

# GOOD PRACTICES IN HIGHER EDUCATION FINANCIAL MANAGEMENT





PROMOTING THE MODERNIZATION AND STRENGTHENING OF INSTITUCIONAL AND FINANCIAL AUTONOMY IN SOUTHERN NEIGHBOURING AREA HIGHER EDUCATION INSTITUTIONS

## Context

# **Table of contents**

This document has been developed to encourage good practice in financial management in higher education. The drafting was a collaborative venture between higher education institutions involved in UNAM project. The Tempus Project UNAM (http://www.unamnetwork.net/), Lend specific support to institutional demands for increased efficiency, autonomy and transparency in FM in partnering Southern Neighbouring Area (SNA) HEIs, with specific objectives to develop transparent financial culture promoting decentralisation & financial autonomy ,to create a platform for dialogue through a recognised regional network of HEI Managers to exchange good practice in FM and to sustainably strengthen managerial, strategic, admin & technical capacities in eight SNA HEIs through targeted trainings, development of strategies & technical support systems for effective FM .

I. Financing Options and Revenue Str Education Institutions in Jordan

II. Multiannual Budgeting and Plannin Applied Sciences, Graz, Austria

III. The policy of the University of Ger and its relation to the financial dec

IV. Increased Competition and Income

V. Funding Higher Education Institutio for Business & Science (MUBS) Lel

COMPILATION OF GOOD PRACTICES FROM UNAM NETWORK 3



ructure: Experience of the Public Higher	4
ng – A case of FH JOANNEUM, University of	14
noa for the development of the governance sisions	21
e Diversification at Beirut Arab University	27
ons: Best Practices from Modern University banon	46

## I. Financing Options and Revenue **Structure: Experience of the Public Higher Education Institutions in Jordan**

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This paper examines options available for the Jordanian Public Higher Education Abstract Institutions (HEIs) to finance their activities. Based on previous literature and a legislative framework, a quantitative research instrument has been designed to collect data from the financial departments in 10 Jordanian public universities. The results suggest that the public universities are heavily relying on internal sources of income rather than the external ones. In average, 76% of the total revenues were gained from tuition fees, whereas governmental subsidies contributed around 14% of the total revenue. In the same context, the results reveal that the public universities experience crucial difficulties when it comes to financing their operations, namely: weakness of income from research, consultation, and teaching activities; irregularity of the governmental aid; and weakness of the investing strategies. The study concludes with some recommendations for further research in this subject.

Finance Options; Revenue Structure; Public Sector Accounting; Government Subside; Key words Public Universities: Jordan

Obtaining finance is one of the key challenges facing the higher educational institutions Introduction (HEIs) over the globe. Due to the recent infamous financial crisis and economic recession, the problem escalated at the HEIs as the whole sector is experiencing further difficulties in accessing funding opportunities as well as finding financing options (Moladovanet al., 2012). In Jordan, there has been a significant growth in the HE sector during the last three decades. Due to some regional and demographical factors, 1 the numbers of university applicants and enrollment in both undergraduate and postgraduate levels have excessively increased. As a natural response, more HEIs and degree awarding bodies, both state and privately owned, have been founded in order to absorb the growing numbers of applicants.

> As in many other countries, HE sector in Jordan faces financing difficulties due to a few reasons, namely: the shortage of public support, the absence of sustainable support from the private sector, the centralization of HE financial management practices including budgeting, and the ambiguity of strategic financing plans (Mah'd and Buckland, 2009; Kanaan, et al., 2011; El-Sheikh et al., 2012). Having said so, it could be argued that the

aforementioned factors have negatively influenced the financial management practices within the HEIs, which would accordingly impact institutional resources management.

This paper focuses on the Jordanian public universities and aims at investigating the available financing options for these institutions. More specifically, this paper explores the common practices undertaken by the public universities in order to survive and secure finance to their operational activities. In the same vein, this study sheds light on the public support being provided to the public HEIs through the financial subsides presented by the government. By achieving the objectives identified above, the current study has several implications to the regulators, practitioners and other stakeholders in the sector since it is an attempt to develop a theoretical foundation by answering the following research questions:

In addition to this introduction, the flow of this paper is divided into four parts as follows: a brief overview of the HE system in Jordan, a review of the extant literature and the legislative financial framework, the research methodology and method which also describes the data collection process, and finally the results of the data analysis along with, conclusion and recommendations for future research.

#### An overview of the HE Sector in Jordan

The higher education in Jordan commenced after the country's independence by the establishment of the Teachers House 'Dar Al-Mu'lemeen' in 1958. This institution had maintained a two-year program aiming at preparing qualified teachers to work at the public schools being operated by the Ministry of Education. Afterwards, the Teachers' House has succeeded and replaced by the 'Teachers Institute', which had later been developed for 'Community Colleges' in the 1970s. However, the university-degree-awarding education commenced by the establishment of the University of Jordan in 1962. This was the first public university in Jordan among others founded later whereas the establishment of Al-Ahliyya Amman University, as a licensed private university in 1989 was a significant transition in the HE sector in the country towards permitting the private ownership to take part in the HE sector (MOHE, 2013).

