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International Organizations of Educational Planning, Government Policies and School Management and Leadership

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The world is amidst a turbulent era with impacts on all aspects of social life and social systems, including that of education, especially in the so-called recessionary economies, as the Greek one. In the framework of the development of a better type of public administration, major international organizations for the economic growth and prosperity, namely the OECD and the European Union, have provided Greece with guidelines and better policies. Recent government policies in education reflecting these guidelines have created an immense agitation among all educational partners, teachers, students, parents, and local authorities, as the latter seems not to understand the rationale behind them. The government rhetoric—though echoing different political areas every time—always includes the argument of the necessity of a planning process to respond to the volatility in schools' external environment and to provide an appropriate basis for their internal management and leadership. This paper investigates the role of the international organizations of educational planning in designing governmental educational policies, their impact on the macro-level of recessionary Greece and the role of school management and leadership in coping with problems in Greek schools. Moreover, this paper explores other relational factors of the Greek reality that add to recession and put an extra burden on school praxis, thus making governmental policies and international guidelines difficult to apply and easy to provoke disillusionment to education partners. Finally, the paper discusses the peculiarities of the Greek educational landscape and proposes new paths for research that can facilitate the introduction of structural changes and further development.

Keywords: economic crisis, educational planning, government policies, school leadership, Greece

Introduction

In recent years, Greece has been in the eye of the economic recession cyclone caused by the financial markets. One of the 22 most developed countries in the immediate past, the country was found lost in the middle of a problematic institutional context and in the prey of wealthy tax evading citizens. The immediate effects of the situation have been obvious on the socio-economic level: de-structuring and shrinking of the economy, loss of jobs, extended youth unemployment, loss of property due to bank loans, poverty-stricken families. So far, the state's main preoccupations have dealt with reorganizing the institutional structures so as to contribute to growth, as well as to comply with the obligations resulting from the external borrowing agreements, to which the state had resorted to overcome flux problems. In doing so, the Greek state seems to

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swing back and forth, between its traditional neo-marxist political, economic and—consequently—administrative profile and the neo-liberal austerity and restructuring economy and public administration measures imposed by the international organizations representing the interests of the international, impersonal creditors.

Although much has been said on the role of international organizations and their share in the causes and impacts of crisis (from a macro-economic perspective), little research seems to have been done on the influence of these organizations at the micro level (Gouvias, 2007), for instance, on the Greek schools, in a milieu of crisis.

The structure of the Greek educational system does not encourage (external) researchers to work closely with educational leaders within the school in order to gather systematic and trustworthy data for an in-depth analysis¹. As a result, there is not enough educational research evidence to rely upon for our discussion.

Consequently, this paper does not present new empirical research. It attempts to bring together work from various fields and literatures, which all provide a specific take on the impact of educational planning organizations on Greek schools' structure, management, and leadership in the middle of a raging economic crisis.

Definitions

Discussion in this paper revolves around two principal terms: educational planning organizations and management and leadership in Greek state schools.

Educational planning organizations are international designing and planning entities whose aim is to deliver guidelines and directives to their member states for the improvement of the states provision of education. According to these organizations' rationale, education is one of the most important pillars to ensure economic growth and enhancement and, as such, it deserves special care and support. Support is provided to member states usually in the form of strategic orientations and policy designing guidance. The most prominent among these organizations are the OECD (working closely with IMF's education staff and the EC), the IIEP of UNESCO, and the European Union. In this paper, discussion about these organizations' micro-level impacts on Greek education will be confined to the agency of two organizations: the OECD and the EU.

The most important of the influences of international educational planning organizations discussed in this paper deals with the meaning content of the term "school leadership". The recent tensions in the Western and/or Europe in the field of education subsume management into leadership (OECD, 2008a; 2008b; 2008c), although the two sets of roles remain distinct: management is more closely associated with maintenance of current operations while leadership involves steering organizations by shaping other people's attitudes, motivations, and behaviors (Bush & Glover, 2003). A bit earlier, Dimmock (1999) had provided a distinction between school management, administration, and leadership: Management involves routine maintenance of present operations; administration has to do with lower order duties while leadership includes "higher order tasks designed to improve staff, student, and school performance". The OECD report (2008a) concluded that the above elements "are so closely intertwined that is unlikely for one of them to succeed without the others".

The international organizations reports have been based on literature and research from decentralized (UK, Canada, Australia, New Zealand, and USA) systems (Leithwood & Day, 2007; Leithwood & Riehl, 2005; Woods, 2005; Moos & Johansson, 2009; Yukl, 2002). In these texts, school leadership appears as an "umbrella" term covering both managerial and leading domains, competences, and skills.

¹ Systematic field research data can be collected easier by ministerial agencies officials who also analyze and interpret data according to their targets and standards. Collection of such data, though conceiving some bias, has also not been done so far.

However, the understanding of leadership in the Greek educational context is differentiated. The Greek equivalent word is largely used for the persons on top of the Ministry of Education or anyone with political power in the field to design policy and take decisions. Although the content meaning of the word remains the same, that is, the power and/or role to shape behaviors, performances, and attitudes, leadership is considered the highest order task attributed to ministers, politicians, or successful entrepreneurs (Mpourantas, 2005). The conceptualization of leadership in western literature is new to the Greek school context. The notion has been introduced quite recently through the recommendations of international organizations (i.e., OECD, 2012). Nevertheless, leadership is still difficult to understand in regard to the roles and responsibilities of the Greek Head teachers, as shown by recent research (Banelli, 2015).

Methodology

This paper draws upon work from various literature contexts, with emphasis on OECD and EU data and the texts of Greece's recent agreements, called Memoranda for brevity's sake. The method chosen for the purposes of this paper is that of the Descriptive Analysis (Wolcott, 1994): a) Collected data are used to inform researchers about the impact international planning organizations which have on national government policies; b) An attempt is made to analyze the information provided by the data, identify key factors, and possible relations among them, and interpret the findings so as to reach an understanding of the issues Greek school head teachers are confronted by in everyday praxis; c) Analysis of impacts is accompanied by critical discussion on how these educational planning directives in combination with other crisis factors affect the micro-level of schools.

International Planning in Education: EU and the OECD, Their Role and Methods

The EU's role is to help member states to develop high quality education through the DG EAC's support and member states' cooperation so as to enhance economic growth and development. EU does not intervene directly in member state legislation regarding the content of teaching and the educational system organization; it encourages the cultural and linguistic diversity and the mobility of citizens, a fact that actually facilitates the mobility of the working force. It is officially stated: "While the responsibility for education and training systems lies with the Member States, the EU has a key role in supporting and supplementing efforts to improve and modernize their education systems". This is because:

In a globalised and knowledge-based economy, Europe requires a well-skilled workforce to ensure that it can compete in terms of productivity, quality, and innovation. Recent evidence, however, suggests that there is a growing mismatch of skills between the workforce and labour market, factors which contribute to unemployment and limit growth.²

The EU has employed a variety of methods to transmit tendencies, introduce policies, and achieve goals in education. This is mainly done through the Open Method of Cooperation—OMC (Lange & Alexiadou, 2007) and via the so called "soft law", that is: communiqués of Ministers of Education Conferences (i.e. the recent Yerevan Communiqué), White and Green Books (the European dimension of education, employability, and competitiveness), funded³ educational programmes and funded educational networks, as well as "Country

² http://ec.europa.eu/education/policy/index_en.htm.

³ Structural or social funding. For example, the compulsory Early Childhood Education initiative is funded by the ERDF, that is, the European Structural and Investment Funds, Regional Development Funds, which "aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions", see: ec.europa.eu/regional-policy/en/funding/erdf/, and thus, promote equality.

Specific Recommendations” and “Monitoring”⁴. Monitoring is based on specific indicators, according to strategic priorities, and each year goals aim at working towards the EC 2020 Strategy indicators.

The EU works closely with the OECD⁵: “The OECD Review of Better Regulation in Greece is one of a series of country reports launched by the OECD in partnership with the European Commission” (OECD, 2012, p. 3). According to their homepage⁶,

OECD uses its wealth of information on a broad range of topics to help governments foster prosperity and fight poverty through economic growth and financial stability. We help ensure the environmental implications of economic and social development are taken into account.

Their work is based entirely on quantitative data (on a set of indicators and benchmarks) from member and non-member countries:

OECD’s work is based on continued monitoring of events in member countries as well as outside OECD area, and includes regular projections of short- and medium-term economic developments. The OECD Secretariat collects and analyses data, after which committees discuss policy regarding this information, the Council makes decisions, and then governments implement recommendations.

OECD has repeatedly been criticized for its heavy statistical methods and standardized tests in education (Sahlberg, 2012) and the lack of qualitative data to corroborate differentiated results from international comparisons. OECD also does not directly interfere with national legislation but through the method of policy recommendations (see: Better Regulation in Europe, Greece, 2012) or reports to general public (Education at a Glance) or ministers (see for example the Secretary General’s Report to Ministers, 2015) affects national government policies, which in turn are “translated” into legislation.

The International Educational Planning Impact on the Greek National Level

Implications and Obligations for the National Government Regarding the EU and OECD

Recommendations

Both organizations’ directives for better education provision are central to Greece’s evaluation for further lending. Although OECD’s guidance to Greece for growth, amelioration, and development of the educational system is not evident in the first two Memoranda (especially, in the Memorandum 2nd, 2012), their indicated reforms (Better Policies for Greece) formed parts of the Memoranda annexes and were fully and openly accepted by the Ministry of Education in 2011 (Gurria, 2011).

However, the present government has to deal with these directives, as all of them were explicitly included in the Memorandum 3rd (that is, the 2015 lending Agreement). According to this text, the authorities should have fulfilled certain obligations by the summer 2016:

The authorities will ensure further modernization of the education sector in line with the best EU practices, and this will feed the planned wider growth strategy. The authorities with the OECD and independent experts will by April 2016 prepare

⁴ http://ec.europa.eu/education/tools/et-monitor_en.htm.

⁵ See: <http://www.oecd.org/about/membersandpartners/> for details: “In the Supplementary Protocol No. 1 to the Convention on the OECD of 14 December 1960, the signatories to the Convention agreed that the European Commission shall take part in the work of the OECD. European Commission representatives participate alongside Members in discussions on the OECD’s work programme, and are involved in the work of the entire Organisation and its different bodies. While the European Commission’s participation goes well beyond that of an observer, it does not have the right to vote and does not officially take part in the adoption of legal instruments submitted to the Council for adoption”.

⁶ <http://www.oecd.org/about/whatwedoandhow/>.

an update of the OECD's 2011 assessment of the Greek education system.

Thus,

Based on the recommendations of the review, the authorities will prepare an updated Education Action Plan and present proposals for actions no later than May 2016 to be adopted by July 2016, and where possible measures should enter into force in time for 2016/2017 academic year (p. 22).

The alignment with EU standards and the modernization of the education sector also include the Vocational Education and Training reorganization with the aim of capacity building to suit the labour market needs (pp. 21-22). Accordingly, Technical Vocational Senior High Schools (EPAL) will have to work together with labour seeking agencies (OAED) to provide their students with apprenticeship opportunities and human capital skills. It is important to mention that these are not just policy implications but straightforward obligations (key deliverables) "for structural policies to enhance competitiveness and growth". In the framework of these obligations the current government has established a multi-member committee to examine and come to policy conclusions for education (Educational Policy Committee, in Greek "Epitropi Dialogou gia thn Paideia", 2016). This Educational Policy Committee first round working results were released in late April 2016. A close examination of these results and their collation with EU's Monitoring Report and Recommendations on Education (see above) and OECD's Education at a Glance (Greece) 2016's results from indicators reveals their internal relation: extensive discussion on the autonomy of schools to manage their own reality and to work with local authorities, the re-organization of Primary and Secondary Education curricula so as to address the "basics" (as the PISA 2015⁷ results show Greece lagging behind), the evaluation of teachers' work and their further training, etc.

However, most of these issues seem to be rather controversial. As it is not possible to examine all these controversies in a single paper, only some indicative cases have been chosen for further discussion here:

The PISA testing methodology and the standardization of educational achievement, have been the major task of the OECD. OECD has introduced four pillars of indicators⁸ in education (OECD, 2015a), by which classification of the country members' educational systems is performed. The 2003 PISA report has indicated a rather low level of Greek students' achievement, as compared to other European countries. However, the PISA results have provoked a great deal of international and contradictory discourse among researchers regarding the relation between the aims and goals of democratic and equalitarian education and standardization of education via tests (i.e. the GERM movement by Sahlberg & Hargreaves, see: Sahlberg, 2012, above, p. 6). They question the use of quantitative Indicators for inter-national comparisons which "flattens" or ignores important specific features, thus, producing unfair comments and criticism⁹.

⁷ <http://www.oecd.org/edu/pisa-2015-assessment-and-analytical-framework-9789264255425-en.htm>.

⁸ OECD (2015a), Education at a Glance: The four indicator groups are: 1) The Output of Educational Institutions and the Impact of Learning (indicators A1-A10); 2) Financial and Human Resources Invested in Education (indicators B1-B7); 3) Access to Education, Participation and Progression (indicators C1-C6); 4) The Learning Environment and Organization of Schools (indicators D1-D8).

⁹ More specifically: a) School age bands are not the same in all countries; b) Goals and policies vary according to national priorities and time periods; c) Socio-economic factors and family background differ dramatically from country to country, often within the same country; d) Needs perspective varies from country to country in Europe making it extremely difficult and untrustworthy to do research based on the instructions provided by a Toolkit; e) Statistics are often untrustworthy, due to (local-national) interpretations of requirements and (due to) inaccurate translation into a target language and then back into English; f) Statistics provided by several countries are often biased or purposely altered (Argyropoulou, 2012a; 2012b).

Regarding the issue of the teachers-students ratio, OECD supports that this ratio is below its standards in Greece and urges the Greek government to take specific measures: “In particular, the authorities commit to align...(and) the ratios of students per class and pupils per teacher to the best practices of OECD countries to be achieved at the latest by June 2018” (3rd Memorandum, p. 22). OECD fails to spot that geo-morphological environment conditions (such as, remote, mountainous, or island areas) and consequent educational needs of children differ from place to place often making education provision particularly expensive. However, OECD, using specific indicators, measuring certain ratios, reports low quality provision. A typical, rather controversial, example of this OECD practice is the provision of Early Childhood Education in Greece(OECD, 2011; 2017)¹⁰.

On the other hand, the question of school autonomy had been raised in the beginning of the new millennium and was consolidated as of major importance for the Greek educational system in 2008¹¹ (OECD, 2008). The issue of autonomy seems to be of pivotal role as it decreases the regulatory role of the state (mostly funding by the state) in the schools and exemplifies a rather neo-liberal stance towards education as compared to the neo-marxist (legislated) ideology being in force today. Moreover, it requires a number of fundamental changes in the statutory framework to overturn the public administration background of the Greek educational law before autonomy is legally introduced in schools (Argyropoulou, 2015).

School autonomy and accountability were associated with school leadership and the attempt to improve it¹². “As a result of these trends, the function of school leadership across OECD countries is now increasingly defined by a demanding set of roles which include financial and human resource management and leadership for learning” (OECD, 2008a, p. 11).

Although the introductory paragraph of the first volume (OECD, 2008a, p. 11) points out that:

School leadership has become a priority in education policy agendas internationally...It plays a key role in improving school outcomes by influencing the motivations and capacities of teachers, as well as the school climate and environment...Effective school leadership is essential to improve the efficiency and equity of schooling.

It does not provide prior research corroborating these assumptions. This redefinition of school leadership roles and responsibilities in alignment with higher degrees of autonomy, accountability and distributed

¹⁰ OECD (2011) OECD Indicators: Country note—Greece, <http://www.oecd.org/dataoecd/44/21/48657344.pdf>. Early Childhood Education has been made compulsory in 2006 after OECD and EU suggestions. Also, see OECD (2017). Being compulsory, it must be provided to all children, even those few ones (below the OECD teacher-student ratio) living in remote islands or mountainous areas who can move to near larger schools on a daily basis. Consequently, there are small-size, one-teacher schools, in these areas, which cannot comply with the OECD teacher—student ratio. The same may happen with certain Primary schools with one to three teachers per a small number of students. The controversy lies in the fact that compulsory education is protected by the Constitution and offered equally to all children of Greece and at the same time should be avoided or not provided at all in order to catch up with OECD guidelines. The issue has been under fervent discussion lately, as the teacher-student ratio adjustments should form part of the May 2016 Adjustment Programme evaluation key deliverables, according to the third Memorandum.

