

Paper Lives: Certification vs. Licensure

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Abstract. Since the mid-1990s certification has increasingly been considered as a tool to increase the chance to find job particularly by youngsters. However under the circumstances that exist today it is known that having certificates does not automatically lead to get job, even contrary job seekers may remain jobless after they pay huge amounts of money to certification firms. The very fast increase in the number of certifying firms confirms the fact that there is an ongoing demand for short term qualification courses. Another process which accompanies to private certification is that the loosing ground in public education that despite corporations still care about diplomas in hiring they reject job applications in the case of absence of certificates. In this study certification as a popular phenomenon has been compared with licensure in the context of waged engineers and their chambers. As a consequence of the analyses made for this study, it may be concluded that there is a capital accumulation which is carried out via two layers of working classes: masses who are obliged to be certified and waged laborers who work in certification industry in order to improve skills of those who are in need to be certified. During reviewing of literature it has also been witnessed that the academic writings focusing on the numbers, wages and working conditions of trainers hired by certification firms is virtually non exist. Therefore study suggests further researches especially on waged trainers working in private certification firms.

Keywords. Certification, Licensure, Turkey, Capital accumulation, Technical staffs.

JEL. I21, I25, J24

1. Introduction

Although occupational licensing as a topic in economics dates back at least to the comments by Adam Smith that trades conspire to reduce the availability of skilled craftsmen in order to raise wages (1937) the present system began in the final quarter of the nineteenth century (Rottenberg, 1962) almost in all around the world. Generally it is an institution whose effects are not immediately apparent, but rather reveal their efficacy over some time. Specifically, occupational licensing usually grandfather in practitioners, implements new exams, and develops educational and location-specific requirements so that implementing these policies usually takes many years. Consequently, the labor market or consumer outcomes are not immediately apparent—a longer-run perspective is required to fully understand the wage, price, quality, and distributional effects. An approach that evaluates the various stages of occupational regulation can help capture and illuminate the role that licensing has in labor and service markets. Occupations are rarely formed as licensed ones. Occupations evolve, organize, and often select licensing as a method to obtain professionalism, quality, and status, as well as to limit the supply of practitioners (Kleiner, 2013).

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For the purpose of this study, on the other, it is necessary to contrast occupational licensing with certifications. A certification permits any person to perform the relevant tasks, but the government agency administers examinations and certifies those who have passed and the level of skill or knowledge. Consumers of the product or service can then choose whether to hire a certified worker or not. In the case of occupational licensing, it is illegal for anyone without a license to perform the task. For example travel agents and mechanics are generally certified, but not licensed (Kleiner, 2000). In the economic literature “licensure” refers to regulations that prohibit workers who do not meet specific criteria, such as passing an exam and/or completing an approved course of study, from legally working. In contrast, “certification” refers to the situation where workers who meet certain criteria are given a designation of being certified, but non-certified individuals are also allowed to offer their services in the market. The least restrictive form of occupational regulation is registration, whereby individuals file information on their qualifications, but there are no specific requirements for professional standing or limitations on who may practice (Sass, 2014:3). According to Bullock and Trombley (1999) professionalization is characterized as, “when a profession arises when any trade or occupation transforms itself through the development of formal qualification based upon education, apprenticeship, and examinations, the emergence of regulatory bodies with powers to admit and discipline members, and some degree of monopoly rights” (National Initiative for Cybersecurity Education, 2012).

The characteristics which differ a profession from other occupations are that the right to control one’s own work, rendering ‘outside’ evaluation illegitimate and intolerable (Freidson, 1970); the mechanisms for controlling the market for expertise via guild like associations (Krause, 1996); and the collective process of upward social mobility by claiming higher social status, including the use of the legitimizing force of universities that certify professional competence (Sako, 2013).

The point of departure of this study is that the increased pressures on Turkish occupational chambers, especially TMMOB- Union of Chambers of Turkish Engineers and Architects and its affiliates to act as private testing & certification firms in the market. Therefore study specifically focuses on newly emerged private certification firms which have been offered as an opportunity of finding job for technical staffs while they have been undermining the gained rights and privileges of those professionals. Regarding with the relation between certification and licensure it must be noted that the majority of technical staffs are the members of licensing organizations, namely, occupational chambers. Therefore study first gives a brief literature on the different thesis and perspectives related to both licensure and certification. Since there is no any critical writing in Turkey and only few exist in Europe on this topic, the section on literature mainly relies on U.S. cases. The next section is devoted to the relationships between commercialization in educational services and newly developed certification industry. The internationalization of productive capital, legitimacy and illegitimacy of certification, different forms of joining of certification firms into the chain of capital accumulation and beneficiaries’ criticisms against certification are the sections follow. Then study ends with the sections on Turkey and conclusion.

2. Different thesis on Licensure and Certification

The Governmental licensing is often confused with private credentialing, generally referred to as certification, because the meanings of the terms are frequently interchanged. Although some jurisdictions use the term certification as

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signifying governmental authority to practice a profession, the difference between licensure and certification is essentially the difference between governmental regulation and self-regulation of a profession. Certification is the process by which private organizations recognize individuals for meeting certain criteria established by the private organization in which individuals are recognized for advanced knowledge and skills. It is a form of self-regulation which is voluntary in that it is not required of individuals prior to practice and is without governmental oversight. Practitioners seek certification usually as a form of self promotion and in an attempt to distinguish one practitioner from another. There is no a legal requirement to be certified and no governmental penalties for failure to achieve or loss of certification recognition. Like licensure, certification is usually granted for a limited period of time and must be renewed based upon criteria set by the private entity. Certification does not provide a legal mechanism to practice an otherwise governmentally regulated profession, but does provide certificate holders to accurately promote the fact that they are certified by the private entity (FSMTB, 2014). Although there is no any legal requirement to be certified we must accept the fact that there is a systemic necessity for jobless laborers to be certified because the firms in the market are increasingly demanding certified labourers. When jobless masses observe that they can not get job because of the lack of necessary certifications they soon tend to apply certification firms.

There is a quite vast literature on licensure in general. Friedman (1962) among others claimed that the ultimate goal of neoliberalism is to convert licensure systems into private certifying. This development is well underway in the form of publicly-supported vouchers for private school tuition, highstakes, standardized testing, accredited and non-accredited private training&testing firms and outsourcing of further training for those who have been licensed before. The most prominent aspects of ongoing debate are related with protection of public interest, free competition, quality assurance and wage and employment affects. The public policy and legal communities, however, have noted that regulating occupations in order to protect the public against incompetent, untrustworthy, or irresponsible practitioners is in the public interest (Thomas v. Collins, 1945 cited by Kleiner and Krueger, 2011).

A second view concedes that occupational licensing increases the wages of professionals, but argues that licensing serves as a means of solving the problem of asymmetric information. According to this view consumers have less information than practitioners, and licensing protects consumers from poor service (Leland, 1979; Shapiro, 1986 cited by Carpenter, 2012). For Kleiner and Krueger, on the other, specific requirements by the government to enter an occupation, such as education level and long internships, are positively associated also with wages. This pattern of results is consistent with a monopoly model of occupational licensing; where supply is more restricted if the licensing authority operates on a wider geographic level. A simple theory of occupational licensing suggests that administrative procedures regulate the supply of labor in the market (2011). Similarly also Milton Friedman defines licensure as a special case of a much more general and exceedingly widespread phenomenon which edicts that individuals may not engage in particular economic activities except under conditions laid down by a constituted authority of the state.