As a result of HE sector's development, the number of public universities has reached (10), besides (18) private universities, and (51) community colleges. This progress in numbers of universities accompanied by significant increase in number of students enrolled to study in these universities, where the number of enrolled postgraduate and undergraduate students in both public and private universities is about (237'000), in which 12% are international students (MOHE, 2013). In parallel with the development achieved in HEIs and number of students, funding options available for students have also been improved, with 25% increase in number of students who benefited from public aid for pursuing their studies during the period 2008-2010 (MOP, 2013).2 The overall development in HE sector in Jordan adds more responsibilities upon the universities; in order to play their role within the society. Raising the

2. During the last few years, various initiatives were released on the national level with an aim to support students who are in a 'real need' for assistance to pursue their studies. Examples of these initiatives include: HM King II Fund for Development and Student's Support Fund (in MOHE).

• What are the available financing options for the public universities in Jordan? · How do the Jordanian public universities classify their sources of income? • To what extent do the Jordanian public universities rely on the public subsides?

<sup>1.</sup> During the last two decades, Jordan has faced crucial demographical changes, this mainly relates to: natural growth of population and occurrence of three massive waves of refugees (due to the political crises facing the region).

financial capabilities is one of the key mechanisms that would help universities in this regard. However, this paper will try to investigate who the public universities diversify their sources of income in order to be able to respond to the societal and educational needs.

#### Literature Review

Limited studies have been conducted on the field of financing the HEIs. Within the literature, attention has been given to investigate challenges of financing the HEIs on the light of the financial crisis, and financial concerns and preserving education guality (see for example, Akinkugbe, 2000; Kanaan, et al., 2011; Moladovan et al., 2012).

Akinkugbe (2000) examined the financial flows within the educational system in Swaziland, with a special focus in computing the households, relative to public contribution of the educational costs. The study revealed that financial resources to the education system are relying on the traditional sources (mainly, government, local communities and households). Furthermore, non-governmental organizations, private enterprises and corporations as well as foreign aid are also sources of further fund available to the educational system. Akinkugbe (2000) concluded that, while the government contributes about 83% of the total fund on the HE level, the household and families' contribution is higher at pre-university levels. This in turn, would indicate the fact that higher education is "heavily subsidized by the government at the expense of basic education, bringing about inequality of educational opportunities within the education system" (p. 1074). Akinkugbe (2000) concluded that cost-sharing or cost recovery measures could be employed at the higher education level in order to re-establish the imbalance in the funding mechanism.

Based on a management accounting framework, Mah'd and Buckland (2009) explored the budget process in the Jordanian Private Universities (JPUs) through explaining budget process and budget participation. The authors have conducted 19 interviews in 11 private universities and Ministry of Higher Education in Jordan in order to: explore the budgeting process, study the level of budget participation, and investigate views and perceptions of the budgets' preparers about the governmental budget model. Overall, government's expectation about the universities' compliance with regulations and highlighting the importance of implementation a unique standard for all Jordanian universities were the key concerns addressed by Mah'd and Buckland (2009).

The study found that the budget usage is varied between JPUs, and in some cases budget participation is not consistent where management is centralized. Furthermore, Mah'd and Buckland (2009)suggested that, although practitioners and budget prepares understand the importance of budget usage, most of them are dissatisfied with the governmental budget format, which in turn, reflects absence of generally accepted practices for budgeting activities of HEIs.

Relying on a political economy framework, Kanaan, et al., (2011) present a critical analysis of patterns of expenditure on higher education system in Jordan. Attention in their study has been given to explore HE system's adequacy, efficiency, and equity, and identify its strengths and weaknesses. Kanaan, et al., (2011) argued that the low public expenditure on higher education is a key constraint facing the educational system in Jordan, and thus "leaving households to compensate through private expenditure". In the same context, the study emphasized that despite more spending on higher education, the significant raised volume of students has required compromises in quality of education. However, dramatic

change has occurred in the financing options being available to the public HEI, through gradual declining of public subsidies, which in turn, pressured public HEI to "reconsider their financing mechanisms and become more efficient". Kanaan, et al., (2011), emphasized that, within the Jordanian HE system, a new financing option has emerged through adoption the "Cost-Sharing" mechanisms. This approach was being introduced through foundation of commercial private universities and the "parallel programmes" at public HEIs. Consequently, much-needed income was being generated, but with negative impact on the societal level.3Kanaan, et al., (2011) conclude with suggestions aiming at supporting the HE system in Jordan. This includes for example, promoting the culture of charitable endowments (i.e. through a revision of the Islamic Awqaf system), and introducing innovative financial mechanisms to tap private savings "without incurring the hazards of profit maximization".

El-Sheikh et al., (2012) investigated financing and management of higher education in Jordan. By utilizing multifunctional research method (including: archival documents, observation, and published reports), the study targeted the Jordanian private universities. The study pointed out that there is a strong competitiveness between the private higher education institutions in Jordan, and this in turn, should motivate researchers as well as the universities' managements to accomplish best practices when it comes to financing and management of the higher educational institutions. Furthermore, El-Sheikh et al., (2012) argued that, while the private higher education sector worldwide (including Jordan) relies heavily on the tuition fees as a key source of income, governmental subsidiaries used to be granted to the private universities. In Jordan this is not the case, where the governmental support is usually given to the public universities. The study concludes with a call for adoption an effective budgetary system which in turn, would help in increasing effectiveness of resources management and decision making within the private universities.

As an attempt to examine the European experience of financing the HE, Moladovan et al., (2012) investigated the current issues on financing of the HE on the macro level. Their analysis has focused on investigating the long term challenges facing HE in the light of the economic recession. Based on their analysis of public and private expenditure of 27 EU countries and Turkey, the results indicated that, in average, EU countries allocated 5% of the GDP as public expenditure on education over the year (2004-2008), in comparison with (0.7% of the GDP) contributed as a private expenditure in education.4 The study concluded that, human capital and innovations are crucial issues for higher education system in Europe, and in order to overcome such challenges, further funding is required in the future with a proposal of 2% of the EU's GDP to be spent on the HE.