¹¹ The World Bank, the OECD, and later the EU, have pushed forward the trend of decentralization of education and the school autonomy and accountability (Hanushek & Wössmann, 2007; Wössmann, Lüdemann, & Schültz, 2007; Wössmann, 2007) as the pivotal axes through which reform, restructure, and improvement will be achieved in schools: “Many countries have moved towards decentralization, making schools more autonomous in their decision making and holding them more accountable for results” (OECD, 2008, p. 11). This indicates that the power in schools moves from in-school decision making—bodies and individuals, such as the teachers’ boards and/or the Head teacher, to either in-and-out school governing bodies, such as, teachers-parents-local authorities, with lesser responsibilities per group, or out-of-school boards, such as the local authorities only.

¹² In 2008, OECD publishes a-two volume project under the title “*Improving School Leadership*” based on research completed in the 22 out of the 30 country-members (Greece did not take part in this international survey, p.11). The aim of the project was to put forward the importance of educational leadership as the pivotal lever for improvement and as a tool for achieving autonomy and accountability in schools as part of a decentralization process in national administrative and financial structures of a country. A toolkit with implementation tips for policy makers and practitioners accompanies the two volumes (OECD, 2008c).

leadership models and practices, is expected to change the landscape for School Heads in Greece: from the School Headship of the last two decades of the 20th century based on the principle of “*primus inter pares*” it moves to the 21st century idea of Principalship with increasing power of the individual (the Principal) and decreasing collective decision-making opportunities (the teaching board decision-making power). As the School Head is assigned with more power and responsibilities she/he is entitled to higher salary so as to “make school leadership an attractive profession” (*ibidem*, p. 12).

As far as the evaluation of the educational system is concerned the 3rd Memorandum text states: “The evaluation of teachers and school units will be consistent with the general evaluation system of public administration” (p. 23). The evaluation of the Greek educational system had been agreed long before the first lending agreement on the premise that the 2008 PISA results for Greece were very poor. Evaluation as a process has been a constantly disputed notion among educators in Greece due to: a) its negative content meaning during the dictatorship and long before it, as it has malfunctioned and been associated with negative consequences (even with job loss); b) the contradictory government policies of the last eight years, mostly of neoliberal orientation and repeating—in certain cases—the punishing attitude (of pre-1982 time) on low performing individuals or schools.

In addition, regulations included in other lending-related legislation affected indirectly but still severely the structure of the educational system with no evident results of improvement. Such an example is found in the first Memorandum (2010): the proposed (accepted and later legislated) reorganization/decentralization of the Local Authorities Chart by the name of Kallikrates¹³ has severely affected the structure of the Regional and Local Educational Authorities, as the LEA’s have been constructed following the Local Authorities structure: the shrinking of municipalities and the formation of larger municipalities out of the merging of smaller ones led to the abolition of an intermediate administrative level officers in LEAs. Moreover, further austerity measures legislated during the so-called Local Authorities decentralization policy dictated the allocation of responsibility for schools’ functional expenses funds from schools to Local Authorities on the pretext of malfunction, corruption, and waste of public money. This decision, out of being impractical for schools, was somehow rather contradictory compared with the OECD’s suggestions for school autonomy (OECD, 2008a; 2008b; 2008c), as it intensified the centralization of resources instead of the promised decentralization by removing responsibility for self-governance from schools¹⁴ to municipalities.

Although there has been an explicit internal necessity for rethinking and restructuring education in Greece, so as to meet the new scientific and practical challenges of the developed world, it could be argued that the work of this Committee has been imposed by the country engagements towards its creditors. Consequently, the Educational Policy Committee will also have a lot of work to do to convince public opinion, to integrate these policy guidelines into their own report, and to balance their recommendations both with the statutory framework and the social demand (teachers, students, parents).

¹³ L. 3852/7.6.2010 (Government Gazette, no. 87, issue A “New Architecture of Local Authorities and Decentralized Administration—the Kallikrates Project”, article 103, paragraph 2).

¹⁴ This happened for the mere sake of economizing (it had been estimated that 500 million €(euros) would be saved in the five years’ duration of the first Memorandum) without taking into consideration problems that would be created in remote island and mountainous areas of the country rather centralized authorities. Evidence from latest research indicates that this was a measure for reaching the goal of 500 million euros expected to be gained from the implementation of Kallikrates and thus fulfilling the obligations of the first Memorandum.

Other Crisis-Related Constraints With an Impact on National Educational Planning

Two major types of crisis-related social constraints regarding education should be mentioned: those associated with direct and/or indirect impacts of the lending agreements and those depending on the generally disturbed social context, though rather irrelevant of the lending agreements. The first group of social impacts refers to labour market upturns and increased unemployment (job losses, especially among young inexperienced people and women) because of either cuts in public administration personnel, lack of recruitments (due to lending restrictions) or private sector companies' bankruptcy. This impact can be seen both on teachers and students' families. Additionally, the economic crisis hit homes and the housing ability of a significant number of families, especially those with high mortgages. Homelessness has slowly but steadily started unfolding, mostly affecting people living alone, low-income and single-parent families (see similar phenomena in the USA during the housing crisis, Duffield & Lovell, 2009). The second set of social impacts, though not so strong or equally visible in all regions, has to do with the increase of immigrant inflows from war—stricken areas in the Near East. Although this is not the first time Greece receives and hosts immigrants, these particular inflows have caused a political turmoil regarding the management of these populations trapped in Greece due to other European countries refusal to accept hosting their share of immigrants. Since there are a great number of immigrant children, escorted or unescorted, the Ministry of Education will have, sooner or later, to undertake action regarding their education and integration in the Greek schools. In short, there is a high level of poverty—local and imported—reflected in the micro-society of schools, especially those in densely populated underprivileged areas of big cities. Moreover, the pressure for keeping social balance calls for government policies ensuring equality in educational opportunities, anti-racism, anti-sexism, religion tolerance and a holistic approach toward avoidance of social clashing (see also: Torche, 2010).

Impacts on the Micro-Level: The Operation of Schools and the Challenges for the School Leaders

School leaders/School Head teachers currently face various kinds of problems: those regarding the teaching staff and the implementation of curricula, those having to do with the students' achievements and behavior and those dealing with their own managing and leading skills and abilities and their lack of appropriate training.

Government policies stemming from austerity measures led to downsizing the number and the salaries of teachers both in Primary and Secondary Education and to minimizing recruitment of new teachers. Several gaps in teaching positions form a major problem. Fragmentary and temporary remedial measures on behalf of the central government fail to provide a sound and permanent solution. Moreover, teacher in-service training as a regular process has ceased long ago due to scarcity of funds. Thus, the restricted numbers of in-service teachers constitute an ageing population, lacking motivation and training, though they are constantly faced with new challenges (OECD, 2015a; 2015b).

Centrally appointed curricula have been changed many times during the past eight years thus causing more problems than those their reform had been expected to solve. This fluidity of teaching content and material, combined with the various “visions and missions” occasionally expressed by the succeeding parties' Ministers of Education in this period in their attempt to incorporate the OECD and EU guidelines, resulted in instability, lack of trust and discouragement of both teachers and students/parents.

Though there are occasional references (in social media and newspapers) about students in need and certain schools in underprivileged areas have organized packed meals for their students, as well as free

remedial courses to prevent school dropping, yet there are not official data about poverty stricken students probably because of embarrassment.

Head teachers, on the other hand, serve as the mediators between the State (in the form of transferring the government policies into the school) and the school partners, as well as between the community (the society in the broad sense) and the school. In short, they are expected to cope with four main challenges¹⁵ reflecting both managing and leading capacities:

- (1) Political and cultural expectations and their interpretation into internal meaning and direction;
- (2) Understanding and empowering teaching staff;
- (3) Structuring and culturing schools with emphasis on interpersonal relations;
- (4) Personal improvement and development.

Greek School Heads do not receive specific training for Headship either before or after being appointed to the position. Specific Headship training, either State-provided or individually acquired, is not compulsory for appointment as there are not available funds for such endeavors. Other criteria (seniority¹⁶, postgraduate, or doctoral studies, etc.) are used. Head teachers' appointments often cause dispute, as each government is accused of passing criteria laws that suit their policies and encourage governing party favoritism. Thus, Head teachers' qualities and capacities lie on their perceptions, experience, or knowledge a few of them may have acquired from the voluntary attendance of a relevant post graduate course. As a result, in most cases Heads fail to perceive, foresee, or prevent problems arising in their schools. However, the fluidity of the current socio-economic situation does not allow incompetence. Today the above mentioned managing and leading capacities seem more urgent than in the past given that adjustment programs obligations exercise extra pressure. Reorganizing the Heads' selection procedure presupposes a redefinition of their roles and responsibilities within a school with modernized and redefined goals.

Concluding Remarks: The Changing Landscape and Research-Related Issues

Education is a structured human subsystem within the wider social system (Bastedo, 2004). It constitutes the first and perhaps most important societal "field" receiving and digesting the socio-economic shocks in a very specific way: it "lives" the shocks (as education is a human environment and each educational partner is a member of the wider social environment) and, at the same time, facilitates the acquisition of knowledge, the learning, about the socio-economic shocks (as it teaches new chunks of knowledge, qualities and skills, concepts and values, beliefs and habits). Consequently, the impacts of the economic crisis on the Greek educational system are multiple and diverse. Suggestions for improving education regard both the meaning and content of teaching and learning and its organizational aspect, as state-provided education consists part of the public administration system. The meaning and content of the Greek educational system has to do with its internal goals, ethics, concepts, and values of the Greek society, its own curricula and pedagogy. In this aspect the Greek educational system is unique and any redefinition or reform in it is a matter of the Greek idiosyncrasy and of internal nationally agreed goals and agendas. In terms of a public administration subsystem, it can possibly be redefined, reformed, and/or restructured following similar policies with those applied to other public administration subsystems on the premise that this reform and restructure does not affect its internal nationally agreed goals.

¹⁵ Abridged and adjusted from *Framework of Reference*, 2010, key deliverable of Leading in Education LLP Project, available on www.leadership-in-education.eu/.

¹⁶ Heads, being part of the teaching staff, also constitute an ageing population with their own attitudes and stereotypes.

Lately, especially during the economic crisis and the recession period, intensive discussion on reforming education in Greece by employing the OECD and EU suggestions has stirred up and several attempts have been made to introduce policies to align with OECD indicators. This discussion, made in the general context of Greece' obligatory "reform of everything" dictated by its creditors, tends to forget the above assumption of its national idiosyncrasy and specific Greek identity. Any reform should be designed in such a way that it does not "imitate" or "copy" foreign policy and practice but with a mind to the national and local context. In doing so OECD indicators should be interpreted with caution, as they do not always measure identical quality or quantity features or do not meet same needs across the OECD countries.

Moreover, research patterns and methods should also be "reformed" in the sense that they should seek to investigate the new causality relations created by the crisis demands. Given that the constantly changing socio-economic landscape dramatically affects the school microcosm, researching school-related issues should be of primary importance as schools are the policies implementation arena; specific relations between policies designing, planning and implementation need to be investigated in detail, aiming at identifying their effectiveness.

Finally, educational research needs to take new paths or re-walk on already paved but scornfully forgotten paths: without disregarding the importance of quantitative methods, emphasis should be put on probing qualitative methods and/or the intensive combination of both. Multi-perspective considerations in gathering and studying data, such as, function, pedagogy, specific educational needs, equity and equality issues, quality issues and factors, are more appropriate for researching the school internal and external environment, as they provide in-depth, analysis necessary for human environment research.

Thus, reviewing policies and reconstructing public entities, such as schools, will acquire their true meaning and purpose.

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To Establish Enterprises' Long-Term Competitive Advantages by Sustainable Business Models Design: A Case From China

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Traditional economic-oriented business models often have problems when faced with increasingly serious sustainability challenges. The advent of Industry 4.0 makes it necessary to transform sustainability challenges into competitive advantages for enterprises. Using a case study of a Chinese enterprise named GEM, this paper attempts to explore how sustainability challenges can be transformed to create competitive advantages. The research provides three conclusions: First, enterprises can transform sustainability challenges into competitive advantages by developing a sustainable business model, with environmental, social, and economic values; Second, a value proposition is the soul of the sustainable business model. Enterprises need not only focus on “how to do” but they must pay even more attention to “what to do”, so it is advisable to integrate a value proposition into the enterprise strategy and business process; Finally, a sustainable value proposition consists of sustainable economic, environmental, and social values, and their individual importance varies in sustainable business models for different industries where the demand for environmental and social value is increasingly important.

Keywords: sustainable business model, value proposition, GEM

Introduction

Population expansion and technological progress are leading towards unsustainable levels of global production and consumption is unsustainable. Resource depletion, environmental pollution, ecological deterioration, questionable food safety, unfamiliar fatal diseases, and so on, have all become increasingly serious sustainability challenges. Industry 4.0 makes it necessary that enterprises transform sustainability challenges into competitive advantages. Traditional economic-oriented business models are often inadequate when faced with sustainability challenges (França, Broman, Robert, Basile, & Trygg, 2017; Upward & Jones, 2016), a recent situation that has been forcing enterprises to rethink their role in society and reflect on the idea that profit may not be foremost among many important business performance criteria. This is reinforced by the fact that global sustainable development and the welfare of future generations will depend on current decisions and actions by enterprises (Morioka, Bolis, Evans, & Carvalho, 2017). At present, there is a growing need for enterprises to address social, environmental, and economic issues through sustainable business practices

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(Moschetti & Brattebø, 2016), so sustainability has become one of the key factors for ensuring long-term business success (Yang, Evans, Vladimirova, & Rana, 2016), and traditional economic-oriented business models have started the transformation to sustainability-oriented business models. Therefore, research into the practice of sustainable business models is an emerging field that has attracted increased attention from academia, business, and political agents (Lüdeke-Freund & Dembek, 2017; Sousa-Zomer & Miguela, 2016).

Unlike traditional economic-oriented business models, sustainable business models involve a broader domain including all stakeholders and the natural ecosystem, with the goal of improving the economic, environmental, and social effects of enterprise activities (Boons & Lüdeke-Freund, 2013). Several studies have proved (Geissdoerfer, Bocken, & Hultink, 2016; Porter & Kramer, 2011; Schaltegger, Hansen, & Lüdeke-Freund, 2016; Upward & Jones, 2015) that sustainable business models can enable enterprises to better adapt to the complex business environment while gaining economic, social, and environmental value, and that sustainability challenges can be transformed into competitive advantages (Bocken & Short, 2016) and enhanced business opportunities (Belz & Binder, 2017). However, academic research on sustainable business models has just started (França et al., 2017; Lüdeke-Freund & Dembek, 2017), and comprehensive case studies are rare (França et al., 2017; Upward & Jones, 2016), so only a few tools are currently available to assist enterprises in developing sustainable business models (Geissdoerfer et al., 2016). The accelerating need to identify new pathways for the innovation and design of sustainable business models has led to increased attention (Kurucz, Colbert, Lüdeke-Freund, Upward, & Willard, 2016; Upward & Jones, 2016). To explore how sustainability challenges can be transformed into competitive advantages for enterprises, this paper attempts to exploit a sustainable business models canvas.

Methods and Literature Overview

For traditional business models, Osterwalder and Pigneur (2010) proposed a market-oriented business models canvas, and on this basis, the sustainability-oriented business models canvas has been developed. Product-service Systems (PSS) have been studied by researchers from a wide range of fields and are considered pioneering innovations in the development of sustainable business models (Reim, Parida, & Ortqvist, 2015; Tukker, 2015). Zhu and Lin (2015) proposed a conceptual framework for sustainable business models composed of a sustainable value proposition, sustainable value creation, sustainable value delivery, and sustainable value capture. Based on the business model canvas proposed by Osterwalder and Pigneur (2010), Upward and Jones (2015) and Kurucz et al. (2016) developed the Strongly Sustainable Business Model Canvas, which is a thorough revision and extension of the original business model canvas. Geissdoerfer et al. (2016) brought together design thinking and sustainable business model innovation to refine the creative process of developing sustainable value propositions and improve the overall business modelling process. In the sustainable business model framework proposed by Bocken and Short (2016), analysis was conducted to promote the discussion regarding the role of new methods of value proposition, value creation and delivery, and value capture in contributing to sustainability. Joyce and Paquin (2016) proposed the Triple Layered Business Model Canvas as a way to coherently integrate economic, environmental, and social concerns into a holistic view of an enterprise business model. Broman and Robert (2017) studied a Framework for Strategic Sustainable Development (FSSD), and França et al. (2017) integrated FSSD with the business model canvas. To help enterprises in bridging the design-implementation gap in sustainable business models innovation, the Cambridge Business Model Innovation Process was developed by Geissdoerfer, Savaget, and Evans (2017).

