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**INCENTIVES STRUCTURE AND ACCOUNTABILITY  
IN THE JORDANIAN HIGHER EDUCATION SYSTEM**

**Ghada Barsoum and Nader Mryyan**

**Working Paper No. 835**



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## Abstract

This paper provides an overview of the incentives structure for higher education by focusing on the quality assurance and the institutional structure governing universities in the Hashemite Kingdom of Jordan. The institutional level analysis focuses on both the external and internal governance structures that regulate higher education institutions. Particular attention is paid to issues of accountability and quality assurance arrangements both at external and internal levels of universities. At the external level, the paper illustrates the role of the Higher Education Council and the Higher Education Accreditation Commission (HEAC). At the internal level, the paper looks at the role of boards of trustees and the different levels of councils. The analysis focuses on the scope of decision-making that each entity has. The paper specifically addresses the growing role of private higher education, presenting two are public and two are private. The two public universities are Jordan University (JU) and Mutah University (MU), and two private universities are Amman Al Ahllia University (AAU) and Jadara University (JU). The analysis in the case studies addresses issues of student size, specializations and quality assurance approaches.

*JEL Classifications: I2*

## ملخص

تقدم هذه الورقة لمحة عامة عن هيكل الحوافز للتعليم العالي من خلال التركيز على ضمان الجودة والمؤسسية الحاكمة للجامعات في المملكة الأردنية الهاشمية. يركز التحليل على المستوى المؤسسي لكل من هياكل الحكم الخارجية والداخلية التي تنظم مؤسسات التعليم العالي. وتولى الورقة اهتماما خاصا بقضايا المساءلة وترتيبات ضمان الجودة على المستويين الخارجي والداخلي للجامعات. على المستوى الخارجي، توضح الورقة دور مجلس التعليم العالي وهيئة اعتماد مؤسسات التعليم العالي (مركز القبول الموحد). وعلى الصعيد الداخلي، تنظر الورقة في دور مجالس الأمناء على مستويات مختلفة من المجالس. ويركز التحليل على مستوى صنع القرار في كل كيان. تتناول هذه الورقة تحديدا تنامي دور التعليم العالي الخاصة. الجامعات الحكومية هما الجامعة الأردنية (JU) وجامعة مؤتة (MU)، والجامعات الخاصة هي جامعة عمان الأهلية (AAU) وجامعة جدارا (JU). ويظهر التحليل في حالة الجامعات محل الدراسة بعض الموضوعات مثل عدد الطلاب، والتخصصات والمناهج وضمان الجودة.

## 1. Introduction

The Jordanian higher education system is one of the fastest growing systems in the Arab region. The Jordanian higher education system dates back to the 1950s, with the introduction of a one-year post-secondary Teacher Training Institute in 1951. A key milestone has been in 1962 with the establishment of the University of Jordan. The number of universities increased significantly thereafter, with four public universities created in the 1990s. During the same period, private universities started to show a presence in the higher education landscape in Jordan beginning in 1990-91 with the establishment of Al-Ahliyya Amman University. Today, the Jordanian higher education system boasts ten public universities, more than twenty private universities, and fifty-two community colleges divided equally between public and private governance (Bekhradnia 2008). The number of students enrolled in public universities nearly doubled in the 1990s from less than 50,000 in 1990-1991 to nearly 90,000 in 2000-01, and there were over 225,000 undergraduate and postgraduate students in 2009-2010. The number of students in private universities increased even more from 7000 in 1992-93 in to over 37,000 in 2000-01 and to more than 55,000 in 2009-10.<sup>1</sup>

One of the key approaches to reforming the system of higher education is to improve relations of accountability by institutionalizing quality assurance measures in order to provide the incentives to educators that are better aligned with education outcomes and supporting venues for stronger public accountability in higher education (World Bank 2008). A key approach is the incentives model illustrated in the World Bank report (*ibid.*), which builds on the literature from industrial organization. The model seeks to design implicit and explicit contracts that align the incentives of the agents (service providers / educators) with those of the principals (policy makers) (*ibid.*:120). Some of the key measures to develop this model are by linking the rewards of educators to student achievements, by creating avenues for parents to participate in school activities to help in performance monitoring, and by encouraging the private provision of education, thus increasing competition and giving students and their parents a choice of provider (*ibid.*). The participation of students in the evaluation the education process builds on the now-classic model of service reform proposed by the World Bank (2004), which seeks to promote “client power” as a short route for accountability. The client power is strengthened through education aid and direct government funding to students.

This paper provides an overview of the incentives structure for higher education by focusing on the quality assurance and the institutional structure governing universities in the Hashemite Kingdom of Jordan. The institutional level analysis focuses on both the external and internal governance structures that regulate higher education institutions. Particular attention is paid to issues of accountability and quality assurance arrangements both at external and internal levels of universities. At the external level, the paper illustrates the role of the Higher Education Council and the Higher Education Accreditation Commission (HEAC). At the internal level, the paper looks at the role of boards of trustees and the different levels of councils. The analysis focuses on the scope of decision-making that each entity has. The paper specifically addresses the growing role of private higher education, presenting two are public and two are private. The two public universities are Jordan University (JU) and Mutah University (MU), and two private universities are Amman Al Ahllia University (AAU) and Jadara University (JU). The analysis in the case studies addresses issues of student size, specializations and quality assurance approaches.