Based on the literature discussed above, it could be argued that less attention has been given on the national as well as the international level to examine the technical part of the financing process within the HEI such as: financing options, resources management and budgeting, revenue generation, and revenue management. Moreover, precious analysis of the HE aiding policy on the national level is missing. Therefore, this study sheds the light on

(1.35% in 2008) (Moladovan et al., 2012, p. 941).

<sup>3.</sup> Kanaan et al., (2011) emphasized that the new financing approach being adopted by HEIs in Jordan, has raised two critical issues. Firstly, students from poor background will find it difficult to enter universities, and secondly, quality of education is constrained since HEIs "must compromise on tasks that are essential but not profitable such as research and development" (p. 23).

<sup>4.</sup> Denmark was the biggest contributor of public expenditure on education with 8.43% and 7.75% of GDP in 2004 and 2008 respectively, followed by Cyprus and Sweden. On the other hand, UK was highest country in terms of private expenditure with 1.75% of the GDP in 2007, followed by Cyprus

the financing options available to the public HEIs and slightly analyze the public subsides being provided to the HEIs in Jordan.

#### The Jordanian HE Legislative Financial Framework

It could be argued that there is a framework for governance, management, and controlling the financial resources of the Jordanian HEIs (both public and private). In this context, there are three influential regulations on ground for management and controlling the HEIs activities. These include: The Jordanian Universities Law (No. 20/2009); Law of Higher Education and Scientific Research (No. 23/2009); and the University's Law (which is existed for each public university as a stand-alone regulation.

Under the above mentioned regulatory package which in turn; has been revised recently, autonomy and decentralization were significantly considered, where the Jordanian universities have become more independent in managing the administrative as well as financial aspects of their activities. With respect to the income diversification, The Jordanian Universities Law (No. 20/2009) identifies the sources of income available for both types of universities (public and private). Article (25) of the Law states that the financial resources of any Jordanian university are consisted of the following:

- Tuition fees.
- Income from moveable and immovable funds owned by the university,
- · Income from teaching, consultations, and research activities. This includes income realized from projects and facilities produced by the university's colleges, institutions and centers,
- · Donations, gifts and grants. Any amount received under this category should be approved by the Cabinet; if the source of grant, donation or gift is located outside the Kingdom,
- · Any other resources of income, and
- · In addition to the above mentioned sources, the public universities benefit from governmental subsidy allocated within the public annual budget.

The above mentioned framework of income diversification will be used to investigate how the public universities classify their sources of income and to what extent do they relying on each of these sources as a finance option.

#### Research Methodology, Method, and Sources of the Data

The current study utilizes the exploratory methodology (Ryan et al., 2002) since attention is given to explore trends of financing options being adopted by the public HEIs in Jordan. In order to achieve its objectives, the current study employs a quantitative research instrument designed specifically to collect the targeted data (Appendix 1 exhibits the research instrument employed on the current study).

In terms of the sources of data, the current study relies on two primary-sources of data:

- a. The financial department, Ministry of Higher Education and Scientific Research. Data provided from this source is related to public figures about HE, characteristics of the public HEIs, and amounts of the governmental subsidies.
- **b.** The financial units within the public universities. Special focus is given here to obtain amounts of income obtained from each source of revenue proposed in the research

instrument. Attention here is specifically given to sources of income disclosed by the public universities on their final annual accounts for the years 2008-2012.

It should be indicated in this part that, the study has faced some limitations including difficulty of obtaining the data (mainly from the universities on the field). This is due to weaknesses of the reporting systems on some universities, as well as unavailability of publicly released accounts and reports; despite that fact that sample of the study is exclusively public HE entities.

#### **Research Results and Discussion**

Table 1: Financing

Options and Revenue

Classification for the

Jordanian Public

Universities\*

This part of the study presents research findings and discussion of the results. Attention in this part is given to answer the research questions addressed above. Table 1 illustrates research results related to the first and the second research questions.

In terms of the financing options available for the public universities, the results indicate that the public universities are adopting several options which in turn, are proposed in the Law. Overall, financing options available for the public universities can be divided into two main categories:

a. Internal Revenue: this includes income from tuition fees; income from movable and immovable assets; income from other academic activities including consulting, teaching and research; and other internal revenues.

**b.** External Sources: this is relying heavily on the governmental aid which in turn, is represented by cash subsidies (i.e. cash deposit and payment of loans installments), funding the infrastructure, paying deficit, and funding construction and equipment. In addition to the public aid, donation from local as well as foreign donors is another source of income being available for the public universities under this category.

Overall, the results reveal that the Jordanian public universities are heavily relying on the internal financing options rather than the external ones. In average, and over through the period of the study, 86% of the income earned by the public universities was generated from internal sources, while almost 14% was provided by the government as a public subsidy.

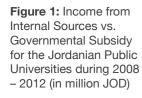
Source of Income Tuition Fees Moveable and Immovable assets Teaching, Consultancy and Researc Activities Donations, Gifts and Grants Other Sources of Income Governmental Subsidy Total \*Results presented here are based on the information disclosed within the final 'annual accounts' of the targeted universities.