Based on case studies of 11 organizations from diverse sectors, Morioka et al. (2017) proposed a theory and practice-based framework of sustainable business models. These studies have important value for the theoretical and practical application of sustainable business models, but there are still shortcomings. First, the priorities for the sustainable value proposition elements are not sufficiently clear. Second, the enterprise positioning is weakened or even ignored. Third, the logical relationship between the sustainable business models elements is also not clear. Finally, the theoretical framework for sustainable business models is so abstract that it is difficult to put into practice.

Given the exploratory nature of the research objective, this analysis will be conducted using a case study. Using theoretical (rather than random sampling) selection criteria, an enterprise in China named Green Eco-Manufacture (GEM) was chosen. This paper uses evidence from a variety of sources. First, enterprise documents, including leader's speeches, announcements, research reports, academic papers, books, etc., were collected. Second, in August 2016, senior managers, core technical staff, and surrounding residents of Jingmen subsidiary of GEM, Jingmen Urban Mineral Resources Recycling Industry Park, and Huishouge Internet Co. Ltd., were interviewed to gather first-hand information. Third, on the basis of the interviews, the business premises, production equipment, and processes of the enterprise were directly observed, and Huishouge APP was experienced. At the same time, a case study's database was established, forming a relatively complete chain of evidence.

Results

Compared with traditional business models, sustainable business models have the following characteristics. Solving the problem of sustainable development and promoting sustainable economic, environmental, and social development are the primary factors driving the decision-making process and providing motivation for enterprise. The scope of enterprise stakeholders is broad and extends from the economic to the environmental and social fields. Enterprises make a profit to exist but they do not just exist to make a profit (Stubbs & Cocklin, 2008), they also pursue environmental and social values and design their sustainable business models based on a long-term perspective.

An increasing number of scholars have accepted that these business models integrate the value proposition, value creation and delivery, and value capture, so they provide the basic logic of business models research (Bocken & Short, 2016; Morioka et al., 2017). Sustainable business models are based on traditional business models, so the basic logic of business models research also applies to sustainable business models (Geissdoerfer et al., 2017).

Based on the characteristics and research logic of sustainable business models, this paper defines sustainable business models as a comprehensive program, designed to promote economic, environmental, and social sustainable development in order to create, deliver, and capture sustainable value for enterprises and their broad stakeholders with a long-term perspective. Based on previous research, Figure 1 shows a sustainable business model canvas.

Sustainable Value Proposition

The value proposition reflects the existence value of enterprises (Richardson, 2008), which is the positive contribution of the enterprise to human development in their process of production and operation. The value proposition is at the core of the business model (Osterwalder & Pigneur, 2010); it is a key leverage point for

enterprises to transform their business model (Osterwalder, Pigneur, Bernarda, Smith, & Papadacos, 2014), and it must be related to sustainability issues (Stubbs & Cocklin, 2008). Sustainable business models are challenged to create and deliver not only financial value, but also, when it is achieved, a so called sustainable value that can be seen as the delimitation of an economic, environmental, and/or social need for current and future generations, and they must provide satisfaction for the corresponding stakeholders (Morioka et al., 2017). Defining a sound value proposition is fundamental for the existence, survival, and prosperity of enterprises (Carayannis, Sindakis, & Walter, 2015). Therefore, the sustainable value proposition contains three parts: a sustainable economic value proposition, a social value proposition, and an environmental value proposition.

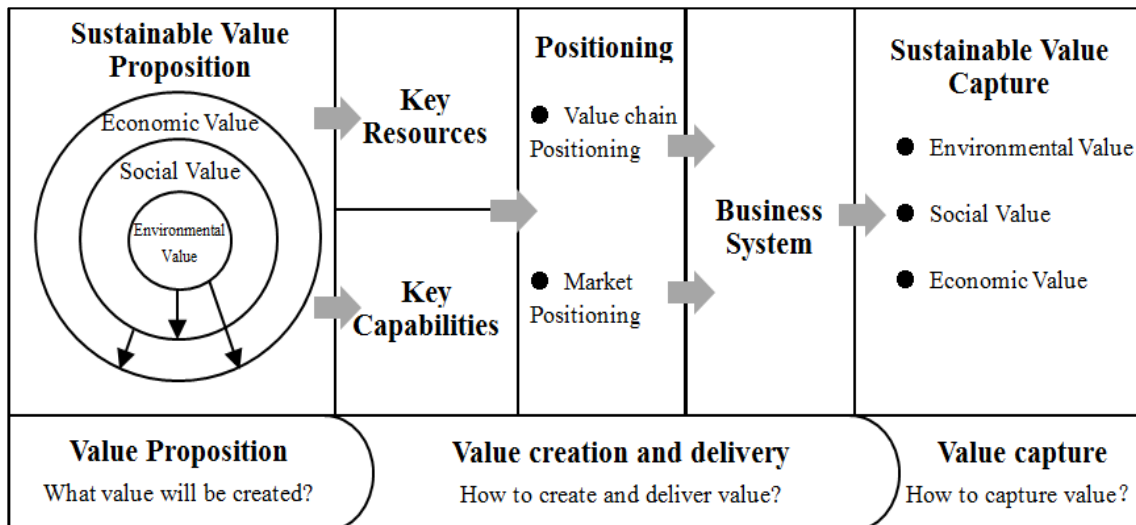


Figure 1. Sustainable business model canvas.

Sustainable Value Creation and Delivery

During the phase of sustainable value creation and delivery, the main issues to consider when implementing the value proposition are enterprise resources, their ability, and the inter-enterprises network, which means having strong connections to generate competitive advantages (Richardson, 2008). When making business decisions, enterprises should consider not only economic but also social and environmental drivers. To this end, enterprises should focus on their tangible and intangible resources and capabilities (Morioka, Evans, & Carvalho, 2016), and deal with relationships with partners (Morioka et al., 2017). Therefore, in order to achieve their sustainable value proposition, enterprises need to consider what key resources and capabilities they have, what key resources and capabilities they need to obtain, and how to obtain them. To deal with the relationship with partners, enterprises also need, based on the sustainable value proposition, key resources and capabilities to establish their positioning, including their value chain positioning in the production system and market positioning in the consumer system. Value chain positioning refers to the role the enterprises should play and what business they should conduct in the value network. Market positioning refers to the identification of target customers and the determination of the products and/or services to be offered. The value proposition, key resources and capabilities, and positioning determine the enterprise business system, which in turn defines the role and value exchange relationship between enterprises and stakeholders in the value network.

Sustainable Value Capture

If enterprises just rely on the value proposition and value creation and delivery but cannot capture value, it would be difficult to ensure their continued successful operation (Richardson, 2008). However, enterprises make a profit to exist but they do not just exist to make a profit (Stubbs & Cocklin, 2008). In the sustainable business model, enterprises should pursue economic values under the premise of environmental and social values.

Discussion

In 2001, GEM was registered in Shenzhen City, and was the first enterprise in China to put forward the business concept of “limited resources, unlimited circulation” firstly in China in 2003. Since its inception, GEM has been actively advocating the exploitation of “urban mining”¹, and has created a unique business model for doing so.

GEM's Sustainable Value Proposition

GEM's sustainable value proposition can be summed up as the thought of “oneness of man and nature”. GEM is an abbreviation for Green Eco-Manufacture, and each letter has a significant meaning: G represents green, E represents ecology, and M represents manufacturing. The overall objective of GEM is to develop an environmentally friendly industry by saving the limited resources and optimizing human living space through green manufacturing.

GEM's environmental value proposition is “to eliminate pollution and recycle resources”, and to strive to resolve the dual pressures of environmental pollution and resource shortages. Their social value proposition is “to legitimize business, make a reasonable profit, be responsible for society and our staff”, and to strive to take social responsibility and benefit the world. Their economic value proposition is “to innovate and upgrade, reduce costs, improve quality and efficiency”, to strive to create an environmentally friendly enterprise that is efficient and competitive, and to strengthen the capacity for profitability and sustainable development.

GEM's Sustainable Value Creation and Delivery

Key resources and capabilities. GEM has broken through the key technical barriers for treating and recycling used batteries, electronic waste, end-of-life vehicles, etc., and has built 16 circular industrial parks, six recycling systems for urban mining, and an intelligent environmental information platform based on Internet of Things technology.

Positioning. Based on the sustainable value proposition and the use of their key resources and capabilities, GEM's value chain positioning is as the leading enterprise in urban mining and recycling, and their market positioning is as a high-tech materials supplier for replacing raw materials.

Business system. GEM has established a closed-loop business system as shown in Figure 2. While developing their process for urban mining, GEM proposed integrated waste disposal ideas that combine “internet + recycling + garbage removal + waste disposal”, and have built six urban recycling systems which include systems for batteries and electronic waste, 3R chain stores in communities for recyclable good, cooperative recycling systems with public institutions and large enterprises, regional renewable resource recovery and distribution markets, and a system of “internet + recycling”. In the phase of material extraction

¹ Urban mining refers to the concept of re-using or recycling valuable materials in urban rather than sending them to a landfill.

and regeneration, GEM has built five industrial chains related to recycling and regeneration of used batteries, recovery and utilization of nonferrous metals, recycling electronic waste, comprehensive utilization of end-of-life vehicles, and recycling of waste residue, gas, and water. With respect to remanufacturing, GEM has regenerated and reused scarce resources such as cobalt, nickel, tungsten, and so on, to produce new materials for batteries, wood-plastic composites, electrolytic copper, automotive components, battery power packs, and so on.

Measures to help people lift themselves out of poverty. Responding actively to the national call for poverty alleviation, GEM has been developing an environmentally friendly industry in a number of counties, through the provision of funds, the development of markets, the introduction of technology, the creation of employment and by offering other supports. They are forging a new path whereby green industries can assist in poverty alleviation.

Promoting public welfare. GEM has assumed a socially responsible role by organizing and participating in various forms of public welfare and charityable activities. Their social donations amounted to 3.5 million yuan in 2016, and they have achieved a level of harmony between enterprise interests and social benefits.

Encouraging green development. GEM has created National Circular Economy Education Demonstration Base opening to the public, and urban mining museums in each industrial park; in 2016, 28,507 people attended their exhibits. To improve environmental awareness among college students and the public, GEM has been conducting programs aimed at bringing “environmental protection into the campus” along with other social welfare activities.

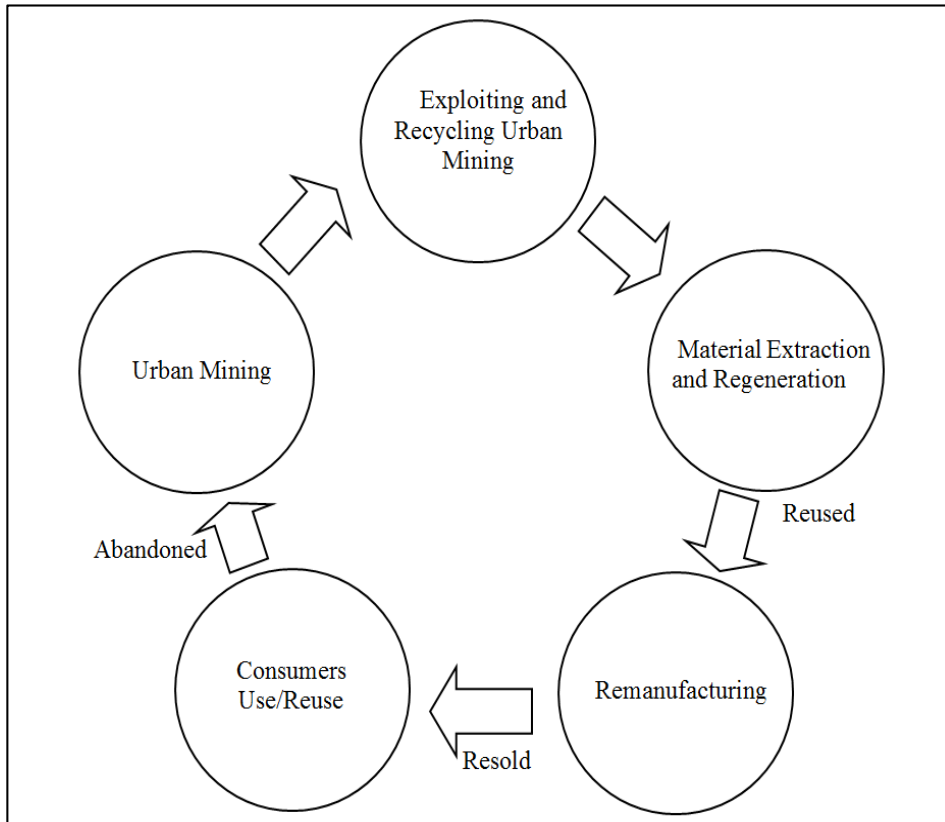


Figure 2. GEM's closed-loop business system.

GEM's Sustainable Value Capture

Environmental values capture. In 2016, GEM disposed of a total of three million tons of waste, recycled 37 types of resources, and regenerated 58 different products. Their efforts saved 2.84 million tons of standard coal or 13.83 million barrels of oil, reduced solid waste emissions by 22.7 million tons, and prevented 1,850 hectares of deforestation, 116.6 million tons of water pollution, 7.5 million tons of CO₂ emissions, and 63,111 square kilometers of soil pollution. At present, their annual recycling of small used batteries accounts for 10% of the Chinese total; recycling lithium-ion battery cathode materials accounted for more than 20% of the national market, and accounts for the recovery of nearly the same amount of cobalt resources. The recovery of waste household appliances accounted for more than 15% of the country's total, the recovery of tungsten accounted for 8% of China's total tungsten exploitation from nature, the disposal of waste circuit boards accounted for more than 20% of the domestic total, and the recovery of germanium resources accounted for 6% of the global total. Driven by enterprises like GEM, recyclables and renewables have become important resources to support the national economy.

Social values capture. Through the promotion of the concept of green development and the improvement of six recycling systems, GEM has constructed a recycling network for transferring waste resources from residents to communities and to society as a whole, which promotes a transformation in enterprise operations and individual lives, and improves the level of environmental awareness. Their targeted measures designed to help people lift themselves out of poverty encourage the poor to share in the achievements of enterprise development, a process which aids in the unification of the enterprise's social responsibility and economic performance. By actively organizing and participating in various aspects of social public welfare and charity activities, GEM takes a level of responsibility for social benefit. As a result, GEM has been awarded a number of honorary titles by the state, earned praise from the public, and created a good corporate social image.

Economic values capture. GEM has created a value-added model based on recycling waste and urban mining. Business income and profits increased continuously, climbing from RMB 570 million and RMB 97 million in 2010 to RMB 7,836 million and RMB 366 million respectively in 2016, with a respective average annual growth rate of 54.8% and 24.2%.

Conclusions

To some extent, the sustainable business model canvas discussed in this paper overcomes the shortcomings from existing research, and enriches the sustainable business model theory. The following three conclusions are reached: First, enterprises can transform the challenge of sustainability into a competitive advantage by developing a sustainable business model, with environmental, social, and economic values; Second, the value proposition is the soul of the sustainable business model, enterprises need not only focus on "how to do" but they must pay even more attention to "what to do", therefore it is advisable to integrate the value proposition into the enterprise strategy and business process; Finally, the sustainable value proposition consists of sustainable economic value, environmental value, and social value, and their importance differs in sustainable business models for different industries where the demand for environmental and social values is increasingly important.

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Modelling GDP and FDI for Czech Republic—Impulse Response Functions in VECM

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This article presents detailed the impact of factors of production on economic growth in the Czech Republic in the period 1994-2015. The main research focuses on the impact of foreign direct investment (FDI) and on answering the question whether between GDP and FDI there is a causality relationship. The VECM model using the impulse responses function confirmed the occurrence of a bi-directional relationship between FDI and GDP in the Czech Republic. According to the empirical evidence, it was confirmed that the consumption demand and trade had a strong impact on GDP. However, these findings demonstrated that a weak FDI had an impact on economic growth.¹

Keywords: FDI, GDP, Czech Republic, VECM, the impulse response function

Introduction

In Czech Republic, the foreign direct investment (FDI) inflow has been increasing over the past 25 years and it has been seen as one of the key factors the economic growth. Therefore, the purpose of this article is to analyse the impact of factors of production (altogether from FDI) on economic growth in the Czech Republic in the period 1994-2015. In this context, it focuses on the impact of FDI and tries to answer the question whether there is a relationship between GDP and FDI. The main goal focuses on the research whose factors of production have a strong influence on economic growth and FDI inflows. The answer to this question is very important for economic policy to sustain the growth rate. However, both the FDI theory and empirical studies for individual countries indicate that the inflow of such investment entails different economic effects. The study uses the VECM model (Vector Error Correction Method) with using the impulse responses function. The research bases on statistics from the OECD, UNCTAD, and IMF Internet databases, for the period 1994-2015.