“A widespread notion about the caste system is that every person's occupation is completely determined by the caste into which he is born. It is obvious to an economist that this is an impossible system, since it prescribes a rigid distribution of persons among occupations determined entirely by birthrates and not at all by conditions of demand. Of course, this is not the way the system worked. What was true, and to some measure still is, was that

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a limited number of occupations were reserved to members of certain castes, but not every member of those castes followed those occupations. There were some general occupations, such as general agricultural work, which members of various castes might engage in. These permitted an adjustment of the supply of people in different occupations to the demand for their services” (Friedman, 1962:138-139).

Contrary what Friedman argues, the sociologist Emile Durkheim emphasizes the importance of professional associations in providing their members with moral rules that professional associations would potentially be able to fill in an ethics gap left open by the disorderly, violent, and confused market system (Persico, 2011). Especially when public interest is considered the points such as moral values raised by Durkheim seem that they have to be taken into account. Nancy Chornic exemplifies public interest dimension of licensure via U.S. nursing services by stating that licensure results from the enactment of a nurse practice act by state legislatures to regulate nursing:

“Laws governing individual healthcare providers are enacted through state legislatures. After enacting a nurse practice act, a state legislature delegates authority to a state agency, such as a board of nursing, to enforce it. The state agency is authorized to promulgate regulations to implement the nurse practice act for the purpose of protecting the public health and safety. The nursing license is the end product of this process. Because the primary purpose of licensure is public protection and safety, the major stakeholder for licensure is the public” (Chornic, 2008).

Wage and employment affects of licensure can be followed through U.S. example that in 1950s and early 1960s, less than 10 percent of the workforce required an occupational license to work for pay. However, by 2008, estimates from the Princeton Data Improvement Initiative show that about 29 percent of the workforce required a license from local, state, or federal government to work for pay (Kleiner, 2013). Similarly also in Turkey membership figures of Professional chambers radically changed since 1950s.² Since not only government projects but also private sector have to employ licensed professionals any increase in the number of occupational licenses corresponds with the increases in actual wage payments, namely, the overall costs of workforce which is something intolerable for capital accumulation.

There are two opposing views for the prevalence of licensure. In the “public interest” approach, licensing is viewed as a mechanism for ensuring quality when consumers are poorly informed. The public interest approach implies that professional licensure would be most likely to occur where the cost to consumers of obtaining information is high and the loss from consuming low quality services is great. Consumers who value improvements in service quality highly will benefit from licensure, while consumers who prefer lower quality (at a lower price) could be made worse off (Shapiro, 1986). In contrast, the “capture” theory of regulation posits that professionals will seek out licensure as a means of restricting entry into a profession, thereby raising wages (Stigler, 1971, Peltzman, 1976 cited by Sass, 2014).

Friedman, on the other, points out (1962) the fact that certification without licensure is a half-way house that maintains a good deal of protection against monopolization. Author underlines that certification may also have disadvantages, but it is worth noting that the usual arguments for licensure, and in particular the paternalistic arguments, are satisfied almost entirely by certification alone: “*If the*

² While the number of TMMOB members was only 8 thousands in 1955, this figure rocketed to 381 thousands in 2000 (TMMOB, 2003: 73-75)

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argument is that we are too ignorant to judge good practitioners, all that is needed is to make the relevant information available. If, in full knowledge, we still want to go to someone who is not certified, that is our business; we cannot complain that we did not have the information. In the first place, licensure the key to the control that the medical profession can exercise over the number of physicians. To understand why this is so requires some discussion of the structure of the medical profession". Friedman continues as follows:

"The American Medical Association is perhaps the strongest trade union in the United States. The essence of the power of a trade union is its power to restrict the number who may engage in a particular occupation. This restriction may be exercised indirectly by being able to enforce a wage rate higher than would otherwise prevail. If such a wage rate can be enforced, it will reduce the number of people who can get jobs and thus indirectly the number of people pursuing the occupation. This technique of restriction has disadvantages. There is always a dissatisfied fringe of people who are trying to get into the occupation. A trade union is much better off if it can limit directly the number of people who enter the occupation -- who ever try to get jobs in it. The disgruntled and dissatisfied are excluded at the outset, and the union does not have to worry about them. The American Medical Association is in this position. It is a trade union that can limit the number of people who can enter." (Friedman, 1962:148).

Not only Milton Friedman but also Kleiner makes a similar comparison by claiming that one major difference between occupational licensing and unions was that licensing may be a more secure job classification. It is rare either for an occupation to become deregulated by a government agency, or for the regulatory Powers of a licensing board to be stripped by the legislature, or for the licensing board to ask to be determined (Kleiner, 2000). Unlike unions, which can engage in concerted activities such as strikes or work slowdowns, however, licensed workers do not sign collective agreements with their employers. Nor do they engage in strikes against employers to raise wages (Kleiner & Krueger, 2011). More importantly occupational chambers are not class based organizations that each them may have members from both classes. When we consider engineers' chambers, for instance, there may be both employer engineers and waged engineers who are members in the same occupational chamber.

Kleiner and Krueger point out that occupational licensing can affect pay and employment through three main channels. First, licensing may increase quality by imposing initial education, testing, continuing training requirements, internship requirements, or fees. These requirements are likely to diminish the number of less qualified or unmotivated individuals who could enter the occupation, and thereby serve to drive up the average quality of workers in an occupation. A consequence is higher quality outcomes for those who are able to obtain the service, but fewer practitioners and less access to the service (2011). Exactly for this reason we may well argue that there are quite strong connections between certification and accreditation in higher education or Bologna process. Again for this reason newly emerging certification industry strongly objects licensure.

Regarding the thesis on quality assurance, it must be noted that skills are of inherent value to people who possess them, but much of the public policy debate over the decades has focused on their contribution to job creation and the international competitiveness of nations. In the twentyfirst century, this debate touches a wider portfolio of skills than in the past as global value chains spread from manufacturing to a variety of professional services. The phenomenon of offshoring has givenrise to studies on the global mobility of jobs, resulting in a finding that more educated workers hold somewhat more offshorable jobs (Blinder, 2009; Blinder & Krueger, 2009). That is, higher levels of education and

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professional skill attainment are no longer an insurance against job losses caused by international competition from lower cost locations. But, again it must be noted that offshoring in services particularly in Professional services is a relatively recent phenomenon dating from the 1990s. Trading at a distance requires routinization and standardization of tasks in manufacturing technology –that testing and certifying became the two preconditions of this process- was applied to this end first before offshoring became prevalent (Gereffi, Humphrey & Sturgeon, 2005; Sturgeon, 2002, Thun, 2010 cited by [Sako, 2013](#)).

Bizarre as the US regulations might seem, it is only one of dozens of such requirements, generally called “certificate of necessity” (CON) laws, that exist across the country, governing a variety of industries, from moving companies and taxicabs to hospitals and car lots. A legacy of the early 20th century, CON laws restrict economic opportunity and raise costs for products and services that consumers need. Unlike traditional occupational licensing rules, they are not intended to protect the public by requiring business owners to demonstrate professional expertise or education. Instead, these laws are explicitly designed to restrict competition and boost the prices that established companies can charge. Occupational licensing laws are among the most common abridgements of economic liberty, but CON rules are more pernicious. They do not even pretend to protect public safety by ensuring that practitioners are educated or skilled; they exist for the explicit purpose of preventing competition ([Sandefur, 2011](#)). Arrow also says (1971) that the existence of licenses may minimize consumer uncertainty over the quality of the licensed service and increase the overall demand for the service. Moreover it is argued that in some cases, a poor quality service is not just a matter between employer and employee a doctor who makes a bad diagnosis may cause a widespread epidemic. In this sense requiring a practitioner to be trained at a minimum level recognized a form of regulation which may produce positive social payoffs ([Rottenberg, 1962](#)).