The analysis in this paper benefits from a recently fielded survey tracing university graduates aged 25-40 in two disciplines that have a number of public as well as private higher education

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<sup>1</sup> All statistics in this part are obtained from the official website of the Ministry of Higher Education and Scientific Research ([www.mohe.gov.jo](http://www.mohe.gov.jo)) accessed in July 17<sup>th</sup>.2013

institutions, namely business administration and information technology. The survey data collection tool collected information on graduates' socio-economic background and household characteristics, education experience, first job experience, current job experience and employment history and mobility. The survey tool also collected data on how quality assurance measures operate, if ever, in Jordan's public and private higher education institutions. The survey provides data on mechanisms for student feedback and monitoring in both private and public institutions, labor market outcomes for graduates of these institutions and retrospective data on graduates' learning experience.

## **2. The Governance Structure of the Higher Education System in Jordan**

The higher education system in Jordan is centrally governed under the jurisdiction of the Ministry of Higher Education and Scientific Research (MoHESR). The Higher Education Council is effectively the executive body responsible for making decisions in matters related to universities and community colleges. The Council actually pre-dates MoHESR as the Ministry was created in 2001, whereas the Council was established in 1981.<sup>2</sup> Some of the key functions of the Council include the authorization for the establishment of new private universities and new programs within private universities; the allocation of funds between public universities; the student entry standards for all universities (public and private); and the number of students to be admitted every year. The Council sets the criteria for student admission for the field of specialization at each university, including the type of high school certificate and the high school threshold final grades for admission into each specialization. These threshold final grades are the same for public and private universities in specializations such as medicine, engineering, pharmaceutical, medical supporting services, religion, nursing, law, agriculture, press and media, but private universities have 5% lower floor than public universities for the remaining fields.

Furthermore, all senior appointments in public universities have to be approved by the Higher Education Council. The Council also nominates the presidents of public universities to the Prime Minister, and confirms nominations of the Presidents of private universities. Similarly, the Higher Education Council approves the deans of public universities (Khasawaneh and Mryyan 2006).

The Higher Education Accreditation Commission (HEAC) provides evaluations and recommendation for its action with issues primarily related to private universities. Although state universities have been subjected to evaluation by the HEAC, the results of these evaluations are not binding and have been used only for advisory purposes (Khasawaneh and Mryyan 2006). Private universities on the other hand, must address the results of these evaluations. The overall mission of the HEAC is limited to accreditation of universities, which is only one of many components of the larger goal we should be concerned with, namely quality assurance. Accreditation is based on measuring certain parameters such as the proportion of different academic ranks among the faculty, the relevance of faculty specialization, the student/faculty ratio, the expanse and quality of physical space, the availability of certain specialized apparatuses and equipment, and the like. There is no assessment of academic content of programs or academic processes, nor is there anything about the quality of the output or any measure of their employability or of their performance on the job once they are employed. Pursuant to the recommendation of the Higher-Education Accreditation Commission and in accordance with the provisions of its law, the Higher Education Council undertakes the following actions:

- Canceling the license of one or more majors.
- Halting admission – permanently or temporarily.

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<sup>2</sup> It is worth noting that the Ministry was originally created in 1985, but then subsequently dismantled in 1998

- Closing the higher education institution – permanently or temporarily.
- Establishing a committee to directly supervise the higher education institution.

Despite the centralized structure, public universities internally set their own curricula, hold control of their set budgets and may transfer their income between budget years. This is a situation that has been described as a form of “constrained autonomy” (Bakhradnia 2008). Each university has its own Board of Trustees consisting of the university president and twelve members in the case of public universities or fourteen members in the case of private universities respectively. These members must at least hold a first-level university degree. According to the Jordanian Universities Law (Number 9 of 2009), the board of trustees assumes the tasks of designing a university’s general policy; approving the university’s annual strategic plan according to a university council’s recommendation, and following up its implementation and evaluation; evaluating the university’s performance on all academic, administrative, financial and infrastructure aspects. The board of trustees also appoints deputy presidents, branch presidents and deans and sends recommendations to the Higher Education Council concerning the establishment of new faculties, departments and centers, academic programs and majors. The board also determines public university’s fees in all majors through a recommendation by the university council.

Aside from the Board of Trustees, councils at the university level, the school (deans) level, and faculty and department levels govern public universities. The University Council is chaired by the president of the university, the entire members of the Deans' Council are ex-officio members of this council, in addition each college is also represented by one faculty member who is elected by the respective faculty members in each college and two members are chosen from directors of academic, technical, and administrative units at the university, additionally, the University Council has two members from the community at large, a representative of students, and a representative of alumni. The university president selects all academic members for one year. The University Council deals with all the non-academic issues in the university and focuses on the university’s relationship with the outside community. The Deans Council, on the other hand, comprises of all faculty deans at the university, with the mandate to take academic decisions in the university. The deans are appointed by the president of each university, however the Higher Education Council should confirm this appointment at the central governance level. There is one council for each college, which is comprised of all the department heads as well as elected faculty representatives from each department (The Faculty Council). It also includes one or two representatives of society at large in recognition of the need to give society a chance to participate in the steering of the college, and by extension, the university. The council tackles the academic issues at the faculty level and makes recommendations for the Deans' or/and university councils for approval. Finally, at the department level, the Department Council is the basic unit cell of university governance and it is well structured (Khasawaneh and Mryyan 2006).