Theoretical Approach

FDI effects on host country economic growth are often debated in the literature because of their controversial character. The effect between FDI and GDP can be either favourable or unfavourable. Several

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¹ This paper presents author's the additional empirical findings towards the paper under the title: Decomposition of Relationship Between Factors of Production, FDI and GDP for Czech Republic—in VECM, which could not be presented on account of volume restrictions of the article.

studies find a clear positive link, while others do not. The views concerning the connection between FDI and economic growth reveal foreign capitals importance on host country economy and the differences among approaches appear because of variables selection (Borensztein, De Gregorio, & Lee, 1995; Chowdhury & Mavrotas, 2005). However, majority of existing theoretical models imply that FDI is beneficial for host country's economic growth, e.g., the traditional economic theory (law of diminishing returns). The important theoretical concept defining the relationship between international capital flows in the form of FDI and economic growth is Dunning's theory of the international investment position evolution (Dunning & Narula, 1996). It explains decisions concerning FDI location by different degrees of economic development of individual countries. Dunning (1998) noticed interrelationships between an international investment position (net values of investment *per capita*) and the economic development level measured by domestic product *per capita*. Theoretical literature also suggests that the positive relationship between FDI and growth is not necessarily true. Herzer, Klasen, and Howak-Lehmann (2008) argued that if FDI considerably "crowds out" domestic investments, then it is possible to have a growth decelerating impact on the recipient country. Moreover, causality relation between FDI and growth is not necessarily unidirectional, because the causality can work in both directions.

Empirical Studies Relevant to Czech Republic and CEE Countries

Many empirical contributions have tried to explain the relationship between FDI and growth. Vehorn and Vasarevic (2011) proved that FDI and domestic investment were statistically significant determinants of economic growth in CEE countries in the period 1992-2007. The research of Damijan, Kostevc, and Rojec (2013) for six CEE countries (Czech Republic, Estonia, Hungary, Poland, Slovenia, and Slovakia) shows that in the first decade of transition, in the period 1993-2001, in general, productivity growth was positively correlated with FDI. In research, Kosztowniak (2016) dealt with the impact of the factors of production on economic growth in Poland in the years 1992-2012 with particular focus on the impact of FDI, and using the VECM she strives to verify whether a causality relationship occurs between GDP and FDI. The impulse responses and variance decomposition analysis confirm the bi-directional relationships between FDI and GDP in Poland. However, the impact of GDP on attracting FDI inflows to Poland is stronger than that of FDI on GDP growth. A weaker FDI impact on economic growth results from the structure of inflowing FDI in which, unfortunately, debt securities prevail.

Next important research concerns on sourcing patterns of FDI activity and their impact on domestic economy for Western and CEE countries (for Czech Republic also) covers the time period 2001-2007. According to Nikolovová (2013), FDI has the potential to positively influence the economy of the host country through backward inter-industry linkages, but this potential is not fully exploited yet in CEE countries, possibly due to a persisting technology gap. Similar views are presented for example Gorynia, Nowak, and Wolniak (2008). Moreover, the research examining the impact of the factors of production on economic growth in the Czech Republic in the years 1994-2015 by using the OLS (Ordinary Least Square) method (Kosztowniak, 2017) indicates that changes in GDP growth strongly explain changes of final consumption expenditure of households, following exports of goods and services (positive), and imports of goods and services (negative), sequentially by changes in gross fixed capital formation and finally final consumption expenditure of general government. The FDI variable was not a significant factor determining GDP growth in the Czech Republic.

Research Procedure and the Choice of Econometric Model

In order to analyse the relationship between changes in GDP values and factors of production in the Czech Republic in the years 1994-2015, the final formula for the production function was developed which looks as follows:

$$Y_t = f(ECEH_t, ECEGG_t, GFCF_t, FDI_t, ExGS_t, ImGS_t, R\&D_t, Employ_t) \quad (1)$$

The model used consists of the dependent variable (GDP) and eight independent variables (in million USD, constant prices, 2010), where: GDP (Gross Domestic Product), FCEH (Final Consumption Expenditure of Households), FCEGG (Final Consumption Expenditure of General Government), GFCF (Gross Fixed Capital Formation), FDI (Foreign Direct Investment) Inflow, ExGS (Exports of Goods and Services), ImGS (Imports of Goods and Services), R&D (Expenditure on Research and Development), Employ (total employment in the economy (number of persons in thousands)), t—period. The above mentioned explanatory variables for production function (GDP) and research methodology were adopted by many authors, among others by Chowdhury and Mavrotas (2005); Driffield and Jindra (2012), who analyzed the FDI effect on economic growth in host countries.

In order to verify the selection of variables for the model, the correlation matrix was determined. The critical value of the Pearson linear correlation coefficient was 0.4227 for $n = 22$. In general, correlation coefficients differ significantly from the critical value. Adoption of first differences of logarithms allowed model estimation while maintaining stationarity of data. To verify stationarity of the analyzed time series, the Augmented Dickey-Fuller (ADF) test was used, in the following form:

$$\Delta y_t = \mu + \delta_{t-1} + \sum_{i=1}^k \delta_i \Delta y_{t-1} + \epsilon_t \quad (2)$$

The value of the test statistic was calculated with the use of the formula:

$$ADF = \frac{\hat{\delta}}{s_{\hat{\delta}}} \quad (3)$$

where $\hat{\delta}$ means the parameter evaluation, and $s_{\hat{\delta}}$ is the parameter estimate error.

For all analyzed variables, it was found out that they lacked stationarity of time series, but a unit root $a = 1$ occurred at process I(1). For each series, the ADF test was conducted separately with an absolute term and with an absolute term and linear trend. For most statistics, the values $\tau_{obl.}$ are higher than critical values $\tau_{kryt.}$, which proves non-cointegrated series (Johansen, 1988). Empirical significance levels of p -values are mostly lower than 0.05, which indicates stationary series.

The results obtained by Engle and Granger confirm complete co-integration. It is evidenced by the value of the test statistic $\tau_{obl.}$, the level of the asymptotic p -values and process integration. For each process used, there is a unit root $a = 1$ and process I(1). Considering the assumption that if τ in respect of the absolute value is higher than the critical value, it means that the series are stationary. Hence, we can conclude that both series y_t and x_t , despite the fact that they are non-stationary, are co-integrated and they do not threaten obtaining apparent regression. Results of the Johansen test (with trace and with eigenvalue) show that at the significance level of 0.05, co-integration of order one occurs. Verification of co-integration conducted with the use of the Engle-Granger test and Johansen test confirmed the occurrence of co-integration and in this way justified the use of the VECM model.

VECM Model

In accordance with the Granger representation theorem, if the variables y_t and x_t are order one integrated I(1) and are co-integrated, then the interdependence between them can be presented as the error correction model (Łupiński, 2013). The general form of the VECM model can be written down as follows:

$$\Delta Y_t = \Gamma_1 \Delta Y_{t-1} + \Gamma_2 \Delta Y_{t-2} + \dots + \Gamma_{k-1} \Delta Y_{t-k+1} + \pi Y_{t-k} + \varepsilon_t = \sum_{i=1}^{k-1} \Gamma_i \Delta Y_{t-i} + \pi Y_{t-k} + \varepsilon_t, \quad (4)$$

where:

$$\Gamma_i = \sum_{j=1}^i A_j - I, i = 1, 2, \dots, k-1, \Gamma_k = \pi = -\pi(1) = -\left(I - \sum_{i=1}^k A_i\right), \quad (5)$$

I is the unit matrix.

The lag order for the VAR/VECM model was determined on the basis of the following information criteria estimation: the Aikake information criterion (AIC), Schwartz-Bayesian information criterion (BIC), and Hannan-Quinn information criterion (HQC). The results of these criteria showed the lag order 1. While analyzing stability of the VAR/VECM model, the unit root test was carried out, which indicated that in the analyzed model the equation roots in respect of the module are lower than one. This means that the model is stable. The Ljung-Box test was used to verify the occurrence of autocorrelation between the variables of the VECM model. In this test, the verifying test statistic uses the autocorrelation function (ACF) in the form:

$$Q' = T(T+2) \sum_{j=1}^m \frac{r_j^2}{T-j} \quad (6)$$

where: T —length of time series (number of observations), j —rank of autocorrelation, $j = 1, 2, 3, \dots, p$, r_j^2 —autocorrelation coefficients (ACF), m —the test level. The critical value of the test is based on χ^2 distribution with m degrees of freedom. The results of the Ljung-Box test for the estimated models (1-9), i.e., for all examined variables, showed that the empirical p-levels were higher than the nominal significance level $\alpha = 0.05$. This authorized us to state the lack of autocorrelation in the residual process.

Empirical Results—Impulse Response Functions

The graphs of GDP response functions to impulses of the model variables indicate that with time the impulses of the nine variables exert both the increasing as well as weakening impact on future values. Responses of the GDP dynamics revealed the increasing/enhancing effect of the impulses of three variables: FCEH, ExGS, ImGS in the period of 1 year, followed by the decreasing effect in periods 2-3, and stabilizing effect from period 4 onwards. These results can be interpreted in such a way that the pillars of GDP growth in the Czech Republic are: consumption demand of households and trade (exports and imports of goods and services). The results of research in this respect are important from the point of view of their application. They mean that the economic policy should use the tools which support the household's demand and trade. Considering the fact that the GDP response to the above mentioned impulses of three variables is the strongest in the first two to three years, it means that they should be the focus of interest of the short-term policy generating quick favourable effects.

On the other hand, the fading/weakening character of the GDP response was revealed to impulses derived from six variables: FCEGG, GFCF, FDI inflows, R&D, and Employment in the first year and then it increased

(rebound) in periods 2-3 and stabilized from period 4 onwards. The fading GDP responses to the impulses from the above mentioned variables are also important from the point of view of their application. The fact is that these variables should stimulate economic growth, but in the case of the Czech Republic they actually do not. This means that the amount of expenditure, its structure, and changes in it over the period examined were unfavourable. For this reason, it seems that they require detailed analysis and changes so that in the future they could support economic growth.

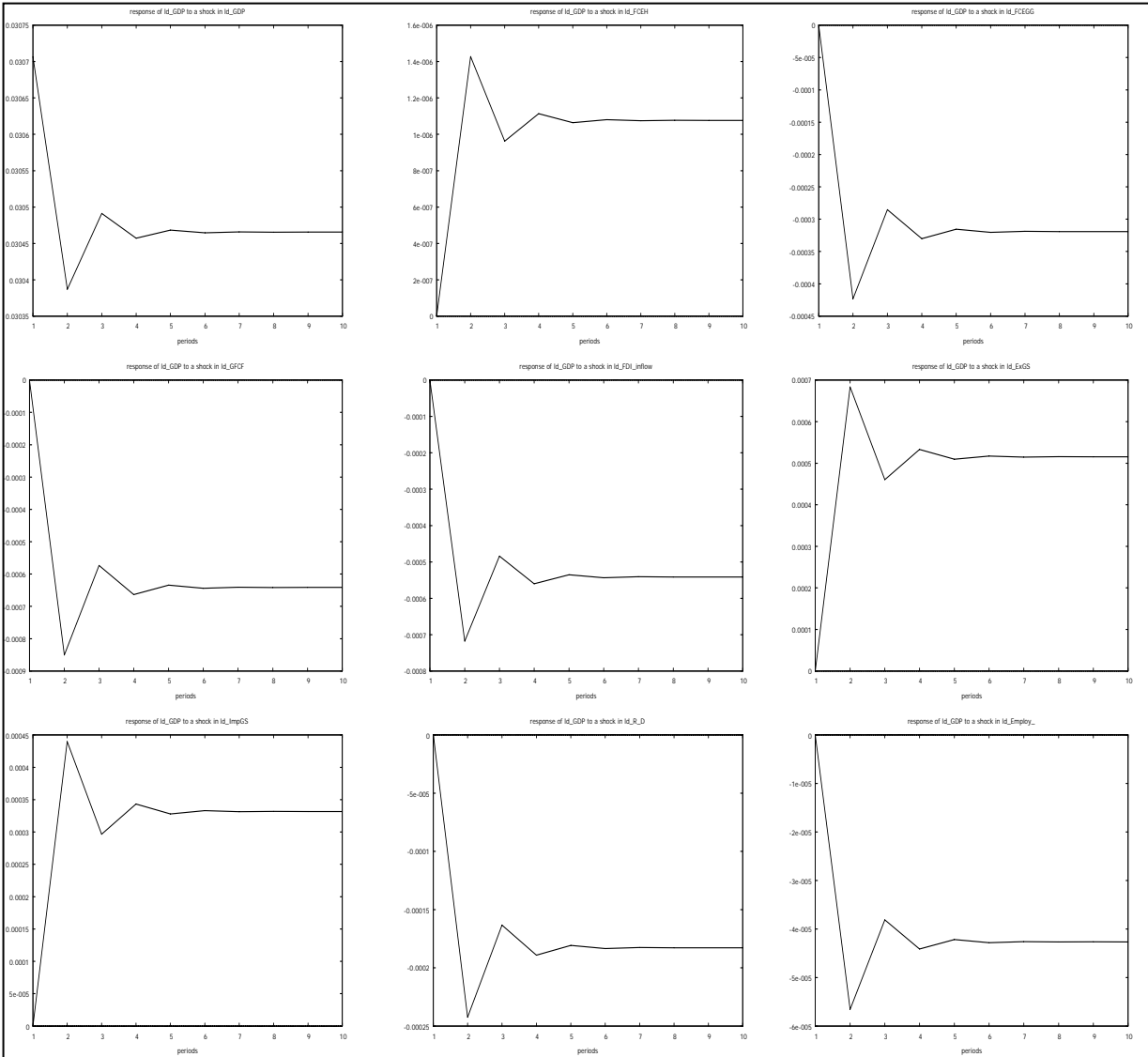


Figure 1. Graphs of GDP impulse responses in the Czech Republic, the VECM model. Source: author's own compilation (OECD, 2017; UNCTAD, 2017).

The graphs of the FDI inflow function responses indicate that they increased in result of the impulses coming from three variables, e.g., FCEH, ExGS, and ImGS in the period of the first two years, weakened in periods 3-4, and stabilized in the following periods. The growing response of FDI inflows to the above named variables: FCEH, ExGS, and ImGS can be interpreted as their being favourable determinants of FDI inflows to the Czech Republic. These determinants are important for foreign investors and their changes decide about

attractiveness of the host economy for investment.

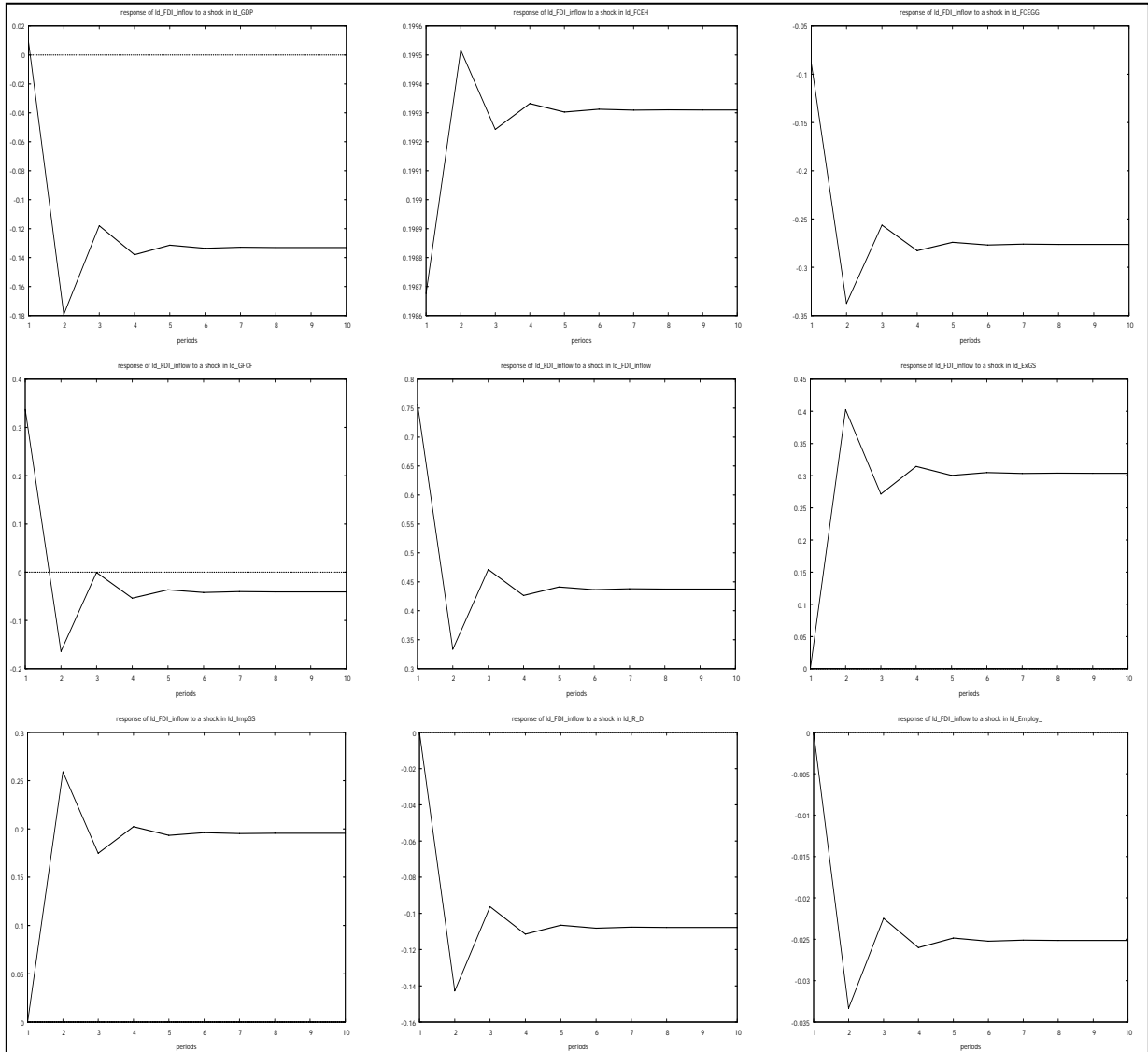


Figure 2. Graphs of FDI impulse responses. Source: author’s own compilation (OECD, 2017; UNCTAD, 2017).