Skeptics of occupational licensing point out that the empirical evidence on the increase in quality, greater level of training, or avoidance of catastrophes is often thin or nonexistent in licensure. They argue that if a signal of quality is important, certification is a better way of accomplishing the goal than occupational licensing. Moreover, the skeptics also argue that any remaining beneficial effects of occupational licensing are more than offset by the monopoly effects of restriction of supply of practitioners. The most generally held view on the economics of occupational licensing is that it restricts the supply of labor to the occupation and thereby drives up the price of labour as well as of services rendered ([Rottenberg, 1962](#)). State regulated occupations can use political institutions such as state legislatures or city councils to control initial entry and in-migration, and thereby restrict supply and raise the wages of the licensed practitioner ([Kleiner, 2000](#)).

Unlike federal state, and county governments who accept the argument that occupational licensing protects consumers and improves their welfare, the dominant position in U.S. economics is that licensing restricts supply, increases prices, and transfers wealth from consumers to producers. In the 20th century, Friedman and Kuznets (1945), [Friedman \(1962\)](#), and [Kleiner \(2006\)](#), among many others, reiterated and expanded the argument that licensing is monopolistic and is intended to secure rents to practitioners. [Law and Kim \(2005\)](#) discuss the historical development of licensing laws during the Progressive Era and examine what they consider the dominant view among economists that licensing restricts entry and reduces competition. They argue informational asymmetries, which were exacerbated due to increasing urbanization and advances in knowledge, explain the enactment of many of these laws and provide justification for them on economic grounds ([Skarbek, 2008](#)). Also for [Stigler \(1971\)](#), an apparent rent seeking exists in

licencing processes that in return for gains from state-created barriers to entry, coalitions built along occupational lines support politicians. Author argues that government action in times of crisis is often inconsistent with its rhetoric so that licensing is typically justified on the grounds that market mechanisms will not mitigate the problems associated with asymmetric information (Skarbek, 2008).

Workers in licensed occupations make up a large and growing proportion of the U.S. workforce, with nearly three out of ten U.S. workers being required to hold a license in order to do their job (Kleiner & Krueger, 2010). Just like what happened in the rest of world in the last few decades also in the United States employment shifted from manufacturing to service industries, which typically have lower union representation. Thus the members of the occupations established a formal set of standards to govern the members of occupation. For a professional association, obtaining licensing legislation meant raising funds from members to lobby the state legislature, particularly the chairs of appropriate committees. The large potential gain from regulation through increased demand for the service, enhanced earnings, and the ability to restrict supply outweighs the potential losses to consumers of potentially higher prices for the regulated services (Kleiner & Krueger, 2011).

3. Discrediting of Schooling Systems and Loosing Ground in Public Education

As long as licensing relates to meet specific criteria, such as passing an exam and/or completing an approved course of study or more generally to get a diploma, any work which focuses specifically on licensure must also cover education in general and higher education in particular. Business groups have recently turned their attention to “work-ready testing” in an attempt to sort future labor. Academic diplomas or grades mean little to employers any more especially when making hiring decisions, instead relying upon school-based formal assessments to evaluate future workers on both basic literacy skills and work habits. This technocratic approach sits well with policy reformers intent on implementing tests for employability (Lakes, 2011).

Although work-ready testing is a young practice and limited only with the U.S.A for now it appears as a quite promising experience for employers especially to grow up a well behaved workforce. Even it may be more explanatory to change its name as workforce-ready-to-obey. Indeed in the U.S.A some employers say that they are not only dissatisfied with the basic academic and technical skills of job seekers but also find that applicants and new hires lack the more general habits and competencies that characterize effective employees. Survey data and other research also show that employers believe that recent high school graduates often lack skills such as punctuality, communication, problem solving, and willingness to accept supervision – in addition to appropriate levels of literacy and numeracy -- that are recognized as critical both to an effective workplace and to an individual’s successful entry into the world of work. In the early 1990s, the Secretary’s Commission on Achieving Necessary Skills (SCANS) and the subsequent National Skills Standards Board (created by the 1994 National Skills Standards Act) led the way in defining and acquiring the skills needed to succeed in the workplace (Muller & Beatty, 2008).

Following to the complaints on insufficiencies in formal higher education from business world commodification in higher education services was legitimized and pumped not only by global institutions like WTO but also by important international institutions and regional Blocks as well. In an OECD survey, for instance, four possible models are suggested as they can contribute to transnational regulation of trade in higher education services. The first model departs from the

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existing national quality assurance and accreditation systems and agencies and tries to strengthen them in view of the international challenges generated by the expansion of transnational education and trade in higher education services. This is the dominant model today and a high number of developments can be situated in it. It is therefore also the most extensively reviewed model. The second model upgrades networking and exchange towards real collaboration, for example in joint cross-border quality assessment projects, and formal or informal mutual recognition agreements between agencies and countries, often following agreements on the recognition of qualifications or mobility and credit-transfer programmes. The third model aims at the development of validation or meta-accreditation of quality assurance systems and agencies, based upon a conceptual framework and a set of methodological standards for trustworthy quality assessment. The meta-evaluation could result in a formal recognition or eventually a ‘certification’ of the agency and, eventually, in the formal international acceptance of the quality assurance or accreditation activities carried out by that agency. Finally, the fourth model concerns the development of real international quality assurance and accreditation arrangements. We can say that today the first model surely is the dominant one, but there are also developments and experiments going on in the other models (Van Damme, 2002).

Since the creation of the first agencies in the eighties, quality assurance has become a central objective of governmental policies and an important steering mechanism in higher education systems worldwide. Undoubtedly, quality has been the central concept and the major focus of institutions and governments in the field of higher education in the nineties. Many countries now have established national quality assurance arrangements or are in a process of doing so. The most important dimensions of variation between national quality assurance and accreditation refer to (1) the definition of the concept of quality itself, (2) the purpose and functions of quality assurance, i.e. the balance between internal functions (improvement) and external functions (evaluation, accountability and transparency, steering and funding, accreditation and recognition), and (3) the methodologies used in quality assurance and accreditation (Van Damme, 2002). Just like above mentioned purposes and functions of quality assurance, Giuliano Augusti also rightly underlines that QA (quality assurance) often tends to assess more the “process” than the “contents” of the education: therefore, especially in subjects that lead towards a “profession” (“engineering” first among them), the practice of “accreditation” is also increasing throughout the World (Augusti, 2012). With the fear and uncertainty of continuous employment in times of job scarcity, neoliberals essentially police the working classes through a variety of disciplinary techniques. Quality working life under neoliberalism has become more conditional, temporary and uncertain, with valued good-paying jobs reserved only for those who have managed their biographies appropriately. What has resulted in post-Keynesian times is a shift from the systemic notion of full employment into the neoliberal model of contingent or casual work, meaning the focus is upon individuals to self-manage their lives for futures of mobile and uneven employment (Lakes, 2011).