The admission to public universities has three modes, competitive, quota and parallel admissions. The regulations allow public universities to grant 20% of their seats to the children of the military and retired military personnel, 5% for the ministry of education personnel, seats for the children of the university's staff, the members of the board of trustees and the higher education council (MOHESR, Public Universities admission Criteria 2013). The quota system includes other exceptions targeting remote and least privileged areas in addition to social groups quota. The percentage of students admitted on quota exceeds two thirds of total admitted students in some years. These rules are quite different for private universities, where the accreditations criteria set the total number of students who should be admitted in each field of specialization, in addition the admission criteria specify the entry floor in terms of high school grades for each field. The admission is mainly competitive,

students can freely go to their first choice of specialization, and together with their parents can choose the private university to continue their higher education studies.

In terms of finance, the government currently provides two types of support to public universities, a direct subsidy to the university and a subsidy to the Students Aid Fund. Students enrolled at public universities are entitled for loans and grants from the Student Aids Fund, which finances up to 45% of the total credit hour cost for poor and highly qualified students. Grants and loans are distributed by the geographical origin of student, where each sub district is awarded a specific number of grants and loans for its eligible students. The student aid is based on a number of eligibility criteria, which include having the Jordanian nationality, financial need, the non-presence of any other official financial support, enrolment in the regular full-time program, a sustained GPA of not be less than 60%, and being in good standing in the university. Grants and loans can be used towards students' education in any public university of their choice. Table 1 illustrates the financial allocations by the Student Fund (2006-2012).

Regular, parallel and international students, all pay tuition fees per credit hour. The credit hour fee varies per field of specialization and type of enrollment within each university, and across universities. Tuition fees represent a much higher proportion of income than is the case in the majority of other countries in the region. Students' tuition percentage of the public universities revenue has increased from less than 50% in 2001 to more than 65% in 2007, and their value exceeded the government subsidy to the universities by more than three folds (Jalal and Kanan 2012).

### **3. Quality Assurance and Academic Accreditation in the Jordanian Higher Education System<sup>3</sup>**

Quality assurance takes primary attention in the Jordanian higher education system. There are two levels for quality assurance in the higher education system in Jordan. As noted earlier, the Higher Education Accreditation Commission (HEAC) is responsible for quality assurance at the national level. The second level of quality assurance is at the institutional level. This section will focus on the national level criteria, whereas institutional-level data will be discussed in the case studies section.

HEAC aims at improving the status of higher education, assuring its quality, motivating higher education institutions to open up and interact with universities, scientific research institutions, and international accreditation and quality control commissions, and employing internationally compatible standards. HEAC's tasks and authorities include such principle areas as:

- Formulating accreditation and quality assurance criteria and revising them periodically;
- Monitoring compliance to the above by the higher education institutions;
- Accrediting higher education institutions and their programs;
- Collecting data and conducting research and studies pertaining to higher education;
- Establishing the National Test Center;
- Developing and updating policy manuals of accreditation for national use
- Maintaining records of accreditation activity
- Conducting training programs for: the national accrediting body members, institutions in the process of self-evaluation, external reviewers in the process of a site visit.
- Evaluating and renewing the accrediting process.

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<sup>3</sup> This section builds on HEAC Law Number 20, 2007, and the information gathered from the universities' web sites and directly from their QA offices.



HEAC runs two types of accreditation, which are Institutional and Program. Private universities are not allowed to start teaching before receiving these two types of accreditation. The Institutional accreditation focuses on the institution as a whole, giving attention not only to the overall educational program but also to such areas as mission, governance, effective management, academic programs, teaching staff, learning resources (library, laboratories, and educational technology), student services, physical facilities and financial resources. Program accreditation, on the other hand, focuses on a degree-granting program within an institution of higher education. Each program has its own distinctive definitions of eligibility, criteria or standards for accreditation. The crucial dimension of quality in program accreditation is the adequacy of the educational program as it relates to professional expectations and requirements for entry and practice in a field (e.g., medical education leading to becoming a physician). During the external review process, the reviewers may review the relationship of the program to the institution for purposes of program maintenance and development.

HEAC undertakes the following four steps in the accreditation process:

- **Development of Standards:** These standards are to be applied evenly to all institutions of higher education and their programs.
- **Self-Evaluation:** The university, institution or program is asked to provide a written self-evaluation in view of the pre-set program standards. This process is expected to take several months and to involve as many of the community members as possible (e.g., administrative and teaching staff, students, employers, etc.).
- **External Review:** A team of experts, representative of the national higher education community (and professional community in the case of program accreditation) review the self evaluation report prepared by the institution as compared to the standards for accreditation and visit the institution/program for purposes of evaluating the extent to which the institution/program is doing what it says it is doing.
- **Accreditation Decision:** Based on the self-evaluation and the feedback of the external reviewers, a decision is reached by HEAC as to whether the institution or program is: accredited, not accredited, or is on probation for a certain period of time during which improvements have to be made. An institution or program which is denied accreditation can experience: its graduates being unqualified to enter the profession; a loss of status in the national higher education community.