On the other hand, FDI inflows showed the fading character in response to the impulses coming from six variables: GDP, FCEGG, GFCF, own FDI inflow impulses, and Employment. The fading/weakening trend was evident in periods 1-2, and it weakened in period 3 and stabilized from period 4 of the forecast. Thus, these variables can be treated (at least in the short-run) as the determinants hindering FDI inflows to the Czech Republic.

Discussion and an Attempt at Their Explanation

The fact that FDI inflows are weakening in response to GDP can be interpreted as follows: Foreign direct investors do not condition investment inflows on the growth rate of Czech economy, but they attach more importance to treating this economy as a location for their own production. The Czech market is one of the links of their production chain. These entities import raw materials, products (components) from their own

parent companies and foreign branches to the Czech market where they process them (taking advantage of the relatively cheap labour force) and they re-export them to foreign markets, but now in the form of finished goods. Moreover, the reasons for a weak impact of FDI inflows on economic growth in the Czech Republic in the years 1994-2015, diagnosed on the basis of impulse responses, can be threefold, e.g., rapid fluctuations in FDI inflows (unstable), low share of foreign capital (FDI) in capital accumulation in the Czech economy, and maintaining unfavourable structure of FDI inflows (by high level of debt instruments). As a result of a strong amplitude of fluctuations in FDI inflows caused, for example, by partial withdrawal of capital, merger, and overtake processes or payment of dividends, potentially favourable effects of FDI inflows on economic growth in the Czech Republic were limited (Pawłowska, 2012). Considerable fluctuations of FDI inflows prove that foreign investors have not pursued a stable, long-term investment policy in the Czech market. The level of re-investment of profits from FDI and implementation of new projects was kept low. The attitude of foreign investors also indicates the so-called low level of investment risk aversion towards the Czech market.

Conclusions

The GDP as well as FDI response functions to the impulses indicate that they responded most strongly in the first year (1-2) to the stimuli coming from the examined variables and got stabilized after 3-4 years of the forecast. GDP showed an increasing tendency to the impulses coming from households' consumption expenditure and exports and imports of goods and services. On the other hand, GDP showed a weakening tendency towards such impulses as: GFCF, FDI inflows, expenditure on R&D, and changes in employment. The FDI inflow responses were stronger in the case of impulses coming from household consumption expenditure and exports and imports of goods and services. Thus, these variables can be treated as the determinants stimulating FDI inflows to the Czech economy. On the other hand, FDI inflows showed the fading effect in response to the impulses coming from GDP, final government consumption expenditure, gross outlays on fixed assets, FDI inflow own impulses, and employment.

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The Study of the Application Extent of Marketing Research Concepts and Principles in the Algerian Economic Companies

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The main objective of this work is to study the role and importance of applying the concepts and principles of marketing research during the planification and control of marketing activity. To achieve this goal, authors discussed the theoretical framework of the study, which included the following approaches: marketing research and marketing research steps. Authors then tried to find out the potential impact of marketing research concepts and principles on the planification and control process of marketing activity in Algerian companies through the selection of a sample composed of 15 companies operating in the industrial zones located in M'sila and Bordj Bou Arreridj in Algeria, by focusing on the category of managers; because they are the decision-makers in companies. For this purpose, authors adopted the questionnaire as an essential tool. And in order to obtain meaningful results, authors adopted the statistical method through a set of indicators, such as Arithmetic average, Student's, Fisher, and Chevy tests. The study reached the achievement of an important part of the general hypothesis; it has been shown that there are acceptable preparations in the studied sample of managers regarding their recognition of the great role played by marketing research in the planification and control of marketing activity in their companies.

Keywords: marketing research, marketing planification, marketing control

Background of the Study

The presence of competition in the market economy is the result of the presence of a large number of companies that offer their products and services across the different world markets, relying on marketing as the most important means to ensure the spread and promote them and their products. In front of this situation, marketing men face the problem of taking a large number of marketing decisions related to the planification and implementation of marketing activities aspects. Most of these decisions have an impact on the companies and the future of their products and are perceived in some way by consumers and distributors. These decisions have a clear impact on the success of the company.

Of course, these decisions should be based on a set of informations and facts about the market and the marketing environment through which marketing works. The effectiveness of marketing decisions and even the effectiveness of the company in this area depend on the validity and accuracy of data and information

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collected from the market.

Marketing research is one of the most important methods to obtain marketing information. Hence, marketing research is a part of a broader and more comprehensive system, which is marketing information system, because marketing research reflects those efforts made in order to collect, record, and analyze data of the marketing problems facing the administration, which relate to the flow of goods and services from production centers to markets, in order to help business managers in decision making on the basis of the study and the careful analysis of informations on the problems they face, thus avoiding reliance on guesswork and error in making decisions. In this context, this study is an attempt to monitor the preparations of the managers of a sample of Algerian economic companies to adopt marketing concepts and research while taking the marketing and administrative decisions.

The Problematic

Based on the foregoing, we can formulate the research problem as follows:

How important is the application of the concepts and principles of marketing research in the Algerian economic companies during the planification and control of marketing activity?

Accordingly, the problem of the research is centered on the following partial questions:

- (1) What is meant by marketing research? And what are its steps?
- (2) To what extent the managers of Algerian companies are ready to adopt the concept and principles of marketing research?
- (3) Are there any statistically significant differences attributed to the general data related to the members of the studied sample regarding their recognition of the concept and principles of marketing research?

Hypothesis

Based on the research problem, the hypothesis can be put forward as follows:

- (1) We predicted that it is widely recognized by the managers in the companies under study of the importance of adopting the concept and principles of marketing research in their companies during the planification and control of marketing activity;
- (2) We predicted that there are statistically significant differences attributed to the general data related to the members of the studied sample regarding their recognition of the importance of the existence of marketing research concepts and principles within their companies.

Objectives of the Study

This study aims at:

- (1) Highlighting a number of marketing concepts that have become the basics of many of the most important researches in marketing, such as marketing research, marketing strategy, marketing mix, marketing planification, marketing environment, competition, marketing control, etc.;
- (2) Studying the applicability of the Algerian companies of the principles of marketing research during the planification and control process of marketing activities;
- (3) Highlighting the types of marketing information that marketing research provides to marketing decision makers in the Algerian economic companies, which are used in the planification and control of marketing activities;
- (4) Highlighting the most important and scientific methods used by the marketing research device during the collection of marketing informations;

(5) Highlighting the most important basic steps of marketing research in order to make marketing decisions;

(6) Adding a new set of suggestions that will help to successfully introduce the concept of marketing research to Algerian companies, in order to increase the market share and achieve competitive advantage resulting from the quality of goods and services provided to customers.

Methodology of Study

Method. In order to analyze our research topic, we have adopted two main approaches. These two approaches are: descriptive analytical approach and case study methodology.

Study tools. In order to achieve the objectives of our study, we used a set of methods and tools to gather sufficient informations and to analyze the extent to which managers in the companies under study understood the importance of applying the concepts and principles of marketing research in the planification and control of marketing activity. These methods are: questionnaire, unstructured interview, and observation.

We have adopted the Likert scale five-Dimensional, and in order to analyze the phrases included in the questionnaire according to these dimensions, we adopted the order of the arithmetic averages of the paragraphs to measure the possibility of adopting the studied approach in the field of study, as follows:

- Strongly disagree: Average less than 1;
- Disagree: Average from 1 to less than 2;
- Don't know: Average from 2 to less than 3;
- Agree: Average from 3 to less than 4;
- Strongly agree: Average from 4 to less than 5.

As for the validity of the questionnaire, this was confirmed by the validity of the content, by presenting it to a group of specialists in: statistics, methodology, and marketing, where they expressed their opinions and observations, which was based on a number of aspects, including:

- (1) The extent to which the paragraph corresponds to the axis under which it falls;
- (2) The accuracy and integrity of the wording (language formulation) of the questionnaire;
- (3) Suggesting additional important paragraphs to measure the questionnaire axis.

In order to verify the stability of the questionnaire, we calculated its stability rate by distributing it to an experimental sample that belongs to the research sample. This sample was estimated to 18 individual, depending on the test-re-test method with a difference of three weeks between the first and second applications, in order to calculate the stability coefficient for the responses of the sample members in the first application with those of the second application. The general stability coefficient was estimated at 0.94 which is an excellent and sufficient value to indicate the stability of the questionnaire.

Study population and sample. The research population consists of the managers of private and public companies of various types (service, productivity, small, medium, large, etc.), which are located and active in the industrial areas of M'Sila and Bordj Bou Arreridj in Algeria. In this context, the size of our sample at the companies level was 15 private and public companies, and the size of the sample studied related to the number of managers questioned, they accounted for more than 50% of the total number of managers working in 15 companies randomly selected among the companies active in the industrial areas of M'Sila and Bordj Bou Arreridj. In total 165 questionnaires were distributed and 161 were retrieved containing four with an incomplete filling, thus the number settled to 157 questionnaires.

As for the questionnaire axes, it included two main axes:

- (1) General data axis related to the members of the research sample, including the company legal nature, respondents career level, age, experience, and educational level;
- (2) An axis for testing the extent to which the manager's category understands the concepts and principles of marketing research in the companies under study.

Literature Review

In this part we will try to define marketing research and its different steps:

Concept of Marketing Research

Research is a systematic and objective investigation of a subject or problem in order to discover relevant information or principles. It can be considered to be either primarily fundamental or applied in nature. Fundamental research, frequently called basic or pure research, seeks to extend the boundaries of knowledge in a given area with no necessary immediate application to existing problems, for example, the development of a research method that would be able to predict what people will be like x years in the future. In contrast, applied research, also known as decisional research, attempts to use existing knowledge to aid in the solution of some given problem or set of problems.

Marketing research assists in the overall management of the marketing function. A marketing manager must prioritize the more important and pressing problems selected for solution, reach the best possible solution based on the information available, implement the solution, modify the solution when additional information so dictates, and establish policy to act as a ready-made solution for any recurrence of the problem.

Marketing research often focuses on understanding the "Customer" (purchasers, consumers, influencers), the "Company" (product design, promotion, pricing, placement, service, sales), and it can be also expanded toward the environment to include "Competitors" (and how their market offerings interact in the market environment) (Smith & Albaum, 2010, p. 1).

Peter Chisnall pointed out that although the term "market research" is now largely used as a synonym for "marketing research", there was originally a distinct difference between the scope of the activities they covered. Some confusions have been caused by the term "market research" being rather freely used to describe the full range of activities properly covered by marketing research. Chisnall noted, however, that market or marketing research is essentially about the disciplined collection and evaluation of specific data in order to help suppliers understand their customers' needs better. Moreover, since decision making necessarily involves some elements of risk, the collection and evaluation of such data should be used to reduce and control, to some degree, the parameters of risk surrounding particular marketing proposals.

Marketing research is defined by the American Marketing Association as:

Marketing research is the function that links the consumer, customer and public to the marketer through information—information used to identify and define marketing opportunities and problems; generate, refine, and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process. Marketing research specifies the information required to address these issues; designs the method for collecting information; manages and implements the data-collection process; analyzes the results; and communicates the findings and their implications. (Proctor & Jamieson, 2012, p. 4)

The European Society for Opinion and Marketing Research (ESOMAR) defines marketing research as follows:

Marketing research is a key element within the total field of marketing information. It is the consumer, customer, and public to the marketer through information which is used to identify and define marketing opportunities and problems; to generate, refine and evaluate marketing actions; and to improve understanding of marketing as a process and of the ways in which specific marketing activities can be made more effective. Marketing research specifies the information required to address these issues; designs the method for collecting information; manages and implements the data collection process; analyses the results; and communicates the findings and their implications. (Shukla, 2008, p. 16)

Also, marketing research can be defined as follows (“Tutor2u™—Marketing Research Toolkit—2004”, n.d., pp. 6-7):

The systematic gathering, recording, and analysing of data about problems relating to the marketing of goods and services:

- Systematic: Using an organised and clear method or system;
- Gathering: Knowing what you are looking for and collecting appropriate information;
- Recording: Keeping clear and organised records of what you are trying to find out;
- Analysing: Ordering and making sense of your information in order to draw out relevant trends and conclusions;
- Problems relating to marketing: Finding out the answers to questions that help the business to better understand its customers and other details about the marketplace.

Marketing research can help a business do one or more of the following (“Tutor2u™—Marketing Research Toolkit—2004”, n.d., p. 5):

Gain a more detailed understanding of consumers’ needs. Marketing research can help firms to discover consumers’ opinions on a huge range of issues, e.g., views on products’ prices, packaging, recent advertising campaigns.

Reduce the risk of product/business failure. There is no guarantee that any new idea will be a commercial success, but accurate and up-to-date information on the market can help a business make informed decisions, hopefully leading to products that consumers want in sufficient numbers to achieve commercial success.

Forecast future trends. Marketing research not only can provide information regarding the current state of the market, but also can be used to anticipate customers’ needs future customer needs. Firms can then make the necessary adjustments to their product portfolios and levels of output in order to remain successful.

Marketing Research Steps

As shown in Figure 1, the research process begins with the identification. The research task may clarify a problem or define an opportunity. The clearcut statement of problem may not be possible at the very outset of research process as often only the symptoms of the problem are apparent at that point. Thus the problem statement may be made only in general terms to be made specific later after some exploratory research has been done to clarify the problem situation (“Marketing Research: Concepts and design”, n.d., pp. 7-9):

Defining the problem. Clear problem definition is of crucial importance in marketing research as in terms of both time and money research is a costly process. Careful attention to problem definition allows the researcher to set the proper research objectives which in turn facilitate relevant and economic data collection. Problem definition in specific terms must precede the determination of the purpose of the research.

In order to define the problem more precisely, some sort of exploratory research may also be undertaken. The methods popularly in use are survey of secondary data, experience survey, or pilot studies.

Statement of research objectives. After clarifying and identifying the research problem with or without exploratory research, the researcher must make a formal statement of research objectives. Research objectives may be stated in qualitative or quantitative terms and expressed as research question statements or hypothesis. For example, the research objective “To find out the extent to which the sales promotion programmes affected sales” is a research objective expressed as a statement. A hypothesis on the other hand is a statement that can be refuted or supported by empirical findings. The same research objective could be stated as: “To test the hypothesis that sales are positively affected by the sales promotion programme undertaken this summer”. Example of another hypothesis may be “Concentrating advertising efforts in monthly waves (rather than advertising continuously) would cause an increase in sales and profits”. Once the objectives or the hypothesis are developed, the researcher is ready to choose the research design.

Planning the research design. Once the research problem has been defined and the objectives decided, the research design must be developed. A research design is a master plan specifying the procedure for collecting and analysing the needed information. It represents framework for the research plan of action. The objectives of the study discussed in the preceding step are included in the research design to ensure that data collected are relevant to the objectives. The researcher must, at this stage, also determine the type of sources of information needed, the data collection methods (surveys or interviews for example), the sampling methodology, and the timing and possible costs of research. The design chosen may be from exploratory, descriptive, quasi-experimental, or experimental design categories which again include a number of alternative methods.