Whereas higher education was previously attached a national and cultural role, the economic rationale became more and more important in Europe as well in due course. The 1991 European Memorandum on Higher Education showed that the economic rationale had become part of the Community’s broader agenda of economic and social coherence. Although at that time many national and institutional representatives criticised this rationale, soon afterwards, national governments started to stress the economic role of higher education. The general argument was that autonomous higher education institutions would be able to better cope with and adjust to the requirements of international, national and

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regional economic environments. Whereas the latter concerned the general government's steering philosophy, it also became clear in the particular policies on internationalisation (Huisman & Van Der Wende, 2004).

Similarly the Bologna Process (1999) outlined its rationale for the Bologna Framework as to provide a mechanism to relate national frameworks to each other so as to enable:

(a) International transparency – this is at the heart of the Bologna process and while devices, such as the Diploma Supplement, have a role to play in this objective, it is difficult to ensure that qualifications can be easily read and compared across borders without a simplifying architecture for mutual understanding.

(b) International recognition of qualifications – this will be assisted through a framework, which provides a common understanding of the outcomes represented by qualifications for the purposes of employment and access to continuing education.

(c) International mobility of learners and graduates – this depends on the recognition of their prior learning and qualifications gained. Learners can ultimately have greater confidence that the outcomes of study abroad will contribute to the qualification sought in their home country. A framework will also be of particular help in supporting the development and recognition of joint degrees from more than one country (www.ehea.info, 2008).

For U.S. experience on trade in higher education John Bellamy Foster's article provides a wider perspective through private foundations exist in educational services. In Foster's article it is underlined that the Broad Foundation promotes what Naomi Klein has called "the shock doctrine," or a form of "disaster capitalism," destroying the public education system in order to open it up for privatization. In April 2009, Seattle Education posted a guide to parents, "How to Tell if Your School is Infected by the Broad Virus," on its Web site. Among the symptoms of the "Broad virus" listed were:

"Schools in your district are suddenly closed....Repetition of the phrases "the achievement gap" and "closing the achievement gap" in district documents and public statements....Sudden increase in the number of paid outside consultants. Increase in the number of public schools turned into privately-run charters....Weak math text adopted....Possibly weak language arts too....The district leadership declares that the single most significant problem in the district is suddenly teachers!...Excessive amounts of testing introduced and imposed on your kids....Your school board starts to show signs of the Stockholm Syndrome. They vote in lockstep with the superintendent....Grants appear from the Broad and Gates foundations in support of the superintendent, and his/her "Strategic Plan." The Gates Foundation gives your district grants for technical things... and/or teacher "effectiveness" or studies on charter schools" (Foster, 2011:44).

In recent years, another one, the Gates Foundation, by far the largest of these foundations, has adopted an agenda very close to that of the Broad Foundation, and the two often operate jointly. Bill Gates has declared that there is no connection between teacher quality and such factors as certification, experience, and advanced degrees, or even extensive knowledge of the subject matter. The Gates Foundation has poured hundreds of millions of dollars into the support of educational advocacy groups meant to pressure public policy, all aimed at restructuring public education, promoting charter schools, encouraging privatization, and breaking teachers' unions. Thus, it has given millions of dollars to Teachers Plus, an organization that supports the restructuring of education, while arguing that the layoffs of teachers should be on the basis of assessments (test scores), rather than seniority rules, as the unions insist. The Gates Foundation also supports Teach for America, a

program that recruits applicants straight out of college, puts them through a five-week boot camp, and sends them off to teach in low-income schools, usually for two or three years—without the benefit of teacher education, or a meaningful apprenticeship leading to professional certification (Foster, 2011).

It is evident from these examples that the main idea behind short-term, private certification in addition to licensure is a kind of perception management to convince public opinion that university education is incapable to catch the speed of technological development. Although it is true that technological changes do not necessarily depend on physical deterioration of the means of production no longer, nevertheless there must also be public ways especially via public universities to fill technological shortcomings of technical staffs after their graduation.

4. Internationalization of Productive Capital and Its Relation with Private Certifying

Simon states (1951) that in many cases offshoring is a trigger to routinize tasks in Professional jobs in Professional services, offshoring is equivalent to turning an employment contract into a sales contracts. This contractual shift to an extent necessitates codifying things that had been implicit prior to the shift. Offshoring or internationalization of productive capital is the migration of productive economic activity and the associated employment from a home country –normally a developed nation such as the U.S. – to low cost countries such as India and China. In its 2011 World Investment Report, UNCTAD (2011:137) estimated that services outsourcing exports were in the range of \$ 90-100 billion in 2009, although the figure could be as high as \$380 billion if intra-firm trading was taken into account (Sako, 2013).

The offshoring research network survey of 253 US companies at Duke University also reveals that by 2006 the most common type of functional category offshored by US firms was IT services followed by product development and administrative services (Lewin, Massini, Peeters, 2009). Using global value chain framework Gary Gereffi and his colleagues have examined (2010) specific mechanisms for local firms to climb up the value chain in services requiring higher levels of skills. Starting with low value added activities such as back office transactions and call senters, offshoring has expanded to include knowledge work in software programming, engineering design, R&D, radiology, accounting, human resources, financial modelling and analytics, market research and legal support services. Thus, it must be noted here that jobs requiring higher skills are not necessarily more secure than those with lower skill content (Sako, 2013).

Internationalization of productive capital following the crisis in 1970s had also visible impacts on the agenda of global trade. Inclusion of educational services into global trade agenda through GATS (1995) is only one of numerous agreements signed under GATT/WTO. However trade in educational services also appeared as a sector for which WTO members were the least inclined to commit themselves to further liberalisation since then. Regarding trade via adult education and certification processes three components seem to be essential for member states: the international registration of providers, the development of new arrangements for the recognition of foreign qualifications and for the transferability of credits, and the development of an international approach to quality assurance and accreditation. Especially quality assurance and accreditation are mentioned in many publications as the crucial elements of regulation in a more and more trade oriented international higher education market. Not surprisingly many experts believe that trade liberalisation is unavoidable and perhaps also beneficial in the

long run, but that the resulting liberalised global higher education market will need strong quality assurance arrangements (Van Damme, 2002).

Regional free trade agreements and other type of international economic cooperation and integration seem to shape environments for the development of cooperation between member states in the field of quality assurance and accreditation in higher education. A clear case of this is the development of quality assurance and accreditation in Mexico under the impact of the North American Free Trade Agreement (NAFTA). The certification of Professional qualifications and the free mobility of professions within the NAFTA has stimulated the cooperation between US and Mexican accreditation agencies and the establishment of Mexican agencies to the example of their US counterparts (Van Damme, 2002:13-14). There is now a clear tendency towards mutual and multilateral recognition agreements to solve issues of professional recognition and equivalency of standards and procedures. Free trade agreements have stimulated this development powerfully: EU, NAFTA, ASEAN, APEC, MERCOSUR, etc. all have regulations dealing with professional services leading to professional recognition (Van Damme, 2002).

When we interpret above given institutions and agreements and also the targets of the Bologna Framework mentioned in previous section in terms of accumulation of capital we see that the main purpose is to harmonize different qualifications in member states. The reason behind this purpose is to enable investors to employ engineers, staffs and technical staffs abroad whose labour power are cheaper but equipped with the same qualifications of the European workforce, a tendency which potentially reduce the value of European labour power by increasing unemployment in Europe. At the same time this is what should be expected following internationalization of productive capital as an answer to crisis in 1970s. The emphasizes on international mobility of learners or Diploma Supplements underlined in Bologna Framework are also important both for analysing commercialization exists in higher education systems in Europe and for understanding the structural relation between commercialization in higher education and private certification.

