor, Coordination Costs, and Knowledge. *The Quarterly Journal of Economics*, 107(4), 1137-1160.
- Beigel, F. (2016). El nuevo carácter de la dependencia intelectual. *Cuestiones de sociología*, (14), 4.
- Beigel, F. (2013). Centros y periferias en la circulación internacional del conocimiento. *Nueva Sociedad*, (245), 110-123.
- Clarke, M. (2007). The impact of higher education rankings on student access, choice, and opportunity. *Higher Education in Europe*, 32(1), 59-70.
- Cusicanqui, S. R., Domingues, J. M., Escobar, A., & Leff, E. (2016). Debate sobre el colonialismo intelectual y los dilemas de la teoría social latinoamericana. *Cuestiones de sociología*, (14), 9.
- Dill, D. & Soo, M. (2005). Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems. *Higher Education*, 49(4), 495-533.
- Edu-Factory.(2010). La Universidad en conflicto: Capturas y fugas en el mercado global del saber. Madrid: Traficantes de Sueños.
- Engelen, E., Fernandez, R., & Hendrikse, R. (2014). How finance penetrates its other: A cautionary tale on the financialization of a Dutch university. *Antipode*, 46(4), 1072-1091.
- ENQA. (2005). Standards and Guidelines for Quality Assurance in the European Higher Education Area. European Association for Quality Assurance in the European Higher Education.
- European Commission. (2006). Communication from the Commission to the Council and the European Parliament delivering on the modernisation agenda for universities: Education, Research and Innovation. Publications Office EU.
- Evans, P. (2004). Development as institutional change: the pitfalls of monocropping and the potentials of deliberation. *Studies in comparative international development*, 38(4), 30-52.
- Fitzgerald, T., Youngs, H., & Grootenboer, P. (2003). Bureaucratic control or professional autonomy?: Performance management in New Zealand schools.
- Gallino, L. (2012). La lotta di classe dopo la lotta di classe. Bari: Gius. Laterza & Figli.
- Gunter, H. M. (2011). Governance and education in England. *Italian Journal of Sociology of Education*, 3(2).
- Hawken, P., A. Lovins, & H. Lovins. (1999). Natural Capitalism: Creating the Next Industrial Revolution. NY: Little, Brown & Company.
- Jolley, A. (1995). A New Era of World Economic Growth (No. 5). Centre for Strategic Economic Studies Victoria University Melbourne.
- Kettunen, J. (2008). A conceptual framework to help evaluate the quality of institutional performance. *Quality Assurance in Education*, 16(4), 322-332.
- Litan, R. E.; Reedy, E. J. & Mitchell, L. (2007). Commercializing university innovations: A better way. AEI-Brookings Joint Center for Regulatory Studies.
- Maniglio, Francesco. (2016). La subsunción del saber: la transformación de la Universidad en la época del Capitalismo Cognitivo. En Capitalismo Cognitivo y Economía Social del Conocimiento. La lucha por el Código, Quito, Ecuador: Ed. Ciespal.
- Marginson, S. (2007). Global position and position taking: The case of Australia. *Journal of Studies in International Education*, 11(1), 5-32.
- Mars, M. M., Slaughter, S., & Rhoades, G. (2008). The state-sponsored student entrepreneur. *The Journal of Higher Education*, 79(6), 638-670.

- Mazzucato, Mariana, & Giovanni Dosi. (2006). *Knowledge Accumulation and Industry Evolution: The Case of Pharma-Biotech*. Cambridge University Press.
- Moulier Boutang, Y. (2012). *La abeja y el economista*. Madrid: Traficantes de Sueños
- OECD.(1996). *The Knowledge-Based Economy*. Paris: OECD Publishing.
- OECD (2011). *Panorama de la educación. Indicadores de la OECD 2011. Informe español*. Ministerio de Educación.
- OECD (2012). *Education Indicators in focus*. OECD Publishing.
- OECD (2016). *Education at a Glance 2016: OECD Indicators*. OECD Publishing.
- OECD (2017). *Education at a Glance 2017: OECD Indicators*. OECD Publishing.
- Olssen, M. O., & Peters, M. A. (2005). Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism. *Journal of Education Policy*, 20(3), 313-345.
- Oxford Economics. (2012). *Global Talent 2021: How the New Geography of Talent Will Transform Human Resource Strategies*. Oxford Economics in Oxford Economics.
- Peters, M. (2003). Classical political economy and the role of universities in the new knowledge economy. *Globalisation, Societies and Education*, 1(2), 153-168.
- Rinaldi, F. B.; Checchi, D.; Guglielmetti, C.; Salini, S. & Turri, M. (2009). Ranking e valutazione: il caso delle classifiche delle università. *RIV Rassegna Italiana Di Valutazione*.
- Roggero, G. (2007). *La autonomía del conocimiento vivo en la universidad metrópolis*. Eipcp -Institut Européen Pour Des Politiques Culturelles En Devenir -.
- Santos del Cerro, J. & Estarellas, R. (2010). *La elaboración y seguimiento de los planes de estudios-XI Foro de Almagro*. Ediciones de la Universidad de Castilla-La Mancha.
- Schleicher, A. (2006). *The Economics of Knowledge: Why Education is Key for Europe's Success*. Paris: OECD Publishing.
- Simons, M., Lundahl, L., & Serpieri, R. (2013). The governing of education in Europe: commercial actors, partnerships and strategies. *European Educational Research Journal*, 12(4), 416-424.
- Simpson, A., & Fitzgerald, T. (2014). Organisational and occupational boundaries in Australian universities: the hierarchical positioning of female professional staff. *Studies in Higher Education*, 39(10), 1929-1941.
- Stiglitz, J. (1999). Public policy for a knowledge economy. *Remarks at the Department for Trade and Industry and Center for Economic Policy Research*, 27(3), 3-6.
- Stiglitz, J. (2002). *Globalization and its Discontents*. New York and London: Norton & Company.
- Thompson, P., & Harley, B. (2012). Beneath the radar? A critical realist analysis of 'the knowledge economy' and 'shareholder value' as competing discourses. *Organization Studies*, 33(10), 1363-1381.
- Vignoles, A., Galindo-Rueda, F. & Feinstein, L. (2004). The labour market impact of adult education and training: a cohort analysis. *Scottish Journal of Political Economy*, 51(2), 266-280.
- Ward, S. C. (2014). *Neoliberalism and the Global Restructuring of Knowledge and Education* (1 edition). New York u.a.: Routledge.
- Wende, M. V. D. (2015). International Academic Mobility: Towards a Concentration of the Minds in Europe. *European Review*, 23(S1), S70-S88.