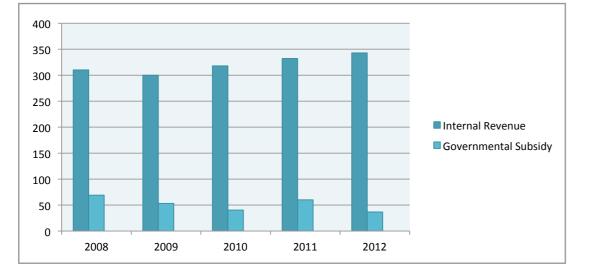
	%	Sub Sources/Classification
	76.44	Regular; Parallel (local vs. US currency); International
	04.74	Students' residential halls; cafeterias; properties rent; Uni. school fees; staff residential rent
ch	0.960	Health services; consulting; training; professional programs
	0.001	Internal; external, cash donation; equipment
	03.92	Charges; interest; employees deductions; investment fund
	13.93	Gov. cash subsidy; installment payments; additional charges
	100%	-

With respect to the degree of adoption of each option of financing, the results show that out of four key options available from the internal sources, tuition fees is the most adopted choice with 76% of the total revenue being earned by the universities, where as only around 5% and 1% being earned from moveable and immovable assets and teaching, consulting and research activities respectively. This result agrees with El-Sheikh et al., (2012).

In terms of the revenue classification, the results suggest that there is variation on the universities practices when it comes to classifying sub sources of the income despite the 'regulatory-codified' sources stated on the Universities' Law. This might be due to absence of unified chart of accounts and incompatibility of the recording and reporting systems within the public universities. Table 1 exhibits the key sources of income and the sub classified sources for the public universities.

As indicated above, and despite the fact that the tuition fess is the main source of income, results indicate that the Jordanian public universities are less relying on the governmental subsidies with 13.9% of the total acquired revenues. This is in contrast with Akinkugbe (2000) and Moladovan et al., (2012). In the same context, the results reveal that the total amount of subsidy being provided by the government is irregular and declined over the period of the study, with 18.2% of the total revenue earned in 2008 was based on the governmental subsides versus 10.7% in 2012. Figure 1 demonstrates distribution of income from internal sources versus the governmental subsidy for the years 2008 - 2012.





It should be indicated that the governmental subsidies were not being allocated based on specific criteria between the universities. In this regard, the results indicate that 54.3% of the totalgovernmental subsidy provided during 2008 – 2012 was given to three universities located in less developed areas - with less number of students in comparison with universities located in the main cities. In these universities, the government subsidy representsalmost 50% of the total revenue gained. This in turn, would raise concerns about what roles is expected to be played by the HEIs within the society (educational vs. developmental). Salmi (1991) argues that countries usually are implementing financial strategies to mobilize, allocate and utilize resources in a more effective and innovative way including the HE, but focusing exclusively on the financial aspects is generally not sufficient.

Nevertheless, despite the fact that the governmental subsidy is essential for some public universities, the total amount of annual allocated HE's subsidies within the public budget

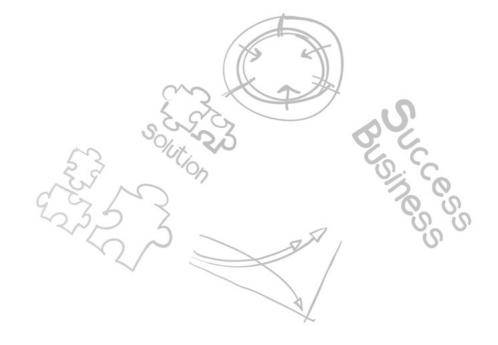
### proposed by the EU (Moladovan et al., 2012).

#### **Conclusion and Recommendations**

Different trends were identified on the Jordanian public universities' experience when it comes to financing their activities. It has been concluded that the public universities are relying on the internal sources - namely tuition fees - as a source of finance. In the same context, governmental subsidy is the second key source of financing the public universities' activities. However, the public subsidy which in turn, is lower than the desired leveldirected mainly to universities in less developed areas. These areas are in need for the public aid due to remoteness, unattractive educational destination, and inexistence of human capital.

On the same context, poor financing options were observed, mainly in those related to income from research, teaching and consulting activities as well as income from donations and grants. This in turn, reflects weaknesses in the strategic vision of the public universities when it comes to create 'revenue-generating' research projects. In the same vein, these results suggest that strong partnerships with private sector do not exist, evidenced by very low donations and grants being presented to the public universities.

Finally, the current research would recommend further studies to be conducted in financing the HEIs, with an emphasis to be given to investigate relationships that might be exist between financing options, 'share-costing' approach (see Kanaan, et al. 2011) and characteristics of the HEIs (e.g. size, age, location, and the educational programs). Furthermore, crucial issues such as the public subsidy should be further examined with an aim to propose national criteria for subsidy's allocation between the HEIs.



does not exceeded (0.17) % of the GDP in 2012, in comparison with 2% of the GDP as

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### Appendix 1: The Research Instrument

#### A. Characteristics of the HEI

- A.1 Name of the HEI: .....
- Case No.: .....
- A.2 Institution Identity (type): Sc
- A.3 Location (district): North  $\Box$
- A.4 Age of the HEI (years): 01-10

#### **B.** Revenue Structure (Narrative)

#### Source of Income Tuition Fees Moveable and Immovable Funds Teaching, Consultancy and Resea Donations, Gifts and Grants Other Sources of Income Governmental Aid (including colle

#### **C.** Operational Performance

Indiantar	Year(Code)/(000) JOD					
Indicator	2008(1)	2009(2)	2010(3)	2011(4)	2012(5)	
B.1 Students number						
B.2 Financial (Revenue Sources) *						
Tuition Fees						
Income from Moveable and						
Immovable Funds						
Income from Teaching, Consultancy						
and Research Activities						
Donations, Gifts and Grants						
Other sources of income						
Governmental Aid (including collected						
charges)						
*To be filled from the final appual accounts of	tha inatituti	~~				

To be filled from the final annual accounts of the institution.