5. Legitimacy and Illegitimacy of Certification

Friedman claims that there are private certification agencies in many areas that certify the competence of a person or the quality of a particular product. The Good Housekeeping seal is a private certification arrangement. For industrial products there are private testing laboratories that will certify to the quality of a particular product. For consumer products, there are consumer testing agencies of which Consumer's Union and Consumer's Research are the best known in the United States. Better Business Bureaus are voluntary organizations that certify the quality of particular dealers. Technical schools, colleges, and universities certify the quality of their graduates. One function of retailers and department stores is to certify the quality of the many items they sell. The consumer develops confidence in the store, and the store in turn has an incentive to earn this confidence by investigating the quality of the items it sells. One can however argue that in some cases, or perhaps even in many, voluntary certification will not be carried as far as individuals would be willing to pay for carrying it because of the difficulty of keeping the certification confidential. The issue is essentially the one involved in patents and copyrights, namely, whether individuals are in a position to capture the value of the services that they render to others (Friedman, 1962).

Distinctively from patents and copyrights, testing and certification firms change the content and requirements of the courses they organized very often. Also the

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vendor-centric nature of certification processes gives rise to the changes in curriculums according to the different expectations of each vendor who are composed by industrial capitalists relying upon testing and certification firms. Wyrostek who is an IT expert very well experienced in testing and certification sector also touches on (2008) the problem is that every vendor has its own set of certification criteria; none of them match, and there is no uniformity. The IT expert states that whatever Vendor A says you should know is what you need to know in order to achieve validation:

“If you have ever taken a Novell exam, a Microsoft exam, a Cisco exam, and/or a CompTIA exam, you probably have been told to answer the questions on the exam the way the given vendor wants you to answer the questions. Because IT certifications are vendor-centric, a vendor can revise, revamp, or completely redo a certification as often as it wants. Much is based on the life cycle of a given product, such as an operating system. If you want to feel like you are simply chasing your tail, keep up your certifications based on a vendor’s whim and whimsy for how long they feel a product’s life cycle is. Here’s a good example from my experience. In 1995–1996, I earned the Microsoft MCSE for NT 3.51 through a lot of hard work. Not six months later, however, Microsoft changed the MCSE requirements for the MCSE in NT 4.0. The seven exams I took for 3.51 no longer had legs. I had to take six or seven more. So I did. Well, guess what happened in 1999–2000? Windows 2000 came out, along with a whole new series of exams—which almost killed me. Now in less than 4 years I had taken close to 21 exams to earn 3 Microsoft certifications that I needed to teach the most up-to-date Microsoft classes. Several years later, Windows 2003 came out with two more upgrade exams, which so far I have not taken/passed because of disgust with the process. I will probably have to take them before long because the Longhorn roadmap “encourages” MCSEs to be at least 2003 to avoid taking all exams again. I would agree until recently, when I was talking to an HR recruiter who told me that a company that was interested in me would not consider any of my experience unless I had the latest-and-greatest MCSE. Three earlier MCSEs and 15 years of field experience made no difference. If I did not have the MCSE 2003 they would look elsewhere. Indeed, they looked elsewhere.” (Wyrostek, 2008)

Moreover Friedman implies that since private certification agencies already exist in many areas for decades there should not be any objection to transfer the tasks of testing and training given to technical staffs to private entities. It must be noted that the difference between certification examples given by Friedman dated 1962 and today’s practices can best be seen by comparing the institutions who have been certifying staffs. As it is also stated by Friedman most of certifying institutions in 1960s, 1970s even in 1980s were non-profit, publicly run organizations and a market specialized on certification did not exist. However today there are thousands of private firms who are accumulating capital through certification market. Apart from this, unlike 1960s and 1970s, certified staffs are paying the costs of private courses by their own. Also because certification processes are offered as a job opportunity for future, the tuition fees paid by both jobless or hired employees to private courses represent the reductions from actual or future wages of receivers. As it is perfectly described by Wyrostek above much certification programmes are based on the life cycle of a given product, that a staff has to have tens of exams in order to get few certificates to meet continuously changing technological criteria.

At the same time, the most valid reason for certificate receivers for not to render what did they learn in these courses to others is the process itself that vendor firms accept to employ only those who deserve to get certificates which have to be drawn up in service receiver’ name. Or, in another word, industrialists and certification

firms work collaboratively together that while former has been forming a market for this specific service by demanding only staffs with certificates, the latter encounter with no trouble to sell its commodities, namely the qualifications added to service receivers. Thus it seems that the above cited problem pointed out by Friedman had already been overcome.

6. How Certification Firms Join into the Chain of Capital Accumulation ?

Many of the activities involved in the certification process can be either conducted by the certifier or delegated to other parties, such as independent testing and calibration laboratories or external auditors. Certification often results in the granting of a mark, certificate, label, or registration, such as ISO 9000 or ISO 14000, with a quality system registrar. The certification market usually involves a number of competing private bodies. In the vast majority of countries, subsidiaries of the 20 or so largest global certification bodies have an important share of the market. While most certification bodies operate as private for-profit companies, others operate as individual not-for-profit organizations or as part of industry associations. (Guasch, et al., 2007: 65).

Regarding the main focus of this paper O'Grady notes that there is a modest, but noteworthy, overlap between the system of licensure for professional engineers and the system of certification of technologists and technicians by sharing the results filtered from his research made in the U.S. The survey data suggest that there is a number of persons who are working as engineers, but whose professional certification is as a technologist or technician. This is consistent with Census data. Barely half of certified technicians report that they are working as technicians. Employer policy is also an important factor in both licensure and certification. A large majority of engineering and technology employers have policies that support the systems of professional licensure and professional certification, though many of these employers do not provide financial support for annual licensure or certification fees. Employer support for licensure of engineers is stronger than support for certification of technologists and technicians. Licensed engineers strongly associate their licence with professionalism, client expectations, better career options, increased employability, and increased earnings. Persons who are working as engineers, but who are not licensed, largely share these perceptions, although a significant number attach less importance to client expectations. Among technologists and technicians, there is a similar association of certification with professionalism, client expectations, better career options, increased employability, and increased earnings (O'Grady, 2009).

In modern business, IT certification in general and Microsoft certification in particular has been an important phenomenon for all parties involved since 1990s. As skill validation, it is widely claimed that certification "ensures that businesses are able to identify experts who know how to use those powerful tools and solutions to the best of their advantage" (Vakhitova & Bollinger, 2011). Among these kind of arguments we see strong references to staffs and workers about that they would also benefit from certification process. For instance Vakhitova and Bollinger state that for the workers, certification is not only associated with a higher human capital but also can provide signals about leadership qualities and comprehension of innovative information (Vakhitova & Bollinger, 2011). It is also a several billion dollar a year business. According to a study conducted by International Data Corporation, the IT training and testing industries reached \$2.5 billion in 1999 (IDC, 2000). Though not formally required in the IT sector,

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certification may result in brand loyalty or provide additional market power for the certifying company (Vakhitova & Bollinger, 2011).