Planning the sample. Although the sample plan is included in the research design, the actual sampling is a separate and important stage in the research process. Sampling involves procedures that use a small number of items or parts of the population to make conclusion regarding the whole population. The first sampling question that needs to be asked is who is to be sampled, which follows from what is the target population. Defining the population may not be as simple as it seems. For example, if you are interested in finding the association between savings and loans, you may survey the people who already have accounts and the selected sample will not represent potential customers.

The next important issue is regarding sample size. How large or how small should a sample be? Generally speaking, larger samples give more reliable information than smaller ones, but if probability sampling is used, a small proportion of the population may give a reliable measure of the universe.

Data collection. The data collection process follows the formulation of research design including the sampling plan. Data which can be secondary or primary can be collected using variety of tools. These tools are classified into two broad categories, the observation methods and the communication methods, all of which have their inherent advantages and disadvantages.

Data processing and analysis. Once the data have been collected, it has to be converted to a format that will suggest answers to the problem identified in the first step. Data processing begins with the editing of data and coding. Editing involved inspecting the data collection forms for omission, legibility, and consistency in classification.

Before tabulation, responses need to be classified into meaningful categories. The rules for categorising, recording, and transferring the data to data storage media are called codes. The coding process facilitates the manual or computer tabulation. If computer analysis is being used, the data can be key-punched and verified.

Analysis represents the application of logic to the understanding of data collected about the subject. In its simplest forms, analysis may involve determination of consistent patterns and summarising of appropriate details. The appropriate analytical techniques chosen would depend upon informational requirements of the

problem, characteristics of the research designs, and the nature of the data gathered. The statistical analysis may range from simple univariate analysis to very complex multivariate analysis. You will study univariate, bivariate, and multivariate analysis and their applications in marketing problem in last three blocks of this course.

Formulating conclusion, preparing & presenting the report. The final state in the research process is that of interpreting the information and drawing conclusions for use in managerial decisions. The research report should effectively communicate the research findings and need not necessarily include complicated statements about the technical aspect of the study and research methods. Often the management is not interested in details of research design and statistical analysis but in the concrete findings of the research. If executives are to act on these findings, they must be convinced of the value of the findings. Researchers, therefore, must make the presentation technically accurate, understandable, and useful.

Frequently, the researchers are required to make both an oral and a written presentation. Since each project is different, the presentation in each case requires originality. However, the better the earlier steps in the research process have been executed, the more likely it is that a good presentation would result. While the oral presentation depends a great deal on the personal style of the presenter and the management expectation, the written report in order to be effective needs to include the following details:

- (1) Title page;
- (2) Table of contents;
- (3) Introduction;
- (4) Statement of objectives;
- (5) Methodology (Research design, Data collection methods, Sampling, Field work, Analysis and interpretation);
- (6) Limitations;
- (7) Findings;
- (8) Conclusion and recommendations;
- (9) Appendix (Copies of forms used, Tables not included in finding, Bibliography if relevant).



Figure 1. Stages in the marketing research process (Source: Anonymous, "Marketing research: concepts and design: unit 1 marketing research-meaning and importance" (p. 7). Retrieved from <http://dl4a.org/uploads/pdf/Unit-1.pdf>).

Statistical Analysis of the Questionnaire Axes

Public Data Analysis Axis (Personal Data)

Analysis of the characteristics of the sample according to the legal nature variable. The sample of the study included a group of public and private companies, randomly selected among the companies in the study area, as shown in the following table (see Table 1):

Table 1

Distribution of the Members of the Sample According to the Company Legal Nature Variable

Company legal nature	Duplicates	Percentage
Public	40	25.5
Private	117	74.5
Total	157	100

Source: Prepared by researchers depending on the questionnaire data.

The table above shows that the members of the studied sample were distributed to both public and private companies. We note through this table that the percentage of managers belonging to the category of private companies was predominant, with 74.5%, while the percentage of public companies was 25.5%. The main reason for these differences is due to the large spread of the first type of companies (private companies) in Algeria in general and in the industrial areas in particular.

Analysis of the characteristics of the sample according to the function variable. Our research sample belongs to the category of managers (tires and high tires), who work in the public and private companies under study. This category is divided into three categories: the company director, the department head, or the administrative. The results were as shown in the following table (see Table 2):

Table 2

Distribution of the Members of the Sample According to the Function Variable

Function type	Duplicates	Percentage
Director	7	4.5
Department head	56	35.7
Administrative	94	59.9
Total	157	100

Source: Prepared by researchers depending on the questionnaire data.

The above table shows that the percentage of those who are assigned with administrative tasks is different from that of the directors of the company or its departments; they constituted the majority with 59.9%. This category consists mainly of employees in the secretariat, accounting and sales assistants, supervisors of working teams, and laboratory officials at some companies. While the heads of departments constituted 35.7% of the tires. In contrast, the percentage of directors was about 4.5%, i.e., seven directors among 15. We note that we have made great efforts to obtain the opinions of this category regarding the questionnaires phrases, as it is supposed to be the initiative to plan and control the marketing activity and convinced the need to use marketing research in it.

Analysis of the characteristics of the sample according to the age variable. We have formed age groups for the sample of the study, which are divided into three categories: The first is the category under the age of 30 years, the second is the category from 30 to 50 years, and the third is the category over 50 years. The

main objective of the study of this variable was to know the age levels of the human composition of the companies under study and thus attempt to discover the level of human energies available and reliable in leading the affairs of this type of companies. The results were as shown in the following table (see Table 3):

Table 3

Distribution of the Members of the Sample According to the Age Variable

Age	Duplicates	Percentage
Less than 30 years	63	40.1
From 30 to 50 years	85	54.1
More than 50 years	9	5.7
Total	157	100

Source: Prepared by researchers depending on the questionnaire data.

The above table shows that young people are the ones who supervise most of the administrative tasks, with 94.2%, while the percentage of people over the age of 50 does not exceed 5.7%, which is consistent with the concept of leadership based on the youth category who make great efforts to create their projects, on the one hand, and with the efforts of the Algerian state towards the establishment of independent projects on the other hand.

Analysis of the characteristics of the sample according to the professional experience variable. In our analysis of the experience variable in the companies under study, we relied on dividing experience into three categories. The first category is where the manager’s experience does not exceed five years, the second category is between five and 15 years, and the third category is where the managers exceed 15 years of experience. This is illustrated in the following table (see Table 4):

Table 4

Distribution of the Members of the Sample According to the Professional Experience Variable

Professional experience	Duplicates	Percentage
Less than 5 years	76	48.4
From 5 to 15 years	39	24.8
More than 15 years	42	26.8
Total	157	100

Source: Prepared by researchers depending on the questionnaire data.

We note through this table that 48.4% of the members of the sample studied have less than five years of experience, while 24.8% have from five to 15 years of experience. In contrast, those with long experience (exceeding 15 years) constitute 26.8%. The above percentages indicate that the level of expertise of the studied majority is not great and this is due to the age levels of this sample; the study shows that 40.1% of the members of the studied sample does not exceed the age of 30 years.

Analysis of the characteristics of the sample according to the educational level. It is assumed that the higher the educational level of the members of the company is, the greater the capacity and the ability to adopt whatever is in the interest of their company of new management approaches as well as enable them to carry out their functions and benefit from their intellectual abilities are; for this purpose we put this variable to ascertain later its impact on the sample members options. The following table shows the analysis of the characteristics of the sample according to the educational level (see Table 5).

Table 5

Distribution of the Members of the Sample According to the Educational Level Variable

Educational level	Duplicates	Percentage
Primary	0	0
Intermediate	0	0
Secondary	40	25.5
University	117	74.5
Total	157	100

Source: Prepared by researchers depending on the questionnaire data.

From the above table, it is clear that the educational level of the majority of the studied sample is the university level, with 74.5%, while the remaining percentage of the sample (25.5%) has a secondary level. For the primary and intermediate levels, we did not find any one belonging to these two levels.

Analysis of Questionnaire Phrases

Statistical analysis of the axis phrases. This axis consists of 13 phrases, which reflect a set of requirements and necessary concepts to conduct marketing research according to scientific standards, and thus the possibility of achieving the company's goals as a result of the application of this concept. We will rely in the analysis of this axis data on the expense of the duplicates and percentages of the responses, the arithmetic averages, the standard deviations, and the symmetry coefficient. The results of the statistical analysis of the axis phrases were as shown in the following table (see Table 6):

Table 6

The Use of Statistical Indicators Related to the Extent to Which Managers Adopt Marketing Concepts and Research in Their Companies at the Level of the Field of Study

Number	phrases (variables)	Answers										Arithmetic average	Standard deviation	Skewness coefficient
		1		2		3		4		5				
		D	%	D	%	D	%	D	%	D	%			
1	Marketing research is a key component of marketing activity	2	1.3	5	3.2	4	2.5	65	41.4	81	51.6	4.39	0.7980	-1.815
2	Marketing research helps in solving marketing problems and making the right decisions in your company	3	1.9	9	5.7	7	4.5	83	52.9	55	35.0	4.13	0.885	-1.446
3	Marketing research contributes in supporting the marketing information system with the necessary data to make marketing decisions	4	2.5	4	2.5	6	3.8	86	54.8	57	36.3	4.20	0.835	-1.723
4	Marketing research is a means of collecting and analyzing data	2	1.3	5	3.2	4	2.5	76	48.4	70	44.6	4.32	0.785	-1.677
5	Effective marketing decision making requires setting goals for marketing research	6	3.8	10	6.4	7	4.5	74	47.1	60	38.2	4.10	1.011	-1.474

(Table 6 continued)

6	The determination (planification) of the marketing research sample is an important step for activating decisions	8	5.1	12	7.6	11	7.0	79	50.3	47	29.9	3.92	1.065	-1.263
7	Successful marketing research requires doing a field study	10	6.4	14	8.9	13	8.3	79	50.3	41	26.1	3.81	1.116	-1.129
8	The company depends in making marketing decisions on the final report of the marketing research	5	3.2	8	5.1	8	5.1	76	48.4	60	38.2	4.13	0.955	-1.525
9	The company relies in making marketing decisions on the informations provided by exploratory research	10	6.4	13	8.3	14	8.9	78	49.7	42	26.8	3.82	1.112	-1.141
10	Your company relies on office data and documents to make marketing decisions	15	9.6	17	10.8	16	10.2	70	44.6	39	24.8	3.64	1.235	-0.883
11	Successful marketing decisions in the company refer to the use of quantitative and statistical methods	6	3.8	11	7.0	10	6.4	60	38.2	70	44.6	4.13	1.061	-1.401
12	Using the survey to collect informations from consumers, contributes to the activation of marketing decisions	5	3.2	13	8.3	15	9.6	81	51.6	43	27.4	3.92	0.993	-1.144
13	Marketing research helps your company to plan and control marketing activity	4	2.5	8	5.1	21	13.4	82	52.02	42	26.8	3.96	0.915	-1.131

Notes. *1: Strongly disagree, 2: Disagree, 3: Don't know, 4: Agree, 5: Strongly agree; **Skewness: The negative value of the symmetry coefficient means that the large or upper categories (4 and 5) are prevailing, and vice versa if the values are positive, i.e., the lowest categories are prevailing. Source: Prepared by researchers depending on the questionnaire data.

By observing the above table, we note that the members of the studied sample have clear views on these variables. This is evidenced by the arithmetic average, the standard deviation, and the coefficient of symmetry; because most of the members agree with the large categories (4 and 5) (Agree and Strongly agree). We will try to find out these opinions and analyze them, phrase by phrase through the following:

(1) The majority of the members of the sample considered that marketing research is a key component of marketing activity. This is confirmed by the value of the arithmetic average, which is estimated at 4.39, with a simple standard deviation of 0.798. For the recorded percentages, we note that 41.4% of the members of the studied sample agrees with this idea and 51.6% of the sample concerned consider that marketing research is an important element in marketing activity, because they fully agree with this idea. This is evidenced by the value of the negative coefficient of symmetry, estimated at -1.815, which indicates that large groups (4 and 5) are prevalent;

(2) The majority of the members of the sample considered that marketing research helps in solving marketing problems and making the right decisions in their companies, because 35.0% of the members of the

sample indicated that they fully agree with this idea and 52.9% expressed the content of this idea. While the rejection percentage of this idea was 7.6%. As for the neutral percentage ratio, it was estimated at 4.5%. By observing the arithmetic average value (4.13), the standard deviation (0.885) which looks simple, and the coefficient of symmetry (-1.446) which looks negative, the level of acceptance is shown by one party, which is the degree of approval and approval completely;

(3) The contribution of marketing research in supporting the marketing information system with the necessary data to make marketing decisions is essential for most of the members of the studied sample, and this is indicated by the arithmetic average level estimates at 4.2. In this regard, 91.1% indicated their agreement with this idea, while we noted that 5% do not agree;

(4) A total of 146 members of the research sample confirmed that marketing research is an important tool for collecting and analyzing data by 93%. This is evidenced by the arithmetic average which was 4.32 and the standard deviation, which was simple and estimated at 0.785, as well as the coefficient of symmetry through its negative value estimated at -1.677;

(5) 38.2% of the members of the research sample was completely agree that effective marketing decision making requires setting goals for marketing research and 47.1% of the members of the sample agreed with this idea. In contrast, 10.2% of the research managers believe that decisions can be successful without resorting to marketing research, but rather to rely on administrative effort, guessing, and experience;

(6) 29.9% of the members of the sample confirmed their complete agreement on the identification and planification of the marketing research sample and that this will achieve the success of the research and its objectives. Also, 50.3% agreed on this idea. In contrast, the equivalent of 5.1% completely rejected the idea and 7.6% disagreed with it;

(7) 76.4% of the members of the sample indicated that their companies rely heavily on the field study for the success of marketing research. This is reflected in the values of the arithmetic average, standard deviation, and symmetry coefficient, whose values were respectively 3.81, 1.116, and -1.129. In contrast, 15.3% considered that their companies do not resort to field study during the marketing research. Also, the equivalent of 8.3% of the members of the sample indicated that they do not know if their companies rely on the field study while doing marketing research;

(8) 38.2% of the members of the sample indicated that they fully agree that the company depend in making marketing decisions on the final report submitted by the marketing research and 48.4% of the members of the studied sample also agreed with this idea, while this idea did not get the acceptance of 8.3%;

(9) 76.5% of the members of the studied sample indicated that the company relies in making marketing decisions on the informations provided by exploratory research. In contrast, 14.7% of the respondents indicated that their companies do not resort to this kind of research in collecting informations, while we found that the equivalent of 8.9% of the members of the sample do not know if their companies rely on exploratory research in making marketing decisions;

(10) 69.4% of the members of the sample consider that it is necessary for their companies to rely on the office data and documents to collect marketing informations and to use it in making marketing decisions. While 20.4% of the members of the sample believe that it is useless to use the documents and office data to collect marketing informations and in taking effective marketing decisions. In contrast, 10.2% of the members of the sample do not know whether their companies adopt the method of office data in making marketing decisions;

(11) 10.8% of the members of the studied sample believe that the success of marketing decisions in the company is not due to the use of quantitative methods, but rather to the use of other methods. In contrast, 82.8% of the individuals concerned with the study consider that the success of decisions in the company is due to the use of quantitative and statistical methods in data analysis. In this regard, some of the managers and departments heads interviewed said that the marketing decisions taken by them, which were based on a set of quantitative and statistical methods, were effective, successful, and accurate, and this is due to the accuracy of the statistical methods used in the data and information analysis process, gathered on the environment surrounding the company;

(12) 79% of the members of the studied sample considered that their companies rely on the survey method to collect informations from consumers, which would contribute to the activation of marketing decisions in the company, while 11.5% said that the collection of informations about consumers is not done by survey, but through guessing and random analysis of consumers. In contrast, 9.6% of the members of the sample under study do not know how informations about consumers are collected in their companies;

(13) 26.8% of the members of the studied sample completely agreed with the idea that marketing research in their companies helps in the planification and control of marketing activity, which helps in the success of marketing decisions in the company, and 52.02% of the managers agreed on this idea. In contrast, 2.5% of the respondents fully disagree with this idea. In the same context, 5.1% of those concerned with this study disagree with it (the idea). The rest of the members of the sample, which is equivalent to 13.4%, do not know about the importance of marketing research in the planification and control of marketing activity.