### ***3.1 Case Studies: The Governance, Admission and Quality Assurance Criteria in Four Key Higher Education Institutions in Jordan***<sup>4</sup>

The comparative analysis in this section will focus on four key higher education institutions, two are public and two are private. The two public universities are Jordan University (JU) and Mutah University (MU), and the two private universities are Amman Al Ahlia University (AAU) and Jadara University (JU). The two public universities were selected from two regions. JU is an elite school, the oldest university in Jordan, located in Amman, and Mutah University which is located 120 km to the south of Amman. The two private universities are the oldest private universities in Jordan. The first is Amman Al Ahlia University, another elite private school, and the newest is Jadara University; where the first is located in the suburbs of Amman and the second is about 70 km to the north of Amman.

As would be expected, the above data on the four selected case studies illustrate that public universities have a larger student body. It is also interesting to look at the types of specializations for each of the two types of universities. Table 3 shows that private

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<sup>4</sup> The data in this section is based on direct communication with each of the case studies and review of websites and university documents.

institutions tend to focus on more applied market-driven specializations that have higher employability potentials. For instance, only the cases from public universities provide studies in languages, religion, archeology, social studies, and agriculture to list but a few. The majority of students in private universities, on the other hand, are in the fields of business and economics.

As noted earlier, there is a quota system for admission in public universities. Table 4 shows the distribution of enrolled students in each university by the type of admission and the students' grades at the high school. It is clear from Table 4 that the competitive admission hardly covers 50% of the university intake, the quotas and other admission (exceptional admissions) exceeded one third of the total admission in Mutah University. The parallel admission which allows students who can afford paying the full cost of education and who meet the minimum grade requirements to get the same education but for higher fees. The table shows that the number of students who had that status in JU is almost equal to those admitted competitively, but their share was lower for Mutah. The reason given for the concentration of the parallel students at JU is the preference of the students and their families for JU as a university and for Amman as a city.

The high school average grade can serve as proxy for the selection into private and public higher institutions. Table 5 illustrates a number of interesting trends. First, public universities attract a larger share of high-achieving students in the secondary stage final examination. For example, about 60% of the students in the Jordan University had an average score higher than 80%. Similarly, 37% of Mutah students had higher than 80% score. Among the case studies from private universities, only 33% of the Al Ahlia students and 5% of Jadara had higher than 80%. Students at Jadara, which is a new university located in the north, the majority of students (82%) had an average score of less than 70%.

While education inputs in terms of student background differ, it seems that all four cases have a serious focus on quality assurance. Each of the case studies has a quality assurance (QA) unit that mainly conducts student evaluation surveys, analyzes data of such surveys, and provides training to faculty and staff on issues related to quality assurance. In Al Ahliyya University, there is a formal and distinctive QA office; it has a high level board chaired by the university vice president and memberships of the faculties and some administrative units of the university. The QA office has two units: monitoring and auditing unit, and the study unit, and two committees: QA committee for the colleges, and QA committee for the administrative departments. The office has a professional and fully dedicated staff. The QA office at Al Ahliyya has embarked on a long process of development and documentation for the university policies and actions, forms, regulations, and questionnaires. The unit developed individual manuals for university policies in relation to issues of admission, calendar, course transfer, curricula and exams, faculty recruitment and scientific research. More importantly, the QA office supervises the students' evaluation for the academic staff of the university, analyzes the data, and makes the necessary recommendations to improve the education standards and policies.

Similarly, the Mutah University has had an Academic Development and Quality Assurance Center since the academic year 2003/2004. The center offers a series of workshops for university academic and administrative staff to improve their teaching and management skills and to upgrade the management of the university. In addition, the center conducts research at the institutional level and is primarily responsible for the analysis of student evaluations of faculty and teaching at the university level.

At the Jadara University, one of the newest private universities in Jordan, the QA center is in charge of developing the institutional and the program accreditation standards, criteria, and manuals, and coordinating the accreditation self-evaluation study and HEAC peer review

evaluation missions. In addition, the university has the Faculty Development Center that is in charge of developing the knowledge and the skills of the university personnel to enhance the quality of the education at the university. Similar to other universities, the center provides training workshops for the faculty and staff and analyzes the students' evaluation for the faculty members.

#### **4. Analysis of Survey Data**

##### ***4.1 Sample Description and Methodology***

The sample size in this survey was 1,924 individuals aged between 25 and 40 years and holding a bachelor degree in one of the disciplines of accounting, management or computer science. The sample was extracted from two earlier surveys conducted by the Jordanian Department of Statistics (DOS). The first was the Job Creation Survey, which was fielded in the first half of 2012; the survey traced 1,300 individuals. The data provided from this survey is shown in Table 6. It is worth noting that DOS conducts the Job Creation Survey biannually. The survey covers about 40,000 households per round, from all the governorates of the Kingdom, through a stratified cluster sample on two phases, representatives at the levels of the Kingdom, regions, provinces and urban and rural areas.

The second source for the sample of graduates was the household Income and Expenditure Survey of 2010, providing information on the 624 individuals who were contacted as part of this study. The Jordanian Department of Statistics conducts the Household Income and Expenditure Survey every two years. The survey covers about 14,000 families from all governorates of the Kingdom. Similar to the sample of the Job Creation survey, the sample of the Household Income and Expenditure Survey is extracted based on a two-stage stratified cluster sampling technique to allow for national, province and urban/rural representation.