Appendix 2: The Jordanian Public Universities

Name/Acronym	Year Founded	No. Students
The University of Jordan (JU)	1962	36'338 (2011/12)
Yarmouk University (YU)	1976	33'929 (2011/12)
Mutah University (MU)	1981	18'271 (2011/12)
The Jordan University for Science and Technology (JUST)	1986	21'714 (2011/12)
Al al-Bayt University (AABU)	1992	13'380 (2011/12)
The Hashemite University (HU)	1995	23'853 (2011/12)
Al-Balga' Applied University (BAU)	1997	28'488 (2011/12)
Al-Hussein Bin Talal University (AHU)	1999	8'653 (2011/12)
The German-Jordanian University (GJU)	2005	3'000 (2012/13)
Tafila Technical University (TTU)	2005	5'394 (2011/12)

Source: The Higher Education Accreditation Commission, The Accredited Public Universities, Jordan, 2013. http:// www.heac.org.jo/Heac/Default.aspx?lng=1&ID=109, Date of retrieval 1st /Nov./2013. The universities' websites.

cientific 🛛	Literary 🛛	Comprehensive 🛛

	11-20 🗆	21-30 🗆	31-40 🗆	41 and more $\Box$
-	11-20	21-00 🗖		

1	Sub Sources
arch Activities	
cted charges)	

## II. Multiannual Budgeting and Planning - A case of FH JOANNEUM, University of Applied Sciences, Graz, Austria

FH JOANNEUM uses a methodology and system of planning and budgeting from a multiannual perspective. The processes and tools used present an innovative practice with a positive impact at strategic planning and management levels at the university.

#### Introduction

The following case description presents a good practice implemented at FH JOANNEUM University of applied sciences in the area of budgeting and strategic planning. A multiannual budget planning process has been implemented in 2011 replacing the previously used annual budgeting approach.

#### Table 1. Institutional Information

Name of the university	FH JOANNEUM – University of Applied Sciences
Country	Austria
Year of Foundation	1995
Number of Students	~3600
Annual Income	~40,35 million EUR
Website	www.fh-joanneum.at

Source: FH JOANNEUM (2012)

The aim is to develop a strong incentive and contribute significantly to performance improvement of the university and its operational units through: (i) top down definition of target values, (ii) through the development of a multiannual (3 year) perspective and (iii) the establishment of new rules and regulations of budgeting and budget implementation.

Budgeting and budget implementation as well as budget controlling are shifted in the course of this change to a new web-based application supporting the process, the so called "Corporate Planner".

Managing directors and managers of organizational units are equally evaluated if a significant performance improvement (content based, qualitative, and financial) has been achieved.

The newly implemented method and system provides more flexibility for organizational units in their detailed budget planning and at the same time allows for tighter steering and control on the overall university level. The multiannual approach allows for longer-term forecasts and rolling adaptations replacing the previous static perspective at the university. On an overall level it benefits strategic planning and management processes on various management levels.

Background

Originally FH JOANNEUM followed a static annual Budget planning cycle. Departments prepared budgetary values as first estimates based on operational planning and historical controlling and budget data. As a second step the individual budgets at the organizational unit level were scrutinized by the management board and director of the financial and controlling department. The revised budget figures were then aggregated to create the

total budget of the university. Steering and overall target definition was limited and less structured in this process. Furthermore there was little flexibility on the organizational unit's level as regards individual budget items and changes in these items. Responsibilities were on a detailed level of aggregation. Targets set as well. This lead to reduced focus and a static cameralistic perception of the organizational unit.

With growing pressure of reduced public funds for the operational budget a revision became necessary in order to achieve the following goals.

- · Easier implementation of total university budget reduction into organizational units level · Performance improvement and efficiency gain in the operational units

- Increase responsibility and accountability of middle managers to achieve desired results Creation of management flexibility within the organizational unit to identify and exploit synergies

To implement a new system meant to change the organization of a complex financial organization. The following chart provides an overview of relevant key facts with relevance to this process:

Figure 1. Institutional Situation in Financial Management



- State

- ....

Source: FH JOANNEUM (2012)

Actions implemented and corresponding impact

- 1. Target values for organizational units
- 2. Annual budgeting and performance meeting
- 3. Quarterly Reporting & controlling Cycle

- · Longer term planning perspective to work with decreasing public funds
- Rolling controlling and adaptation of budget values
- · Focus on the "important" objectives and changes necessary

#### Different sources of funding:

- Province
- Municipality
- Third-party

The key components of the system of multiannual budget planning can be described as the following:

- 4. IT System Corporate Planner
- 5. Awareness building and training

The following chart provides an overview of the 5 components of the system and its impact on diverse internal target groups.