In the U.S. the Microsoft Certified Professional Program was established in 1992. In the year 2000, Fairfield Research, Inc. and Certification Magazine recognized Microsoft as the industry leader whose certification programs attracted the largest number of certificates. According to www.microsoft.com, as of January 2004 about 1.5 million individuals had achieved Microsoft certification worldwide, and about one third of them obtained more than one certificate (Vakhitova & Bollinger, 2011). Transnational corporations already are advantaged by the multibillion-dollar worldwide markets in schooling, as seen in the testing and textbook publishing industries, among instructional technology vendors, and in the food preparation and cleaning services, to name a few. Spring (1993) noted that the testing industry is driven by the profit motive, in the hands of a few major firms, and always on the watch for new ways to increase their markets. Houghton Mifflin foresaw a market potential of \$1.6 billion in delivering their tests electronically, and for \$16 million acquired computer adaptive technologies of Evanston, Illinois (Sacks 1999). "There are standardized tests for wine tasters, baseball umpires, plumbers, ballroom dancing instructors, Bible scholars, and art collectors," wrote Sacks (1999) in a book about the national obsession with the culture of testing. Yet standing behind the illusion "held by most employers that such exams can sort the capable from the incapable" it is the testing industry that sells the mythology one can measure a person's job readiness or work-related performance abilities. There are billions of dollars in revenue to be accumulated from selling and administering educational tests, and these firms are positioned to work in concert with governments and educational reformers. (Lakes, 2011).

During this study it is observed that the richest literature and field researches on certification exist in the U.S.A. Therefore functioning of the industry is analysed here by giving examples mainly from the U.S.A. and little from Europe. In the U.S.A the standardized tests are based upon levels of mastery in the three foundational areas of applied math, reading for information, and locating information, cognitive skills considered by businesses as essential for a well-qualified workforce. Each test battery, timed and proctored, is about fifty-five minutes long, available in paper and pencil or computerized versions, and consists of over thirty multiple-choice questions per exam covering the reading of textual materials such as memos and letters, or bulletins and policies; the calculating of mathematical formulas and multiple steps in conversions over work-related problems; and the locating of information on graphical images and figures, tables and charts, or floor plans and diagrams. In the U.S. the ACT charges \$17.00 per exam, but costs are subsidized by the states for clients in employment and training programs. First introduced in the USA in 2006, the National Career Readiness Certificate is used in 37 states for assessing individual work-ready skill levels, producing over 691,000 registered certificates. The certificates tell employers what to expect in terms of on-the-job proficiencies and ability and willingness to perform new jobs—making transparent a uniform system for recognizing the skills and qualifications held by potential applicants (Lakes, 2011).

Several authors analyse the positioning of beneficiaries who are parts of certification programmes by stating that if training is useful for employers and unemployed persons why government money should be spent on it. Why could it not be arranged by the employers and the unemployed persons involved? If the training is beneficial to the employer or the unemployed person, or to both, why would they not want to invest in training themselves? There is a number of reasons. First, the return of training to the unemployed person is uncertain. He has no guarantee of finding a job and even if he does, the initial pay may be relatively low.

If he is risk-averse, he might not engage in training, even if there is a positive expected return on training (Kodde, 1987; Ritzen, 1989 cited by Baaijens, Cluitmans, Gelderblom, Huitema and Waterreus, 1998: 72). Another difficulty is that training costs are high, implying that most people would have to borrow the money. However, it is hard to imagine that banks would lend money to an unemployed person. The costs would even enormously increase if the unemployed person would face the risk of losing a benefit because of training participation. When following training, unemployment benefit receivers are expected to be available for a job. Following training - especially in day-time - carries the danger of losing the unemployment benefit, because the availability for a job is doubted. This is a bottleneck for private initiatives in the field of training for the unemployed (Baaijens, et al., 1998: 73).

Spring points out (1998) that also in Europe a uniform credential already established and widely accepted is the Europass, a European Union (EU) personal skills card used by the member states to signify employability. It is a compact document or curriculum vitae that records prior work histories and language proficiencies as well as vocational certificates, higher education qualifications, and transnational learning or training experiences. The credential was initiated by EU public policymakers who spoke of closer alliances with business and training organizations, for they understood the real need for workforce improvements, with demands for up-skilling in computer and information technologies, and for workers who engendered lifelong learning (Lakes, 2011). Similarly also in Netherlands employees may follow job-related training outside working-hours on their own expenses (Baaijens, et al., 1998: 38).

7. Beneficiaries' Criticisms Against Certification

Certification exams and certification requirements are typically designed by a vendor. For example, Microsoft, Cisco, and Novell each have their own certification programs and tests. Some of them are more general; others are very product- or subject-oriented. Each vendor typically provides several certificates that may be obtained if one has successfully passed a certain number of exams. For example, to obtain Microsoft Certified Professional certificate, one needs to pass a single test; while to become a Microsoft Certified Systems Engineer (MCSE), one is required to pass five core exams (four operating system exams and one design exam), plus two elective exams. In many cases certificates have to be renewed after two or three years. There are also some certification programs that are considered "vendor-neutral." They have been designed by a third party or a group rather than a single vendor (Vakhitova & Bollinger, 2011).

Also because certifications are vendor-oriented, they do not prepare technical staffs for the real World that at the same time no one is overseeing the whole process. No environment is made up of just Microsoft, or UNIX, or Novell, or Linux or etc. The real-world enterprise is made up of at least two platforms, and tens if not hundreds of applications from a host of vendors. The real world is a fully integrated environment. Moreover IT certifications have been devalued since their heyday in the mid- to late 1990s. The reason for the devaluation is brain dumps let service receivers get all the questions on a live exam. They can then pass the exam without knowing the technology. People earn the certification without training and without experience, and advertise themselves as experts. This makes everyone look bad and devalues the certification process. There are some vendors, such as Microsoft and Cisco, which are trying to improve the value of the testing experience by incorporating simulations. But the result of these efforts just like as a band-aid. Many knowledge-based cognitive exams are poorly written, poorly

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edited, not real-world oriented, and not in tune with the needs of the industry (Wyrostek, 2008).

While employability exams are favored by employers in sizing-up individuals for their firms,

“test scores are decidedly poor predictors of one’s job performance or career achievement” (Sacks 1999). Critics question the validity and reliability of these assessments, the veracity of measurements on a battery of timed, work-based aptitudes that actually determine occupational success in the real world. Moss and Tilley (2001) said that judging skills is problematical due to subjectivity factors and “cannot be measured with precision”—even though psychometricians claim talented workers can be spotted and marked. And, second, due to situational factors in the workplace, skills are “profoundly dependent on context” and employers add their own “attitudes to the mix”. That is, human resource personnel who require face-to face interviews with potential job candidates in the selection process bring their own biases into play. Gender bias also plays-out in the arena of employability testing. Castellano (1997) remarked that “standardized tests do not predict future performance so much as they assess applicants’ exposure to a certain set of experiences and their ability to display it in testing situations”. In her study of an apprenticeship program for women preparing to work in the trades, testing bias appeared in question sets on technical literacy, such as mechanical reasoning and spatial relations. Females might not have prior exposure to using tools and hands-on projects either at home or in grade school industrial arts classes that impact their abilities to master the timed, employment exams. And standardized testing adversely impacts the educational prospects of working-class kids, those most likely to score poorly are the ones who face a heightened regime of testing and test preparation academic curriculum once available to all now are limited to well-heeled school districts (Lakes, 2011).