The final sample of this graduate tracer study was extracted from the above two survey samples, after the exclusion of districts that had less than 20 eligible individuals to facilitate data collection.

##### ***4.2 Data Analysis***

The sample described above provides data on the education experience and labor market outcomes for graduates aged 25-41. The limitation of the sample to specific specializations, namely business administration and information sciences is because university graduates are highly heterogeneous in terms of skills and specialization, and the private sector plays the larger role in the production of these skills.

The following analysis links the labor market prospects of graduates to the type of university education they received accounting for selection issues. This analysis would attempt to related differences in labor market outcomes among graduates to some organizational features of the universities they attended, specifically in relationship to their public vs. private ownership.

###### ***4.2.1 Background Characteristics of Graduates of Public and Private Institutions***

The first section of this analysis deals with the background characteristics of graduates, to find out how the types of family individuals are born into affects their choice or likeliness to join a public or private university. University graduates were more likely to be children of wageworkers in the public sector/government, for its stable jobs and income. However, parents who worked in the government/public sector were more likely to send their children to public institutions. This correlation is confirmed with private sector employers/employees being more likely to enroll their children in private institutions.

In terms of pre-university type of educational institution, the majority of graduates in the sample came from public schools as opposed to private or other types of schools. However,

graduates of public institutions were more likely to come from public institutions. Inversely, graduates of private higher education institutions were more likely to come from private institutions.

#### *4.2.2 Learning Experience at the University Level*

This section provides some details on the learning experience of graduates of both private and public higher education institutions based on survey data. The first part looks at the language of instruction. As Table 9 shows, graduates of public institutions were more likely to be taught in both English and Arabic than graduates of private institutions. About 78% of public university graduates have been instructed in both Arabic and English, compared to 67% of private education graduates. Yet, about 9% of graduates in private institutions were taught in English, compared to 7.9% of graduates of public institutions.

Table 10 shows that the teaching methods are quite similar in both types of institutions as reported by graduates. A slightly higher use of group projects, applied knowledge and multiple-choice questions is found in private institutions. There is also a little more focus is on theoretical learning and writing assignments in public institutions. The extent of use of technology in both types of universities is very similar, indicating that public universities do not have a problem of financing capital expenditure on computer laboratories and other facilities.

#### *4.2.3 Students' Feedback and Evaluation of the Learning Process*

Student feedback is a strong tool for quality assurance in higher education institutions. As the analysis of the case studies data shows, most universities in Jordan have quality assurance units that are responsible for the analysis of student feedback and evaluations surveys. Surprisingly, Table 11 shows that students in public institutions have a better chance of assessing professors and participate more in student satisfaction surveys than in private institutions. This is surprising because it would be expected that private institutions care more about students' assessments as they would show more flexibility and responsiveness to their needs, being dependent on students' fees, rather than government subsidies, for survival. While the data on getting student feedback in both public and private institutions are more skewed towards ignoring this important assessment tool, the difference is significant in how public institutions perform better on this indicator.

The difference between the two types of institutions diminishes in terms of providing job placement services and in allowing the opportunity for alumni groups to be formed. Alumni groups can be a great asset to a higher education institution, supporting in its promotion and through their donations. However, this asset is rarely tapped on in both private and public higher institutions as the data suggests.

The data collection tool inquired about graduates' assessment of how suitable their education was in preparing them to get their first job, for lifelong learning, to do their current job, for self-development, and in attaining creative skills. There is almost no distinction between graduates from public or private universities. More than 70% of all students in both types of education institutions believed that their university education was relatively suitable and suitable for all the above benefits.

#### *4.2.4 Employment Outcomes for Graduates of Both Public and Private Institutions*

As the primary motivation for investment in human capital is to reach better employment outcomes, this last section of the data analysis deals with the employment status and job characteristics of graduates of public and private universities.

Table 13 looks at the first employment status upon graduation. As the table shows, the unemployment rate among graduates of public institution was much higher than among graduates of private institutions (39.6% compared to 31.8%). When working, graduates were

primarily wageworkers. However, graduates of private institutions were almost twice as likely as graduates of public institutions to become employers (2% versus 1.2%). Similarly, the proportion of female graduates from public institutions who became housewives upon graduation was double that of female graduates from private institutions. These are included in the sample, as they have had some work experience afterwards.

In terms of characteristics of the first job, graduates of both types of institutions shared many similarities. The private sector has been the main first employer of graduates of both private and public institutions in the disciplines of focus as Table 14 shows. However, the public sector hired about one quarter of the graduates of private institutions and more than one third of graduates of public institutions. This shows that graduates of public higher institutions were more likely to work in the public sector than graduates of private institutions (37.6% as opposed to 24.5%). A minority of working graduates (about 2%) were engaged in informal private sector employment with little difference along the type of education institution lines.

Most of the first jobs obtained by graduates of both private and public institutions were permanent jobs (about 70%), with minor difference along the lines of the type of higher institution they attended. Graduates of public institutions were more likely to have access to work contracts in their first jobs than graduates of private institutions (50.7% versus 42.7%). They were also more likely to gain access to social insurance in their first jobs than their peers from private institutions (72.4% versus 68.2%). However, the average first monthly salary among graduates of private institution was higher than among graduates of public institutions (JD 263.4 compared to JD 261.0). The same pattern holds for the average last salary in the first job.