The analysis of the differences in the responses of the questionnaire axis. After analyzing the phrases of the axis as a whole, we will now try to ascertain whether there are statistically significant differences in the responses of the sample members due to the general data variables related to the company legal nature, function, age, experience, and educational level. For this, we will depend on the test Student (t) value and the level of significance (Sig.) of each phrase to ascertain whether there are statistically significant differences between the responses of the members of the sample or not. This is illustrated by the following table (see Table 7):

Table 7

The Analysis of the Differences in the Responses of the Questionnaire Axis According to the Variables: Company Legal Nature, Function, Age, Experience and Educational Level, Using the Analysis of the Binary Variation

N	Phrases	Test value = 4	
		Statistical t*	Sig. **. (2-tailed)
1	Marketing research is a key component of marketing activity	6.102	0.000**
2	Marketing research helps in solving marketing problems and making the right decisions in your company	1.894	0.060
3	Marketing research contributes in supporting the marketing information system with the necessary data to make marketing decisions	2.961	0.004**
4	Marketing research is a means of collecting and analyzing data	5.085	0.000**
5	Effective marketing decision making requires setting goals for marketing research	1.184	0.238
6	The determination (planification) of the marketing research sample is an important step for activating decisions	-0.899	0.370
7	Successful marketing research requires doing a field study	-2.146	0.033**
8	The company depends in making marketing decisions on the final report of the marketing research	1.755	0.081

(Table 7 continued)

9	The company relies in making marketing decisions on the informations provided by exploratory research	-2.009	0.046**
10	Your company relies on office data and documents to make marketing decisions	-3.618	0.000**
11	Successful marketing decisions in the company refer to the use of quantitative and statistical methods	1.505	0.134
12	Using the survey to collect informations from consumers, contributes to the activation of marketing decisions	-1.044	0.298
13	Marketing research helps your company to plan and control marketing activity	-0.610	0.543

Notes. *T is the calculated Student test value; **Sig. is the calculated Fisher test value, and its value is significant at the level of significance ($\alpha = 0.05$). In other words, the difference from the theoretical value (4) is not a coincidence; it is a statistically significant difference. Source: Prepared by researchers depending on the questionnaire data.

By observing the table above, we find that there are significance level values that are less than 0.05. These values are significant for the phrases of the questionnaire axis, which means that there are statistically significant differences between the answers of the members of the sample on the phrases of this axis. In other terms, the members of the studied sample have clear views regarding these variables and we will try to identify these opinions and analyze them, phrase by phrase through the following:

(1) There are statistically significant differences at the level of significance ($\alpha = 0.05$) due to the general data variables, in relation to the first phrase: "Marketing research is a key component of marketing activity", where the level of significance is equal to 0.000**;

(2) There are no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the five explained variables: company legal nature, job, age, experience, and level of education, in relation to the second phrase: "Marketing research helps in solving marketing problems and making the right decisions in your company". This is evidenced by the significance level value, which is estimated at 0.060, as shown in table 7 above;

(3) There are statistical differences at the level of significance ($\alpha = 0.05$) due to the general data variables, regarding the third phrase: "Marketing research contributes in supporting the marketing information system with the necessary data to make marketing decisions", where the level of significance is equal to 0.004**;

(4) There are significant differences at the significance level ($\alpha = 0.05$), in relation to the fourth phrase: "Marketing research is a means of collecting and analyzing data", which is according to the general data variables, where the value of the level of significance is equal to 0.000**;

(5) There are no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the general data variables, in relation to the fifth special phrase, which states that: "Effective marketing decision making requires setting goals for marketing research", where the value of the significance level is 0.238;

(6) There are no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the variables of the general data, in relation to the sixth phrase: "The determination (planification) of the marketing research sample is an important step for activating decisions", where the value of the significance level is 0.370;

(7) There were significant differences at the level of significance ($\alpha = 0.05$) due to the variables of the general data, in relation to the seventh phrase: "Successful marketing research requires doing a field study", where the significance level in value is 0.033**;

(8) There are no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the five explained variables: company legal nature, function, age, experience, and educational level, in relation to the

eighth phrase: “The company depends in making marketing decisions on the final report of the marketing research”. This is indicated by the significance level value shown in Table 7 above;

(9) There are significant differences in the level of significance ($\alpha = 0.05$) due to the variable of the general data, in relation to the ninth phrase: “The company relies in making marketing decisions on the informations provided by exploratory research”, where the significance level value is 0.046**;

(10) There are significant statistical differences at the level of significance ($\alpha = 0.01$) due to the general data variables, in relation to the tenth phrase: “Your company relies on office data and documents to make marketing decisions”, where the significance level value is 0.000**;

(11) There were no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the general data variables, in relation to the eleventh phrase: “Successful marketing decisions in the company refer to the use of quantitative and statistical methods”. Where the value of the significance level was estimated at 0.134, as shown in Table 7 above.

(12) There were no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the variables of the general data, in relation to the twelfth phrase: “Using the survey to collect informations from consumers, contributes to the activation of marketing decisions”, where the significance level value is 0.298;

(13) There are no statistically significant differences at the level of significance ($\alpha = 0.05$) due to the variables of the general data, in relation to the thirteenth phrase: “Marketing research helps your company to plan and control marketing activity”, where the significance level value is 0.543.

Through the above and by observing the values of the significance level for the first axis phrases, we find that most of them are valuable values. This means that there are statistically significant differences between the responses of the sample members on the phrases of this axis. In other terms, the members of the studied sample have clear views on these variables.

Variations Analysis

In order to know in favor of who were the statistical differences in terms of the questionnaire axis, we measured the significance level of the axis as a whole. This is in order to facilitate the analysis process and then we used the Scheffe dimension test for the whole axis according to the explanatory criteria with the significant indicators, as shown below:

The variations analysis test of the whole axis, according to the company legal nature variable to detect statistical differences. Table 8 shows the variance analysis using the ANOVA (Analysis of Variance) test:

Table 8

Variance Analysis Using ANOVA Test

	F	Sig.
Between groups	0.731	0.394

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the table above that the value of the significance level is 0.394, from which we find that the values are not significant. So there are no statistically significant differences between the responses of the two categories (private and public companies) members, related to the whole questionnaire.

The variations analysis test of the whole axis, according to the function variable to detect statistical differences. Table 9 shows the variance analysis using the ANOVA test:

Table 9

Variance Analysis Using ANOVA Test

	F	Sig.
Between groups	92.371	0.000

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the above table that the value of the significance level is 0.000, which is less than 0.05, which means that the test is significant. Therefore, there are statistically significant differences between the answers of the members of the sample, distributed by categories of fonction in relation to the whole questionnaire axis. And to know in favor of who were those differences, we used the Scheffe post-test (see Table 10):

Table 10

The Scheffe Post-Test Applied to the Whole Questionnaire Axis According to the Fonction Variable to Detect the Statistical Differences

Sig.	Fonction (J)	Fonction (I)
0.7180	2	1
0.000	3	1
0.718	1	2
0.000	3	2
0.000	1	3
0.000	2	3

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the above table that the value of the significance level for categories (1) and (2) is 0.718, which is greater than 0.05, indicating that the values are not significant. Therefore, there are no differences in the answers of the members in categories (1) and (2). While the significance level of each of the categories (1) and (2), with the category (3) respectively were 0.000, 0.000. This indicates the existence of statistically significant differences in the responses of this category from the categories (1) and (2), and therefore, the category (3) is distinguished from categories (1) and (2). This means that the responses of the administrative category were different from the responses of the directors and heads of department's categories. This is confirmed by the Table 13.

The variances analysis test of the whole axis, according to the age variable to detect statistical differences. Table 11 shows the variance analysis using the ANOVA test:

Table 11

Variance Analysis Using ANOVA Test

	F	Sig.
Between groups	19.660	0.000

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the above table that the value of the significance level is 0.000, which is less than 0.05, which means that the test is significant at the significance level (5%), and therefore there are statistically significant differences between the answers of the sample members, distributed by categories of age in relation to the whole questionnaire axis. And to know in favor of who were those differences, we used the Scheffe post-Test:

Table 12

The Scheffe Post-Test Applied to the Whole Questionnaire Axis According to the Age Variable to Detect the Statistical Differences

Sig.	Age (J)	Age (I)
0.000	2	
0.000	3	1
0.000	1	2
0.130	3	
0.000	1	
0.130	2	3

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the above table that the value of the significance level for categories (3) and (2) is equal to 0.130, which is greater than 0.05, indicating that the values are not significant and therefore there are no differences in the answers of the (3) and (2) categories members. While the significance level of each of the categories (3) and (2), with the category (1) respectively were 0.000, 0.000. This indicates the existence of statistically significant differences in the responses of the category (1) from the categories (3) and (2), and therefore, the category (1) is distinguished from categories (3) and (2). This means that the responses of the junior managers group, who are under the age of 30 years, are distinct from the responses of the older persons that are over the age of 30 years.

The variances analysis test of the whole axis, according to the experience variable to detect statistical differences. Table 13 shows the variance analysis using the ANOVA test:

Table 13

Variance Analysis Using ANOVA Test

	F	Sig.
Between groups	48.896	0.000

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the above table that the value of the significance level is 0.000, which is less than 0.05, which means that the test is significant at the significance level (5%). Therefore, there are statistically significant differences between the answers of the sample members, distributed by categories of experience in relation to the whole questionnaire axis. And to know in favor of who were those differences, we used the Scheffe post-test of the whole axis according to the explained criteria with the significant indicators as shown in the following table (see Table 14):

Table 14

The Scheffe Post-Test Applied to the Whole Questionnaire Axis According to the Experience Variable to Detect the Statistical Differences

Sig.	Experience (J)	Experience (I)
0.000	2	
0.000	3	1
0.000	1	2
0.023	3	
0.000	1	
0.023	2	3

Source: Prepared by researchers depending on the questionnaire data.

The table above shows that the significance level for the categories (1), (2), and (3) is less than 0.05, which means that all these values are significant, and therefore there are statistically significant differences in the answers of these categories members.

The variances analysis test of the whole axis, according to the educational level variable to detect statistical differences. Table 15 shows the variance analysis using the ANOVA test:

Table 15

Variance Analysis Using ANOVA Test

	F	Sig.
Between groups	159.521	0.000

Source: Prepared by researchers depending on the questionnaire data.

It is clear from the table above that the value of the significance level is 0.000, which means that the values are significant. This explains the existence of statistically significant differences between the responses of the (3) and (4) categories members, related to the whole questionnaire.

Conclusions

The study reached a number of results, which we list as follows:

(1) The study showed a relative proof of the general hypothesis; it was found that the managers of the Algerian economic companies were aware of the importance of applying the concepts and principles of marketing research in the planification and control of marketing activities at the field of study;

(2) There are statistically significant differences due to the general data related to the members of the studied sample regarding the recognition of the managers of the studied companies of the importance of applying the concepts and principles of marketing research while solving marketing problems and making marketing decisions. These differences were more significant for the age variable, experience, and educational level in the first place, and then the function variable and the legal nature of the company.

The study also presented a number of suggestions to the supervisors of the companies under study summarized in the following:

(1) The need for managers in the companies under study to consider the process of self-education and development in order to obtain sufficient knowledge of the most important fundamentals concerning marketing research, related to methods and ways used in the collection of informations by marketing research, quantitative methods used in the analysis process, the statistical models, etc., because this would clarify the importance of these concepts and their role in the processes of supporting the right and accurate marketing decision;

(2) The need to develop specific training programs, focusing on the principles of marketing activity, based on the method of highlighting the experiences of leading organizations that have adopted successful approaches in the field of marketing and marketing research, with an explanation of the approved models and the results achieved by them;

(3) The need to involve all categories in companies during the planification of marketing activity, within the limits of their functional levels, and this is in order to reflect the culture of marketing planification in all members of companies, which helps later to speed planification and decision making;

(4) The university research in the fields of marketing research, marketing studies, marketing planification, and marketing control should be used, as well as the need to give the opportunity to the students and

researchers who wish to conduct field research on these topics at the level of the company and to benefit from them while they are in the field by presenting administrative and marketing problems for them;

(5) The leaders of the studied companies should work to free themselves from the traditional methods of management, reduce barriers between departments, and disseminate the work with team spirit and foundations of dealing;

(6) The companies under study must rely more on information technology and train their personnel to use them to develop their capabilities and improve their marketing performance.

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The Accredited University of Tomorrow: Accreditation, Creativity and International Recognition

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Numerous challenges have impeded the Bologna process which was designed to provide guidelines for the establishment of appropriate academic standards at the university level. The Bologna process was expected to include a set of standards for the creation of independent accrediting bodies to provide accreditation for universities and higher colleges of education in the European Union, so that the work of students might be recorded and accepted as transferable among universities accepting the Bologna process. This paper provides initially a reflection on the nature and importance of accreditation standards. This follows consideration of the demands for transparency and accountability and consideration of the problems of recognizing transferable credits which are faced by higher educational institutions in Europe. The value and the benefits which derive from acceptable standards for institutional accreditation are identified. Identification is then followed by description of the five standards which will move the accreditation introverts in Europe to the more extravert approach being taken by universities in the United States and the rest of the world.

Keywords: accreditation, accreditation standards, academic standards, transferable college credit

Introduction

“In the EC we accord more importance to a cow than to a hundred students....”

Agency Europe 1-2 Dec., 1986

Higher education in the European Union, a Europe of Knowledge (2014), from the 1987 Erasmus Decision onwards has proved to be a “continuous challenge” (Jansen, 1998). Progress in the arena of European wide university accreditation has yet to prove the inevitability of gradualness (Webb, 1923). The early frustration as expressed by Commissioner Marin and reported in Agence Europe three decades ago remains. The European Union still accords more importance to Agriculture than to Education (EU Budget, 2010). The European Union carefully regulates agricultural production, even to the extent of protecting products’ geographical origin. Yet the European Union has yet to come up with a set of agreed standards for the

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accreditation of European Universities.

There is wide recognition of the link between educational attainment and prosperity. Evidence from the 2010 OECD Programme for International Student Assessment (PISA) confirms “The High Cost of Low Educational Performance: the long-run economic impact of improving PISA outcomes” (2010). Nevertheless we know that “cash-strapped” governments even in the OECD have been “scrutinizing the nearly 5% of GDP they devote to education” (Economist, 2010) and in many cases making cuts. Such is “the extent of austerity levied on the educational sector” that failure to achieve the EU 2020 goals of 40% enrollment in tertiary education is now assured (EU Policy Brief, 2012).

But not in the United States where, in the competitive world of international higher education, investment continues and the “USA is still No.1” (Washington, 2012). Indeed The Housing and Economic Recovery Act 2008 (42 USV 4501) actually provided \$100 billion for education as a necessary investment in the success of recovery from the financial crisis. Increasing private philanthropy is traditionally the funding model for United States private education universities, but is now being seen to become a major part of the funding model for public universities (Applegate, 2012). David Blinder, University of California’s vice chancellor noted that with State funding having dropped “we need to learn from the privates”.

This is in contrast to the funding model of higher education in Europe where philanthropy has had a history of limited involvement and where the European Union has largely seen institutional resources merely provided with “the right to seek Community funding” (Corbett, 2005).

The Importance of Appropriate “Accreditation”

Philanthropy and private funding are linked with a natural strategy. From the outset goals are defined and the donors “expect measurable results from investments” (Gose, 2013). The strategic goals of higher education philanthropy, the deliverables, are expected to be aligned with the liberal arts and the outcome of providing real marketable skills to the next generation. This is in contrast to the views of the Educational establishment in Europe who believe that curricula should be left to academics, business amateurs, rather than business professionals.

This philanthropy brings consideration of the role being played by external independent accreditation of schools and programs in the United States. Typically philanthropic funds will be tied to gaining and maintaining appropriate institutional and program accreditation. Wide acceptance that colleges and universities are failing to keep pace with commercial development in the global workplace has generated United States-wide audits of programs to ensure continuing improvement in the quality of curricula and appropriate practical and not just theoretical instruction. Acknowledgement of “the Great Stagnation of American Education” (Gordon, 2013) underlines acceptance of the fact that 21st century American undergraduates may not be getting sufficient preparation and may not “perform competently in analyzing complex non-technical problems” (Bok, 2008).

Graduation from an accredited program impacts jobs and licensure employers. Therefore, quite rightly, there is an increasing partnering between universities and future employers. This is then noted and independently verified as “(accreditation) speaks to a sense of public trust, as well as to professional quality” (APA, 2013). Thus “one of the first steps any prospective student should take before enrolling in a college or university” (ACBSP, 2016) in the 21st century must be to make sure that the school is accredited by the accrediting agency appropriate to the student’s prospective career and that the university employs faculty with

real-world experience gained from employment in such a career.

It may well be that in Europe “higher education continues to be acknowledged as one of the primary policy issues” (Keeling, 2006). Yet we know that the Bologna Declaration and its process has stalled after its pompous initiation in 1990s. Uniform performance measures, comparisons of quality, and the essential concept of accreditation, of setting European standards, remain “fields of debate” (Keeling, op. cit.). From the perspective of students, the future generators of Europe’s wealth, there should be cohesive accreditation standards to make the quality of higher education transparent and the people employed in education accountable so as to provide an appropriate prospectus for those undertaking tertiary education and therefore for the future prospects of the European Union.