Certification examinations are developed by private organizations and are not subject to the same level of legal scrutiny as that of a licensure examination. Certification organizations, being accountable only to themselves, are free to establish criteria in the interest of their members. They are not accountable to the public. The title used by an individual after successful completion of a certification examination does not carry any type of legal status. It does not embellish one’s licensure or procure additional rights. The public can rightfully assume that the use of certified professionals will increase the probability of more proficient care. However, by virtue of a certification examination being private and voluntary, it cannot be used by state as a public protection mechanism. Since the certification is voluntary and private, there are no legal requirements that the individual must be certified to be practice. Registered professional licensure is a prerequisite for achieving certification. However, the distinction between certification and licensure becomes blurred when certification and licensure have overlapping roles, -especially if there is not any national examination for licensure- as in the case of advanced practice nursing (Chornic, 2008). In addition to above cited concerns the process is voluntary and accreditation standards may vary even if certification programs become accredited. Certifying organizations may overlap in types of certifications offered but differ in standards, eligibility requirements, and examinations (Kendall-Gallagher and Blegen,2009).

8. Turkish Case

As it is stated in introduction the point of departure of this study is that the increased pressures on occupational chambers, especially TMMOB- Union of Chambers of Turkish Engineers and Architects and its affiliates to act as private

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testing&certification firms in the market. Although certification industry does not limit itself only with technical staffs and covers entire working class, this study choose the umbrella organization of the chambers of engineers and architectures as an example. TMOOB was established in 1954 by the Law 7303 and the Decree-Laws 66 and 85 amending of the Law 6235. It is a corporate body and a professional organization defined in the form of a public institution as stated in the Article 135 of the Constitution. At the establishment stage, TMMOB who defines itself as a professional democratic mass organizations had 10 Chambers and 8.000 members. However, as of December 31, 2014, the number of Chambers has increased to 24, while the number of members reached 467.344 (TMMOB, 2015).

The question of why occupational chambers are under significant pressure today to commercialize their training activities which have been given as free of charge for decades must be seeked in changed conditions of capital accumulation in Turkey. Indeed in the past, this special workforce numerically were too few comparing today that they had to be equipped with untouchable privileges. At the same time engineers and architects were mainly employed by Public Economic Enterprises especially between 1960 and 1990 that only few per cent of TMMOB members were working in private sector meaning that they did not produce surplus value. Just like how it happened in the rest of world following capitalist depression in 1970s, Professional employees in Turkey also faced with consecutive losses of rights that while unemployment among technical cadres was not the case in the past, today there are thousands of engineers and architects who are seeking jobs. Regarding the privileges generated from being members of TMMOB, it must be noted that today most of engineers have been working in private enterprises as totally deprived from these privileges.

Under these highly precarious conditions beside many other layers of working class technical staffs have also been offered further trainings, exams, testing and certifications to improve their skills in order to find job. Although it has been presented as a way of finding job, this is not a job guarantee that also the staffs with certificates mostly fail to get a job in the final. These programmes usually take three or four months and service receivers must pay the costs of courses by their own. Certification and testing procedures emerged as a life ring also for Turkish Government that staffs who have been taking these courses are not counted as jobless during these periods even if they have been seeking jobs. Thus, Turkish Government is enable today to display unemployment figures less than actual figures thanks to the certification mechanisms.

Debates inside TMMOB affiliate chambers on whether they should support ongoing trends of commercial certifying process for their members show that there are conflicted positions in both within each chamber but also between different chambers. Nevertheless by moving from the fact that only The Chamber of Mechanical Engineers accepted to be accredited by TÜRKAK as of February 2015 we may conclude that opponent chambers still represent majority in TMMOB at least for now. Below statement made by young engineers in the fourth convention of student members of EMO, The Chamber of Electrical Engineers affiliated in TMMOB may give an idea why opponents are against commercial practices in general and private certification in particular:

“The new needs of capitalist class are flexibility, replaceability and multi-functionality. Especially in the countries like Turkey international capital is required laborers who are able to accomodate new technologies, to be employed in different fields of job when necessary, having job skills based on work experience rather than qualifications gained in schools and ready to work under most flexible forms. Accordingly, course credits in higher education have been lessened and university education has been transformed

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to highly simple processes that students can get only a very general formation which enables them only to use the limited knowledge they get in the university education. Thus students are only given a very general skill in specific occupation rather than having a holistic view, possessing entire knowledge of that occupation or doing scientific researches. They are asked to be certified by private agencies to fulfill their occupational deficiencies when they make job applications. By this way, private courses and certification have been pervading while scientific characteristics of higher education are increasingly disappeared. Consequently engineers and technical staffs have to prove by submitting their certificates that they have enough skills to perform specific jobs and/or they must show that they are ready to work in any unrelated parts of job rather than being professionals who knows entire details of their occupation, able to produce new ideas related with their jobs and enable to develop projects. Following growing up of certification industry hiring and firing of engineers will be much easier for firms” (Kalaycı & Aras, 2007).

Adversely to the position of engineers and their chambers, private sector defines this process as a conformity assessment program that it means skills, competency and experiences of a candidate is evaluated according to objective criterions by comparing needed requirements which are determined by standards. Then if the result of the evaluation is enough level, the candidate can have the personnel certification which it proves the candidate has enough skills, competency and experience in the related subject:

“People who graduated from the education program have been increasing day by day. However personal qualification can’t meet needs of the industrial area depending on changing evolutions which is requested by current economy under the competitive conditions. As a result, it brings financial burden generated from staff circulation in the companies and causes decreasing of the competitive quality. The aim of “The Evaluation Convenience” and “The Personal Certification” programs of TQNet for individual orientated to improve strictly required personal competency which will be met the current specific needs and to progress to the security of public and environment.”(TQNet Homepage, 2015)

Also Turkish MYK, the Institution for Professional Competences states that private sector must be motivated to establish centers for testing and certifying in order to increase employment of staffs proper to the nature of business, to guarantee higher productivity and quality, to reduce the risk of losing time and Money, to increase competition power of business, to contribute workers’ mobility in international markets and to set the stage for finding job of unemployed (MYK, 2015).

Table 1. *Estimated Certification as of the end of 2015*

City	Population	Certifying Firms	Estimated Number of Certificates
İstanbul	12.915.158	3.200	8.850
Ankara	4.650.802	1.500	3.198
İzmir	3.868.305	800	2.660
Bursa	2.550.645	400	1.265
Adana	2.062.226	170	1.413
Konya	1.992.675	550	1.370
Antalya	1.919.719	680	1.111
G.Antep	1.653.670	70	1.137
Kocaeli	1.522.408	240	881
Diyarbakır	1.515.011	90	577

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Samsun	1.250.076	170	620
Kayseri	1.205.872	140	529
Balikesir	1.140.085	170	513
Van	1.022.310	60	507
Denizli	926.362	150	537
Sakarya	861.570	120	592
Erzurum	774.207	60	532
Trabzon	765.127	80	526
Eskişehir	755.427	120	519
Malatya	736.884	120	507

Source: TÜBİDER VOC-Test Center

As it can be seen in above given table the estimated number of private testing and certifying firms in Turkey is nearly 9 thousands as of 2014, despite legislative steps were taken in 2006, only eight years ago.