Finally, we asked graduates of both types of institutions about their degree of job satisfaction. Around 50% of all surveyed graduates are satisfied with all aspects of job quality; job security, pay and type of work, work hours and commute time, and the suitability of their job to their skills. While there was little reported variation among graduates of both types of institutions, Table 15 shows that graduates of private institutions consistently reported slightly higher level of satisfaction than graduates of public institutions with regards to their current jobs.

## **5. Concluding Remarks**

The higher education system in Jordan has a highly centralized structure. However, it is clearly the case the quality assurance is taken very seriously both at the institutional and national levels. The model of higher education reform in Jordan, with its increasing use of student aid allows for what the World Bank (2004) calls “client power”. This makes public universities, similar to private universities, more responsive to the preferences and choices of students and their parents. The data from the four case studies suggest that quality assurance units are active in evaluating the performance of their institutions, collecting data about students’ satisfaction and providing training workshops to faculty and staff. The funding structure of the higher education system in Jordan relies largely on student tuition fees. These increasingly represent a much higher proportion of income to institutions than is the case in the majority of other countries in the region.

A clear observation about private universities in Jordan, consistent with models in other countries, is their focus on applied fields such as business administration and management. However, students with higher grades in the secondary stage completion exams are more likely to go to public universities as opposed to private universities.

Despite the preference for public higher institutions, the data on the education experience of graduates of public and private institutions reveals a number of similarities. A slightly higher use of group projects, applied knowledge and multiple-choice questions is found in private

institutions. The extent of use of technology in both types of universities is very similar, indicating that public universities do not have a problem of financing capital expenditure on computer laboratories and other facilities. Interestingly, graduates of public institutions were more likely to be taught in both English and Arabic than graduates of private institutions. Overall, the majority of graduates from both types of institutions reported believing that their university education was relatively suitable and suitable in preparing them to get their first job, for lifelong learning, to do their current job, for self-development, and in attaining creative skills. Overall, the analysis in this paper points to the need for a stronger emphasis on the diversification of teaching methods and more student-centered approaches to education as opposed to relying on lecturing as the mode of instruction.

Despite the growing emphasis on obtaining students' evaluation of the system and feedback as shown in the case studies, this was not highly reflected in the retrospective data collected as part of the survey. This is primarily the case because of the large age range of graduates and the fact that many of them have graduated before quality assurance units were enacted. The data shows that students in public institutions have a better chance of assessing professors and participate more in student satisfaction surveys than in private institutions.

The data on the first employment status upon graduation sheds light on education outcomes according to type of institution. The unemployment rate among graduates of public institution was much higher than among graduates of private institutions. Similarly, the proportion of female graduates from public institutions who became housewives upon graduation was double that of female graduates from private institutions. These are included in the sample, as they have had some work experience afterwards. In terms of characteristics of the first job, graduates of both types of institutions shared many similarities. The private sector has been the main first employer of graduates of both private and public institutions in the disciplines of focus. However, graduates of public higher institutions were more likely to work in the public sector than graduates of private institutions. Most of the first jobs obtained by graduates of both private and public institutions were permanent jobs, with minor difference along education lines. Graduates of public institutions were more likely to have access to work contracts in their first jobs than graduates of private institutions as well as access to social insurance in their first jobs than their peers from private institutions. However, the average first monthly salary among graduates of private institution was higher than among graduates of public institutions (JD 263.4 compared to JD 261.0). The same pattern holds for the average last salary in the first job. Finally, there was little reported variation among graduates of both types of institutions, however graduates of private institutions consistently reported slightly higher level of satisfaction than graduates of public institutions with regards to their current jobs.

The case studies and the analysis provided on the accreditation and evaluation of private institutions reveal a number of issues. First, it is obvious that the evaluation process is input driven. There is no evidence of attention being directed towards the institution outputs and graduates performance in the labor market. This is a missing key element for higher education reform in Jordan. Second, HEAC's accreditation mandate is still limited to private universities. Extending HEAC's accreditation mandate to cover public universities will ensure their program performance. Standardizing quality assurance and accreditation measures is key to improving the performance of lagging institutions and to aligning standards in Jordan with the international standards.

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**Table 1: Government Subsidy to the Public University System (JD million)**

Year	Universities Subsidy	Student Aid Fund	Number of Students by Student Aid Fund
2008	69.0	14.6	17,065
2009	53.4	15.9	20,228
2010	40.5	11.6	23,790
2011	60.0	9.6	24,915
2012	33.7	16.3	29,994

Source: MOHESR, 2012.