The Value of Accreditation

Higher education accreditation in the United States was developed “to protect public health and safety and to serve the public interest” (ACBSP, 2016) and was initiated to focus on educational and admission standards. The early focus was on building credentialing capacity and facilitating the transfer of credits earned at one university so that they might be recognized by other universities. The early focus was regional, but by 1918 had grown to a national focus and a federal effort to establish best practices for higher education. After World War II, the GI Bill (1944) led to an increase in professional and specialized accreditation and in 1952 the US Congress recognized that non-governmental accreditation was the most reliable source for determining the quality of higher education and training and continues to do so. The setting of accreditation standards reflects three core values of higher education, all essential to academic quality.

- (1) Institutional autonomy;
- (2) Academic freedom;
- (3) Peer and professional review (Eaton, 2014).

The real value of accreditation and the associated certification is the fact that the certification process “added value” to the institution (IAF, 2014). Value of a program is added by an accrediting agency in much the same way as the process of meeting ISO (International Standards Organization) and other international standards. Certification of accreditation assures stakeholders in an institution that the minimum standards of quality education, curriculum, faculty, facilities, and process are met. There is assurance that the institution has set up performance measures which ensure continuous improvement. The findings of the IAF (International Accreditation Forum) survey “confirm that accreditation procedures are generating significant benefits and added value” and this is a key reason why hundreds of thousands of international students “see American higher education as the gold standard in the world” (Stanek, 2001). This is why “more than 820,000 international students came to US colleges in 2012/2013” (Chappell, 2013). In spite of the cost, this is why nearly 20% of all international students make the United States their education destination of choice (UNESCO, 2013).

The increased speed of globalization in conjunction with a more competitive job market has created an additional level of complexity for employers seeking to identify relevant knowledge, skills, and capabilities.

There is a perception that business schools no longer equip graduates with the requisite knowledge and skills to meet employer needs. Students’ self-awareness may decide to attend an ACBSP accredited school because of career goals reliant to their business education. With such endorsements for the ACBSP accreditation process, it is reasonable to make the hypothesis that becoming a member of ACBSP and

completing the accreditation process will elevate a college's profile and thus its attractiveness to students

Purpose of This Paper

This paper is written to draw attention to the numerous challenges that impeded the Bologna process to provide guidelines including a set of standards for creation of independent accrediting bodies to accredit universities and higher colleges in the European Union.

First it's a reflection on the nature of accreditation standards. Then, there are notes on the demand for transparency and accountability and consideration of the problems faced by higher educational institutions. Consideration of the benefits which derive from institutional accreditation, will be followed by description of five standards which might move the accreditation introverts in Europe to the more extravert approach being taken by universities in the United States and the rest of the world.

The Nature of Accreditation

University Accreditation of any Post-secondary school or University is generally considered to provide a formal published statement regarding the quality of an institution or a program following a cyclical evaluation. Such engagement occurs after conferral meetings and or exceeding agreed set of standards. Attention to the process is focused on the quality of management (Orsingher, 2006) and the primary nature of the institutional Mission and Strategic plan. Failure to do so will result in Mismanagement Styles and ultimate demise of the institution (Adizes, 2004).

The responsibility for accreditation procedures, in the European Union, rests with "national agencies, voluntary associations, rector's conferences, inter-institutional networks, and professional organizations" (CRE Project, 2001). The reliance is an introverted self-assessment with outcomes confirming funding in a manner which fails the needs of students and closes the academic administrative mind (Bloom, 1987). The emphasis is on facilities and bureaucratic statistics which do not include such outcome measures as the successful employment of student alumni and the level of salary a graduate may expect to earn from their tertiary education experience. In many cases, stakeholders (students' families, future employers, local community participants) in the university are simply not considered.

Generally Higher Education Accreditation is seen to require:

- (1) Standards set to determine fitness for purpose;
- (2) Self-study by the institution under review;
- (3) Financial viability and long term sustainability;
- (4) External review by independent peers;
- (5) External evaluation by independent testing services.

The accreditation process in Europe, as already noted, is generally delegated to or by the nation's ministries of Education. Research at the Institute of Sociology of the Academy of Sciences at the University of the Czech Republic is underway to survey, analyze, and make transparent the information processes which are related to the "collecting, use, analyzing and disclosure" (Haskova, Lubica, & Lubor, 2013). However, there continues to be "barriers to the effective utilization of information" in the 28 institutions who were open to the 2013 survey. Barriers exist at both institutional and national level.

One is reminded that transparency refers "to the principle of creating an environment where information on existing conditions, decision, and actions are made accessible, visible, and understandable to all market

participants” (Greuning & Koen, 1999). As Greuning also noted, policymakers “become accustomed to secrecy” and are comfortable as it provides “the benefit of hiding their incompetence”.

That is where the US accreditation system has overtaken Europe’s individual accreditation process. Accreditation in the US is warranted by numerous agencies, such as US Department of Education, Council for Independent Education, Council on Higher Education Accreditation (CHEA), and the six regional accrediting bodies. Their function is regulated by the Higher Learning Councils to build capacity, which provide transparency and accountability to potential customers for higher education in the United States.

Demand for Transparency and Accountability

Given the prestige of membership and accreditation, one would expect that resulting curricular improvements of a business program would be attractive to students. In fact, the overall improvements through the accreditation process of ACBSP does support the assertion that greater student enrollment is directly related to implementation of quality standards in business education. Students’ perception of the importance of accreditation is shaped not only by the schools they are considering for their undergraduate/graduate education, but also by their future employers.

The demand for transparency and accountability in higher education begins with the call from taxpayers to government to account “for the productivity of knowledge workers” (Miller, 1996). The price of higher education is rising (Trombley, 2003) and it is clear that Higher education will need to evolve to keep the cost of higher education affordable (Sreenivasan, 2013). In the absence of proper accounting for this intangible value, governments simply cannot track productivity growth and as a result European students are not provided with even a reasonable knowledge of the value of the higher education they choose to pursue.

The demand for accountability arises because the established “rules of the game” by which economic value has been determined “are being rendered obsolete by technological and social developments, to say nothing of business reality” (OECD, 1992). Further the value of an undergraduate degree is being questioned (Economist, 2012). So the demands for transparency and accountability need to be seen in Europe in the context of:

(1) Falling levels of quality. “Since the second world war Europe has progressively surrendered its lead in higher education to the United States” (Economist, 2005). The United States boasts 17 of the world’s 20 top universities (Shanghai ranking, 2013), England 2 and Switzerland 1. This is a sad reflection on the quality of European universities and confirms that the European Union is failing its young;

(2) Rising levels of access to the Internet, university rankings, and the growing impact of the social media assessing university education;

(3) Competition from the private sector in higher education even in the face of national government reluctance to embrace the private sector;

(4) Increased acceptance of the need for accreditation by the most highly rated European higher education institutions.

Problems seen in the United States are equally evident in many regions of Europe, but while the response in the United States is open and peruses a pro-active approach, the response by European higher education institutions seems by some estimates to be closed and at best reactive (Gjorgov & Gjorgova, 2006).

These problems include:

(1) Responding to the growing demand for transparency and accountability as the availability of critical

analysis grows and is heard on the social media;

(2) The pace of change in the business world. The traditional humanities have not related to the revolution in business and “the most devastating criticism is that they are useless” (Swaim, 2014). In much the same way professional application programs are slow to adjust and this can be most easily seen in accounting where the top three accounting research journals have no practical application whatsoever;

(3) The funding of Higher Education. The defunding of higher education, particularly in the United States, is focusing attention on weakness in the university education model. The provision of free education at the tertiary level and the maintenance of education standards are not sustainable. Government plans to extend university education (as with the EU 2020 goals) without an appropriate level of funding guaranteeing a further reduction in the quality of the education available. This can be seen particularly in East Europe;

(4) New university models. The success of for profit tertiary institutions like the University of Phoenix taken together with the expansion of online courses being made available by the majority of higher education institutions questions the traditional university model. Regardless of European university apathy to online degrees “the number of job candidates with online bachelor’s degrees has rapidly increased in recent years...and acceptance of the degrees by employers is becoming more common” (Haynie, 2013);

(5) The expansion of “distance learning” indicates a return in many business areas to a Master Intern relationship to enable students to achieve the necessary mastery of subject areas and a return to professional “on the job” training combined with online course to acquire appropriate credentials;

(6) Competency based instruction where the academically trained faculty begin to be replaced by a professionally trained faculty who can provide and share students with relevant real world knowledge and experience.

Accreditation provides an opportunity for higher education institutions to discuss these matters and to share in coming up with solutions to the problems, to take a pro-active approach to them and thereby underwrite the future for jobs and growth in Europe.

Educational systems in most EU countries are centrally regulated through governmental education standards, quality control and development standards, and other restrictive regulation. By its very nature, decentralization leads to greater diversity among providers and hence greater school choice but also differences in standards among schools (European Commission, 2011).

Therefore, the importance of setting national standards and quality controls which although respecting those differences would ensure parents and students to acquire at a minimum socially acceptable quality. Such “protection” of customers is particularly important in EU where transition and decentralization opened possibilities for diversity among local public schools as well as the establishment of private schools offering different programmes and curriculum of study (Mojsoska, 2006).

Benefits From Accreditation

The overarching goal of program and/or institutional accreditation “is to ensure that education provided by institutions of higher education meets acceptable levels of quality” (USDE Overview, 2012). This benefit must be fully transparent and seen in the context of the diversity of degrees and institutions. Public knowledge, and particularly the knowledge available to prospective students, is certainly opaque across national borders and even within countries.

There are three other associated goals (Eaton, 2012):

- (1) Engendering private sector confidence;
- (2) Facilitating the transfer of academic credentials;
- (3) Providing access to government and private funds.

As already noted, private sector confidence can lead to philanthropic contribution and the establishment of funding for appropriate first-class facilities.

The transferability of academic credentials provides for student mobility and reliable credit transfers. This would lead to the same ease of credential transfer in Europe as is available in the United States.

Access to additional government and private funds provides the opportunity for higher educations to grow and contribute to the growth of jobs and industry in their geographical area.

The setting of US Accreditation standards reflects three core values of higher education (institutional autonomy, academic freedom, and peer or professional review), all quite essential to academic quality. The real value of accreditation and the associated certification is the fact that the certification process awards “added value” to the institution. Tangible value of a program is thus added by an accrediting agency in much the same way as the process of meeting ISO (International Standards Organization) and other international standards. Certification or accreditation of an institution assures stakeholders that the minimum standards of quality education, curriculum, faculty, facilities, and overall process are met.

Five Suggested Key Performance Standards

Social Responsibility and Leadership Standard

The need for European Quality Assurance and Accreditation standards to open up their institutional evaluation is established. A Social Responsibility Standard recognizes the need to share the mission and strategic plans of the institution with stakeholders. Such a standard will disclose:

- (1) The major accomplishments made in line with the Institutional Mission;
- (2) List of high quality intellectual contributions to the local and national communities;
- (3) Partnerships with industry;
- (4) Internships and other professional opportunities for students and the local community;
- (5) Social responsibility projects initiated and completed by the University.

Strategic Planning Process

Between 1993 and 2007, The Goldwater Institute (2010) told us “the number of full-time administrators per 100 students at America’s leading universities grew 39%” while at the same time the number of employees engaging in teaching “only grew by 18%”. The nature of this information is increasingly in demand at university campuses.

A strategic planning process standard would disclose:

- (1) The current institutions strategic plan, not just narrative but appropriate financial statements and non-financial goals;
- (2) The procedures leading to the final strategic plan, the inputs from Faculty, students, and administrative staff and their involvement in the planning process;
- (3) Performance measures showing progress made on previously approved plans and their final outcomes;
- (4) Details of pending plans and planned outcomes and deliverables.

But in the Europe Union, the strategic plans of universities, when they exist, have yet to be widely shared with students, faculty, and stakeholders.

Student and Stakeholder Focus

This standard will be of particular interest to potential students and their parents. Concern inevitably focuses on whether present curricula adheres to the liberal arts concept, the classical concept of “liberal arts” that is “the provision of useful skills for free people” (Cicero, 55 BC). Education, arming young people “with useful arts that are indispensably necessary”, was set down long ago by Aristotle (50 BC). Concern today is on the curricula’s provision of those “useful” arts that are indispensable necessary (Small, 2014). “Acquiring an excellent education is the best way not to be left behind as technology races ahead” (Brynjolfsson & McAfee, 2014).

A student and stakeholder standard would disclose:

- (1) The measurement of knowledge transfer preferably by third party organizations like the Educational Testing Service and Peregrine academic Services;
- (2) The formal process of course learning objective review and the resulting changes made;
- (3) Comprehensive Learning Outcomes analysis with multiple-year trend analysis;
- (4) Curriculum links with business and the professions and the use of real world business techniques;
- (5) Assessment and evaluation of non-curricular activities.

Increasingly accredited colleges in the United States have turned to independent evaluation of knowledge transfer based on rigorous research by agencies, such as the Educational Testing Service (ETS, 2014). More focused global educational support is available from Peregrine Academic Services and these independent assessments of business programs are designed to provide comparative data on which to base continuous improvement in college curricula.

Measurement and Analysis of Student Learning and Performance

- (1) Student learning outcomes cover a wide range of skills, knowledge, and attitudes that can be influenced by the educational experience;
- (2) Business programs must have established a learning outcomes assessment program to indicate the effectiveness of the process;
- (3) Successfully describe your learning outcomes assessment process for each program;
- (4) Identify internal learning outcomes assessment information and data you gather and analyze;
- (5) Identify external learning outcomes assessment information and data you gather and analyze;
- (6) Identify formative and summative learning outcome assessment information and data you gather and analyze.

Faculty and Staff Focus

A faculty and staff focus standard would disclose:

- (1) Analysis of contact/class hours and the overall faculty load;
- (2) Deployment of faculty and staff with appropriate qualifications;
- (3) Credentials appropriate to subjects taught including real-world experience;
- (4) Analysis of full-time and part-time employment;
- (5) Comprehensive analysis of community and scholarly contributions;
- (6) Details of Faculty and Administrative staff evaluation process;
- (7) Details of online and hybrid courses and trends in online coursework.

Faculty teaching business at the university level used to require academic qualification. Professional qualifications were not considered appropriate. The trend particularly for business disciplines is to require relevant real world experience. So professional qualification is now widely accepted for accreditation purposes and increasingly requested in advertisements by colleges who wish potential students to know that they will learn from “professors with real-world experience in your chosen field” (Colorado Tech., 2014). This trend has yet to be accepted by universities in Europe.

Educational and Business Process Management Standard

An educational and business workplace standard would disclose:

- (1) Methods of program delivery for graduate and undergraduate programs;
- (2) The Common Professional Components of each course;
- (3) Details of facilities and equipment including technical details of the availability of software made available to students and faculty;
- (4) Details of Library and other research resources available to students and faculty;
- (5) Enrollment procedures and other administrative features of the university;
- (6) Details of special opportunities such as a junior year abroad or other International experience.

Conclusion

Allan Bloom (1987) first identified a separation of the disciplines across the curriculum and the impact that the lack of integration might have on students and faculty in an article “Our listless universities”. Indeed he was prescient in identifying the disintegration of the business curriculum in particular so that subjects have been increasingly studied using theory in isolation and, perhaps ironically, he noted how “the heads of the young are stuffed with a jargon derived from the despair of European thinkers”.

Businesses that collaborate with industry find the need to provide integration to promote students’ understanding. They are also noting how the business curricula, as other curricula, have got lost, out of touch with relevant real world activity. Drucker (2001) noted carefully that “Management is thus what tradition used to call a liberal art”. Real world managers draw on a knowledge resource that integrates “all the knowledge and insights of the humanities and the social sciences” and of course the physical sciences. Therefore, to survive university curricula needs to integrate with business and provide students with knowledge relevant to the real world, the “soft skills”, networking and so make management and other disciplines true examples of the liberal arts. European universities need to regain the lead providing young Europeans with the skills they need to prosper in the global world wherein they will make their careers and generate European Union prosperity.

The trend in America’s best universities is to become more transparent. University administrators had become accustomed to budget and strategic plan secrecy. Secrecy was attractive. Secrecy hid their incompetence but secrecy also provided a barrier to policy success and as The Goldwater Institute discovered “Administrative Bloat” was “the real reason for High Costs in Higher education”. This is also likely the case in the European Union. Accreditation brings transparency and accountability to universities. Transparency and accountability are the buzzwords in education and they are needed; nowhere are they needed more at present than in the European Union.

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Appendix

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