Figure 2. Scheme of actions implemented and impacts in multianual budgeting



Source: FH JOANNEUM (2012)

The following sections will briefly explain each of the 5 components of the multiannual system of budgeting and planning at FH JOANNEUM:

1. Target Values

Target Value

For each organizational unit a target value for specific years is defined that has to be achieved in the budget planning process as well as in reality at the end of a fiscal year. The calculation of the target value follows the following approach:

Without

allocation of

#### Figure 3. Calculation of **TARGET Value - Calculation**

- + Funding from state
  - + Income from R&D activities
  - + Other income
  - Operating costs for personnel, material costs, depreciation, etc.
  - +/- income/charges from internal services (teaching and R&D only)
  - = operating result = TARGET Value of department

Sum of all target values have to be covered by province funding Operating result = result being influenced by head of Department Figure 4. Example

Budget of a Department

	Department
	As Is PREVYEAR Jul 2010 - Jun 2011
	Y -1
State funding	504
Other income	15
Income from R&D	63
Total revenue	582
Personal cost	722
thereof fixed employees	546
therof freelancers	176
Other costs	69
Accounting for internal services	-7
Total direct costs without allocation of indirect costs	784
allowance planned für services rendered	-202
Investments	44
Allowance planned (CASH)	-246
Depreciations	43
Investments	44
Result planned for profit and loss account (TOP DOWN)	-245

Figures shown are just symbolic

#### Source: FH JOANNEUM (2012)

#### 2. Annual Budget Meetings

Every year the heads of organizational units meet with the management board and the finance director to go through the Budget planning details. The meeting starts with a full account of the performance of the previous year and an overview for the upcoming planning periods.

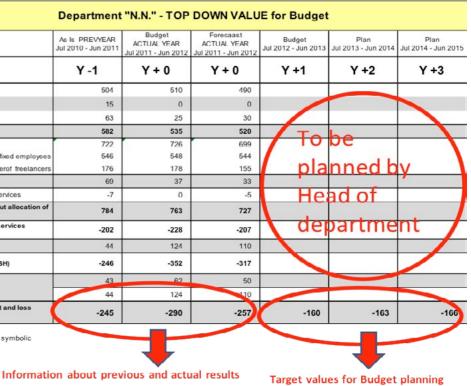
The head of department prepares the budget according to the example in Chart 4 above in advance to the meeting. The details are discussed during the meeting and checked for feasibility and target value match. Additional performance indicators on quantitative and gualitative levels are jointly defined for the organizational unit and documented. The performance appraisal of the middle manager is also part of this meeting.

The outcome of the meeting is the finalized budget for the upcoming fiscal year including forecasts for year 2 and 3. The finalized data from all meetings can then be aggregated and extended by indirect costs and other overall cost to form the global budget of the university.

#### 3. Quarterly Reporting

An integral part of the system is the integrated controlling cycle. On a quarterly basis all accounting data is consolidated on the level of the organizational units (and higher

This target value is under direct control of the head of an organizational unit (academic or administrative alike). This is one of the quantitative performance indicators against which the manager's performance is matched every year. Through setting these target values the managing board can implement savings plans in a simple and clear manner leaving flexibility at the departmental level intact. The following chart shows that the target value is simply the sum of the budget templates. Target values are set 3 years in the future and the templates also provide historical data for comparison. The domain of flexible planning and responsibility at the organizational unit's level is guite extensive in this model.



aggregates) to provide managers at this and higher levels timely access to information of whether the actual expenditures are in line with the budget plan or whether corrective action has to be taken. The 3 month period at which this takes place ensures any deviations can be addressed early on and the organizational information is extremely current and transparent.

#### 4. IT System – Corporate Planner

Corresponding to the change in processes and approaches to budgeting and planning a new IT tool was necessary to support the new system. Dedicated third party software, named "Corporate Planner" was purchased to perform this task. The main features are that it allows via a web interface direct access of all involved managers on the various levels to obtain and enter data to and from the system in the budgeting planning and reporting process. Planning data is directly entered and consolidated and aggregated in real time to provide the higher level managers (finance director and managing directors) with transparent and current information. The following image shows a screenshot of "Corporate Planner" in the data entry mask for budget planning of an organizational unit.

Figure 4. Corporate Planner

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1 Detroit cleaning F&E	28153.96	451.000,00	38.02.96	413.050,00	415.000,00	436.0
D # Sonstige Erlöse	5.3650	0,00	1.18.17	10.666,00	4,500,00	11.0
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₽ II davon et Lebrende	-38.07.00	-28,30,0	-20.00.27	-38-47.M	-312.000,00	-31
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D & KORRECTURGEDARF	211660,73	58.434.36	30.64563	15.10,90	44.82,76	4

Source: FH JOANNEUM (2012)

#### 5. Awareness and Training

The new processes, tools and IT systems utilized in the budgeting and planning procedure required active participation by all involved managers. This meant that managers had to be trained in the use of the tools, and awareness as well as willingness to engage in the new processes and procedures had to be created.

Training on the IT system and selected tools was provided by internal experts. Single coaching during the actual budgeting process was also needed to facilitate the first implementation run. Awareness creation and general information was provided by the managing directors as well as the financial director to all heads of organizational units.

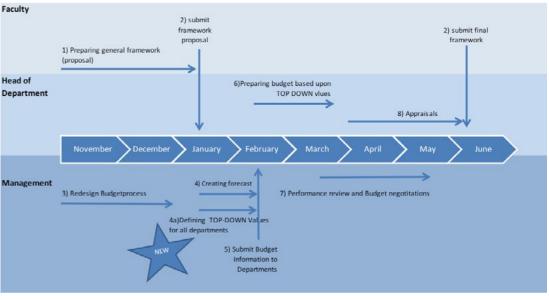
new system more difficult.

The critical success factor of any large scale organizational change project such as this is the clear communication and commitment of the management board of the organization. Strong leadership is needed to overcome organizational inertia and implement new procedures and instruments.