**Table 2: Higher Education Institutions and Percentage of Enrollment**

Higher Education Institution	Number of Institutes	No. of enrolled students	% of Total enrollment	% of Total enrollment
Public Universities	9	183368		73
• Regular Admission		97375	53	
• Exceptional Admission		46026	25	
• Parallel Admission		39967	22	
Private Universities	21	68321		27
Public Community Colleges	19	12476		48
Private Community Colleges	20	12233		48
UNRWA Community Colleges	2	862		4

**Table 3: Number of Students Enrolled at all Four Cases by Faculty/Discipline (2011)**

Discipline	Public Universities Case Studies		Private Universities Case Studies	
	Jordan University	Mutah University	Amman Al Ahlia University	Jadara University
Arts	2734	1310	272	907
Business and Economics	4871	3381	1676	1617
Physical Education	807	1227		
Nursing	820	508	259	
Law	1344	612	328	206
Agriculture	1514	660		
Religious Studies	1778	1239		
Pharmaceutical	2136		1121	
Medicine	1792	945		
Science (includes ICT in Jarada U.)	2535	1911		423
Social Studies and Humanities		1653		
Fine Arts	394		581	
Engineering	5730	2677	817	62
Information Technology	2418		201	
Dentistry	709			
Education	2965	2185		348
International Studies	543			
Languages	2942			
Vocational Sciences	759			
Archeology and Tourism	796			
Total	37587	18308	5255	3563

Source: Al Manar Project, The National Center for Human Resources Development (NCHRD), Jordan

**Table 4: Type of Admission in the Two Public University Case Studies**

Admission Type	JU (%)	Mutah (%)
Competitive	43%	50%
Quotas	11%	27%
Parallel and International	41%	16%
Other	5%	7%
Total	100%	100%

Source: Al Manar project, NCHRD



**Table 5: The Distribution of Enrolled Students by the High School Grade and University**

The Grade Range	JU (%)	Mutah (%)	Al-Ahlia (%)	Jadara (%)
50-60	-	-	10	22
61-70	8	26	27	60
71-80	21	37	30	13
81-90	29	27	23	4
91+	31	10	10	1
Unidentified	11			
Total	100	100	100	100

Source: Al Manar project, NCHRD

**Table 6: Final Sample Distribution by Governorate**

Governorate	Job Creation Survey Sample Source	Households income and expenditure Survey Sample Source	Total
Capital	663	532	1195
Al Balqa'	92	16	108
Al Zarqa	120	28	148
Madaba	42	48	90
Irbid	104		104
Al Mafraq	54		54
Jarash	49		49
Ajlun	29		29
Al Karak	85		85
At Tafila	37		37
Al 'Aqaba	25		25
Total	1300	624	1924

**Table 7: Percentage of Graduates from Public and Private Institutions According to Their Parents' Employment Status and Sector of Employment at Age 15**

Parameter	Graduates of Public Institutions (%)	Graduates of Private Institutions (%)
<i>Father's Employment Status and Sector of Employment at Age 15</i>		
Wage Worker in Gov./Public Sector	47.1	38.1
Wage Worker in Private Formal Sector	15.1	22.0
Wage Worker in Private informal Sector	4.1	4.4
Employer	7.3	11.2
Self-employed	10.9	9.1
Unpaid Family worker	0.0	0.0
Deceased	5.4	7.0
<i>Mother's Employment Status and Sector of Employment at Age 15</i>		
Wage Worker in Gov./Public Sector	9.5	7.4
Wage Worker in Private Formal Sector	2.0	3.0
Wage Worker in Private informal Sector	0.0	0.2
Employer	0.1	0.2
Self-employed	0.5	0.5
Unpaid Family worker	0.0	0.0
Deceased	0.2	1.1
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>
	<b>881</b>	<b>658</b>

**Table 8: Percentage of Graduates from Public and Private Institutions According to Type of Foundational and Secondary School**

Parameter	Graduates of Public Institutions		Graduates of Private Institutions	
		%		%
<i>Type of Foundational school</i>				
Public		78.9		66.3
Private		14.3		21.3
UNRWA Schools		4.7		5.6
International		0.1		0.0
Abroad		2.0		6.8
<i>Type of Secondary school</i>				
Public		88.8		82.5
Private		9.5		14.4
UNRWA Schools		0.2		0.5
International		0.1		0.0
Abroad		1.4		2.6
<b>Total</b>		<b>100.0%</b>		<b>100.0</b>
		<b>881</b>		<b>658</b>

**Table 9: Percentage of Graduates from Public and Private Institutions According to Language of Instruction, and Preferences**

Parameter	Graduates of Public Institutions		Graduates of Private Institutions	
		%		%
<i>Language of Instruction</i>				
Arabic		13.8		23.4
English		7.9		9.1
English and Arabic		78.1		67.0
French		0.1		0.5
Other		0.0		0.0

**Table 10: Degree of Use of Teaching Methods in Public and Private Institutions**

Teaching Methods	Public Institutions					Private Institutions				
	A (%)	B (%)	C (%)	D (%)	E (%)	A (%)	B (%)	C (%)	D (%)	E (%)
Lectures	1.2	3.2	12.2	28.3	55.2	0.3	2.7	12.0	30.2	54.7
Group Projects	6.2	20.4	50.9	18.4	4.1	4.9	16.6	51.5	21.6	5.4
Research Projects	6.8	20.8	52.3	16.3	3.8	5.9	18.6	56.0	16.1	3.4
Applied knowledge	9.3	21.1	40.4	24.8	4.4	8.3	16.0	45.7	25.1	4.9
Theories	14.3	24.2	45.1	13.1	3.3	12.5	20.8	50.4	13.8	2.5
Instructor as Main Source of Information	2.4	9.4	24.8	32.8	30.5	1.2	7.0	23.4	36.4	31.9
Problem Solving	7.8	27.4	44.8	15.8	4.3	9.2	18.5	49.7	19.1	3.5
Focus on analytical skills	4.9	17.0	48.6	23.4	6.1	3.6	16.6	50.5	23.0	6.2
Oral Presentations	6.1	21.1	50.9	16.7	5.2	3.3	18.8	56.6	16.5	4.8
Multiple Choice Questions	3.0	9.1	47.7	26.0	14.1	2.0	7.2	47.4	26.6	16.8
Writing Assignments	6.4	20.8	49.1	18.7	5.0	8.3	20.0	49.1	18.7	3.9
Use of technology	4.6	13.8	34.5	27.2	19.9	4.3	13.1	34.4	28.0	20.2

Notes: A: Never; B: Rarely; C: Sometimes; D: Usually; E: Always.