In Turkey the NDT-Non Destructive Testing activities were started in 60's. However, these activities were localized, and realized by short seminars especially on the testing of weld seams. The first systematic and long-term program on NDT training in Turkey was initiated by the establishment of NDT Committee (NDTC) of the Chamber of Metallurgical Engineers in Ankara in 1987. In July 1988, based on the project agreement between Turkish and German governments, NDTC and Middle East Technical University (METU-Ankara) started to implement a training, qualification and certification program with the active participation of German NDT Society (DGZfP-Berlin) and German Federal Institute for Materials Research and Testing (BAM-Berlin). In the frame of the same project, the Welding Technology and NDT Centre was established in the premises of METU. A group of engineers from the METU and various industrial firms were trained and certified in several NDT methods to level-3 in Germany between the years 1989 and 1992. With participation of these groups, the NDTC has prepared an activity plan consisting of the regular programs for training, qualification and certification for NDT personal in Turkish firms, and then establishing the Turkish NDT Society. The working groups of training, qualification and certification, technical rules, and industrial relations were established in 1992. After July 1993, the system of the training and the qualification exams was adopted to EN 473. Parallel to the improvements in the related international standards, an independent certification body, named as "NDT-Personnel Certification Centre" was established in 1996. Starting from this date, the NDT training and qualification-certification activities have being carried out independently (www.ndt.net 2015).

Regarding with international aspect it must be reminded that Turkey is member of a Customs Union with the EU since 1995 and as a candidate country it must align its national quality infrastructure with the European one. Beside many other factors which accelerate integration of Turkey in economic transformations around the World, it has to complete the establishment of the so-called quality infrastructure, a generic term encompassing the operators and operation of standardization, testing, certification, inspection, accreditation and metrology as well. Furthermore it is important to create confidence on an international level in the testing, inspection and certification bodies in Turkey and to create reliability in the tests they perform and in the certificates they issue. After the formation of the customs union in 1995, private conformity assessment bodies started to invest in Turkey in order to provide international certificates and markigs such as the ISO 9000 series and CE marking for Turkish producers. The Turkish Accreditation Agency (TURKAK), founded in 1999 and commenced accepting accreditation applications for conformity assesment bodies in 2001. Accreditation is not

compulsory for notified bodies, but public authorities request –as emphasized by the European Commission- that candidate notified bodies comply with EN ISO 45000 standards. These authorities work in cooperation with TURKAK to assess the capacity of the notified bodies, or accept those are to be notified to the European Commission. In particular, the Ministry of Industry and Trade, the Ministry of Labour and Social Security, the Ministry of Health, the Ministry of Public Works and Settlements, the Undersecretariat for Maritime Affairs and the Telecommunications Authority have established cooperation protocols with TURKAK in this context. In 2002, TURKAK became a full member of the European Co-operation for Accreditation (EA). However becoming a member of an international organization is not sufficient to achieve international recognition of accreditation certificates, as an accreditation body must also be a signatory to specific multilateral agreements (MLAs) with other accreditation bodies. In Turkey, marking and certification parallel to the EU system were implemented only in the automotive sector till 2010, which was subject to the old approach directives. In addition Turkey suffered for a long time from a lack of certification bodies. Although Turkey opened up the certification, testing and calibration market to other actors, Turkish firms were reluctant to enter the market for conformity assessment bodies as long as uncertainties prevailed regarding the acceptance of notified bodies of the European Commission. In April 2006, TURKAK signed four out of seven MLAs with EA members. These MLAs cover the areas of test laboratories, calibration laboratories, quality systems management, certification bodies and inspection bodies. Hence, since April 2006, certificates issued by all test, calibration, quality systems management and inspection bodies accredited by TURKAK are recognized within the EU. With the signing of the remaining three MLAs in 2008 TURKAK's full international recognition has been completed. These three MLAs are those for product certification, personnel certification and environmental management systems certification (Togan, 2010: 64-69).

Another national body, the MYK- Institution on Vocational Quality Assessment was founded on 21st September 2006. The main objective of MYK is to study for the establishment of a National Vocational Qualification System based on a functional link between the quality of work life demands. MYK believes that this system will allow it to train the skilled workforce needed to compete in the global economy Turkey. It is underlined that one of the strengths of this system is to accept the concept of lifelong learning. In this context, MYK aims certifying those who acquire qualifications on the job, to provide vertical and horizontal job transfers between occupations and sectors, to prepare laborers for more flexible works by enabling them to reflect new developments emerged in their occupations to their professions via certification coursesn(www.myk.gov.tr, downloaded in February 2015).

Although the market for certification services in Turkey shows a reasonable number of suppliers, the competence of some has been questioned and their practices may be anticompetitive. Of the estimated 82 certification bodies in Turkey, only 19 were accredited by the national accreditation body, TÜRKAK in 2002. Again, as of March 2002, up to 700, or 18 percent of certificates in Turkey were delivered by nonaccredited bodies (Guasch, et al., 2007: 241-242). As of February 2015, the number of accredited certification firms have been reached to 57 (TÜRKAK, 2015). Moreover, some local stakeholders, both national and foreign, question the business ethics of some of the smaller certification bodies active in the Turkish market, some of them subsidiaries of European bodies accredited in their home countries as follows :

“They appear to be performing poor audits and granting certificates quickly and cheaply, and they may not be adequately monitored by foreign

accreditation bodies. Many of the clients of these certification bodies appear to be services companies seeking to satisfy certification requirements for government procurement purposes. It is difficult for certification bodies accredited by TÜRKAK or by other reliable foreign accreditation bodies to compete under these circumstances. Until now, Turkish firms have had to use the services of the subsidiaries of organizations notified in other European countries. Two European subsidiaries share most of this market for CE marking. The presence of domestic notified bodies in Turkey would increase competition and expand the market to other parts of the country ([Guasch, et al., 2007: 241-242](#))”.

9. Conclusion

In the study it is aimed to show different perspectives on licensure and private certification in general and also to give a brief information on the state of Turkey in particular. It is apparent that ongoing enlargement of private certification industry rise upon three basic reasons, allegedly, insufficiencies in higher education, restrictive nature of licensure and qualifications required by new technologies. Although these excuses seem quite satisfactory for the very beginning of internationalization of productive capital in 1970s and 1980s, study manifests that processes of private certification passed much beyond of these excuses today. Indeed sector alone represents a new field for accumulation of capital. We may well conclude that this accumulation is carried out via two layers of working classes: masses who are obliged to be certified and waged laborers who work in certification industry in order to improve skills of those who are in need to be certified. Since staffs and professionals feel that they need to get certificates mostly when they are seeking job and also because they have to pay for these courses by their own, all tuition fees imply reductions in future wages. Since the literature focusing on the numbers, wages and working conditions of trainers hired by certification firms is virtually non exist study suggests further researches especially on waged trainers working in private certification firms.

Regarding Turkish case, this study seems to become first especially for critical writings that private certifying appears as a topic with numberless aspects to be searched. Although ongoing debates have been stuck in a dilemma of accredited and non-accredited firms none of these two cases are exempt from existing exploitation in certification industry. Under the propaganda jointly run by state authority and private sector, technical staffs are in difficulty to find their ways. Both actors the state and certification industry define this process as a conformity assessment program that it means skills, competency and experiences of a candidate is evaluated according to the objective criterions by comparing needed requirements which are determined by standards. Under these circumstances of uncertainties and manipulations in Turkey further critical researches become an unavoidable and unpostponable task for critical thinkers.

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