Figure 5. Process of Budget Planning (redesigned)

Lessons Learnt

Secondly a well-planned process for implementing change in the organization is crucial to effectively reach the goals. An internal project should be planned and executed accordingly. The following chart provides an example on the time plan of the implementation of the new system of budget and performance planning at FH JOANNEUM:



Source: FH JOANNEUM (2012)

In the actual use of the new system the new features of IT tool proved to be of great importance to support the actual planning process in each of the organizational units as well as on the level of the finance and controlling department keeping an overview and aggregating the data.

Among the challenges faced in the implementation process it can be stated that the willingness and IT competences of middle managers to use a new IT tool in their budget planning could have been addressed even more intensely than actually done. It turned out that this target group requires a more thorough support (even individual support) in first time use of the IT tool.

In this section we aim to identify factors that supported or made the implementation of the

Secondly more time to prepare and implement technical aspects of the planning system and its tools would have been beneficial. Some adaptations could not have been made in year 1 of the project and had to be moved to later stages.

#### Future challenges

The challenges for future development of the system are on the one hand of a technical nature and on the other hand organizational.

The technical challenges concern mainly the implementation of further automated planning and data collection in the budgeting process. Currently staff planning data is not fully automatically updated in the IT system, which it could and will be in the future. This will reduce sources of errors and increase speed and efficiency during the planning process. In addition the technical integration of internal service charges between different cost centers would benefit the planning process greatly.

Another important challenge is to unify existing teaching planning tools and processes with the budget planning process, where at the moment several databases and planning procedures for different purposes exist within the university. Efficiency gains and elimination of sources of errors or discrepancies will be the major benefits of such an extension of the new system.

A third challenge is to further rationalize and streamline organizational structures to create additional efficiency. In the concrete case this means organizational aggregation of academic organizational units into faculties. This would lead to a reduction of annual budgeting and performance meetings from currently 40 per annum to around 21 for the remaining top level organizational units (academic and administrative).



## III. The policy of the University of Genoa for the development of the governance and its relation to the financial decisions

#### Mr. Angelo Musaio, University of Genoa Head of Service for International Strategies

Italian university has been suffering serious and long standing difficulties, especially coming from lacking of attention of governments to the funding of research and education; this lack has provoked heavy and not differentiated cutbacks. A trend which is mainly Italian, since other Member States, on the contrary, have gone on investing with conviction in the human capital. Nevertheless, the University of Genoa is not going to remain passive and the Rector's strategic guidelines keep into duly account such issues.

The link between University and territory must get stronger and stronger. The University should be the driving force of regional development, contributing to the cultural and technological progress, to the economic and social development of the territory and its competitiveness.

As regards the University of Genoa, in recent years we can highlight:

- the active role played at national level;
- modernization:
- the promotion of initiatives in synergy with local authorities;

For the future, the University proposes to:

- referential territory, in which it operates;
- educational, research and technological innovation activities.

Therefore, our University must support all the capabilities to produce research of the staff, employed and free-lance, linked to the activities of our departments, centres and labs, including the potential commercial exploitation of research results. It is fundamental that our professors and researchers are led to recognize the value of their skills. We need to

• the promotion of the University as a territory resource and factor of development and

• the strengthening of relationships with the institutions operating in the area, through many forms of cooperation and with specific reference to the framework of the enterprises;

 the membership to external bodies, in order to broaden even more the range of institutional activities, in compliance with the EU, national and regional laws.

participate in an increasingly dynamic and active way to the life of the city and the

• strengthen, also through strategic investments, the synergies between University and public and private institutions for the realization of joint projects in the framework of

effectively connect the initiatives of the University with those of the territory, in coordination with other actors of the regional research system.

For this purpose, it is necessary to keep in mind the goals of the multi-year development plan which are, among other objectives:

- to play the essential role of advancement of knowledge, the accomplishment of relevant cultural, economic and social goals, the achievement of high educational standards, the qualification of University and the development of the knowledge society;
- to initiate a review of the University research activities of high and medium-high quality, in order to make a true mapping of the existing situation, and therefore to formulate support and enhancement policies;
- to complete and bring to approval new regulations for activities carried out "on demand";
- to start the new University information system for the Research Register, in collaboration with CINECA 5:
- to strengthen cooperation with research institutes and industries, both at national and international level, for the enhancing of the financial autonomy.

What results are to be expected on the basis of these guidelines?

- Within the just reformed legal framework, to be able to optimize its teaching offer and students' services and research skills.
- To become more and more a reference point for the development of knowledge and excellence.

How to achieve such outcomes by management actions? Some good practices on financial management have been pursued by means of the reforming of the Regulation for management of on-demand ("business") activities.

#### Legislative framework

The activities carried out on behalf of third parties and internal contribution paid to teachers ("business" activities) are currently ruled by specific Regulations, which must contain some general requirements coming from Ministry Decree.

The Universities, provided there would not obstacle the accomplishment of their scientific and didactic institutional goals, can carry out research and consultancy activities defined by specific contracts and agreements with public and private institutions (authorities, local governments, industries, entrepreneurs, ...).

5. Cineca is a non-profit Consortium, made up of 68 Italian universities (including Genoa) and 3 Institutions (Ministry of Education, University and Research - MIUR, National Institute of Oceanography and Experimental Geophysics - OGS, CNR - National Research Council.

It is the largest Italian computing centre, one of the most important worldwide. It operates in the technological transfer sector through high performance scientific computing, the management and development of networks and web based services, and the development of complex information systems for treating large amounts of data.