**Table 11: Percentage of Graduates from Public and Private Institutions According to Ability to Assess Professors, Participate in Surveys and Alumni Groups, and Use Employment Services**

<b>Did Your Institution Allow you to:</b>	<b>Graduates of Public Institutions (%)</b>	<b>Graduates of Private Institutions (%)</b>	<b>Total (%)</b>
<b>Assess professors</b>			
Yes	49.9	33.6	42.9
NO	50.1	66.4	57.1
<b>Participate in student satisfaction surveys</b>			
Yes	43.6	29.9	37.8
NO	56.4	70.1	62.2
<b>Participate in student exit surveys</b>			
Yes	22.5	15.8	19.6
NO	77.5	84.2	80.4
<b>Join an alumni group</b>			
Yes	3.5	3.8	3.6
NO	96.5	96.2	96.4
<b>Job placement Service</b>			
Yes	9.1	10.2	9.6
NO	90.9	89.8	90.4

**Table 12: Degree of Suitability of Public and Private Higher Education**

<b>Do you believe that your higher education was suitable and helped you:</b>	<b>Graduates of Public Institutions (%)</b>	<b>Graduates of Private Institutions (%)</b>
<b>To get your first job</b>		
Not Suitable at all	2.7	3.5
Not Suitable	9.6	8.1
Relatively Suitable	40.4	42.1
Suitable	41.4	42.9
Very suitable	5.8	3.5
<b>Life-long learning</b>		
Not Suitable at all	1.9	2.4
Not Suitable	9.0	10.6
Relatively Suitable	37.0	36.5
Suitable	48.5	47.7
Very suitable	3.6	2.7
<b>Doing your current job</b>		
Not Suitable at all	2.4	3.3
Not Suitable	8.1	7.1
Relatively Suitable	35.3	34.2
Suitable	50.1	51.4
Very suitable	4.2	4.0
<b>Self-Development</b>		
Not Suitable at all	2.5	1.1
Not Suitable	9.3	9.9
Relatively Suitable	29.5	34.3
Suitable	55.3	50.6
Very suitable	3.4	4.1
<b>Creative Skills</b>		
Not Suitable at all	3.7	2.4
Not Suitable	10.4	11.1
Relatively Suitable	31.3	34.7
Suitable	51.6	47.7
Very suitable	2.8	4.1

**Table 13: First Status after Graduation**

<b>First Status after graduation</b>	<b>Graduates of Public Institutions</b>	<b>Graduates of Private Institutions</b>
Wage Worker	56.8	63.1
Employer	1.2	2.0
Self-employed	0.5	1.4
Contributing family worker	0.6	0.5
Work for others without pay	0.1	0.0
Unemployed	39.6	31.8
Housewife	0.7	0.3
<b>Total</b>	<b>881</b>	<b>658</b>

**Table 14: Characteristics of First Job**

<b>Characteristics of First Job</b>	<b>Graduates of Public Institutions</b>	<b>Graduates of Private Institutions</b>
Sector		
Public sector	37.6	24.5
Formal private sector	60.3	72.7
Informal private sector	2.1	2.0
International organization	0.0	0.7
Work Stability		
Permanent	69.5	70.7
Temporary	29.8	28.6
Seasonal	0.8	0.2
intermittent	0.0	0.5
Access to Work Contract		
Yes	50.7	42.7
No	49.3	57.3
Access to Social Insurance		
Yes	72.4	68.2
No	26.9	30.2
Don't know	0.8	1.6
Average Monthly Salary (first salary)	261.0	263.4
(Last Salary)	386.0	410.3

**Table 15: Degree of Job Satisfaction**

	<b>Graduates of Public Institutions</b>	<b>Graduates of Private Institutions</b>
<b>satisfaction about work hours</b>		
Not satisfied at all	2.0	2.4
Not satisfied	10.7	8.8
Relatively satisfied	29.2	29.2
Satisfied	54.4	55.6
Very Satisfied	3.7	4.0
<b>satisfaction about commute time</b>		
Not satisfied at all	4.3	3.8
Not satisfied	11.9	11.2
Relatively satisfied	29.5	28.4
Satisfied	48.6	49.8
Very Satisfied	5.7	6.7
<b>satisfaction about suitability of job to skills</b>		
Not satisfied at all	5.3	4.0
Not satisfied	8.2	8.7
Relatively satisfied	24.3	24.5
Satisfied	54.4	55.0
Very Satisfied	7.8	7.9
<b>Total</b>	<b>881</b>	<b>658</b>