It develops advanced IT applications and services, acting like a trait-d'union between the academic world, the sphere of pure research and the world of industry and Public Administration.

### Requirements, conditions and terms of the "business" activities

The activities must be carried out under contracts or agreements with public or private bodies, where the prevailing interest of the customer is significant.

Conditions to ensure the customer satisfaction during and / or upon completion of the activities are:

- transfer of ownership of results to the customer 6;
- duty of confidentiality for the findings and results;
- (competent for the Health Service) 7.

Fees elements Overall fees for servi
--------------------------------------

- a. estimated cost of the service:

The cost of the service is calculated taking into account:

- a.1. the cost incurred by the unit for the use of consumables;
- a.2. staff mobility costs (travel costs and daily allowance);
- necessary to carry out the service;
- a.4. charges for staff providing the service, as self-financing;
- expertise;
- a.6. overheads and operating costs of the Unit;
- a.7. costs for the ICT services.

Costs estimation

Staff costs is calculated in accordance to the average hourly costs of the annual tables issued by the Ministry or by the European Commission for R&D activities and for European Social Fund activities.

Overheads and operating costs, including amortization of equipment already owned, are calculated at a fixed forfeit amount not less than 10% of the fee for the service. A different larger quota of overheads can be agreed between the parties on the basis of the outputs of the system of double-entry bookkeeping held by the University.

6. Ownership of the results and findings will be the customer, without prejudice to the copyright or inventor rights. University of Genoa may use the same results for their own institutional educational and scientific purposes. 7. Provision to be applied in case of services within the National Health System framework:

planned checks and intermediate reports to the customer also before the deadline;

• penalties for delay or for different quality of the results or for not full carrying out the tasks;

• distribution of the share for staff of Clinics and Institutes of Health, in reference to outpatient services and to diagnostic and treatment services, regulated by specific agreements; specific fees are negotiated between University and Regional Government

es consist of two elements:

b. profit to be divided among the staff and to be used like self-financing.

a.3. amortization cost for purchase of technical-scientific and educational equipment

a.5. further necessary goods and sub-contracting whether the staff has not the required

	If the nature of the service does not allow a reliable estimation of the costs, provisions for additional expenditures are expressly provided.
The profits	The fees required to the customer (including profit, planned expenditures and overheads), are established by the board of the responsible unit.
	A payment in advance is always settled, before starting the service and the balance is always paid no later than two months after its completion.
	A further 10% rate is used to cover the general expenses of the responsible unit.
	20% of the profits (difference between the agreed fees and the estimated costs) are destined to the "University common fund" - UCF. The remaining 80% is assigned to the staff participating to the activities and providing the services.
	The UCF is distributed in accordance with criteria agreed with trade unions.
	The profits for academic and technician-administrative staff providing the service are distributed according to these "weights":

professors: 3 lecturers, middle-managers and functionaries: 2 remaining non-teaching staff: 1,5

The weight increases by 1 unit for the person who takes the project responsibility, explicitly stated in the contract; this persons will also have duty to sign all the reports.

The board of the unit decides at the end of each year the list of staff providing the service, dividing the activities by quarters: January to March, April to June, ....

Any difference between estimated costs and lesser costs actually incurred is assigned to the Unit.

At the end of each financial year, for each Unit providing the service, profit and its sharing is calculated (20% assigned to the UCF and 80% assigned to the staff providing the service).

When dividing activities by quarters, the board of the Unit may assign to any quarter a profit share different from the planned allocation related to the execution progress in each quarter, in accordance with the execution progress for n months.

For contracts covering more than 1 financial year, if the profit assigned to a quarter alters the overall profit of the year, the board of the Unit must explain the profit assignment: to explain the progress achieved compared to the activity to be carried out in the remaining period until the ending of the activity.

#### Staff rewards

service is calculated.

The UCF is distributed by June of the next relevant year to non-teaching staff that did not provide the service or did provide the service for an amount lesser than the one that they would have received if they did not provide the service. In the latter case, the amounts due is assigned to the Unit providing the service.

Within 3 months after the end of the financial year, payments to staff is made and the amount and destination of the funds assigned to each Unit is communicated to the Unit's Directors.

For the carrying out of individual contracts assigned to individual full-time teachers, the Management board of the University establishes from time to time the income allocation, after consultation with the staff concerned.

#### Reform process (in-progress). New framework

- teaching and consulting;
- establish the "Fund for scientific research";
- encourage the use of new tools that can have a positive impact on the budget.

#### Reform process. Activities on behalf of third parties

- scientific assistance and coordination or supervision;
- material;
- and structures of interest of the customer.

### Fund for scientific research - FSR and Common Fund - CF

The FSR is composed by, for each financial year, the coefficient of 0.5% on each payment from activities on behalf of third parties, excluding VAT and quotas to be transferred to the project partners. The Fund is assigned annually by government bodies.

The CF is composed by, for each financial year, the share of 20% of the incomes. A quota, established by the Management Board between 10 and 20% of the fund, is managed by the General Manager for following purposes: i) to rewards for the support provided by units of Administrative Direction staff; ii) to assign additional specific tasks to middle-manager positions.

#### At the end of each financial year, the amount due to each staff member providing the

• expand the involvement of the third parties who may use University for research,

- locate a portion of the UCF to reward staff for assigned specific tasks;
- introduce specific provisions for further tasks to the teaching staff;

· research, consulting, technical and scientific advice, feasibility studies, technical and

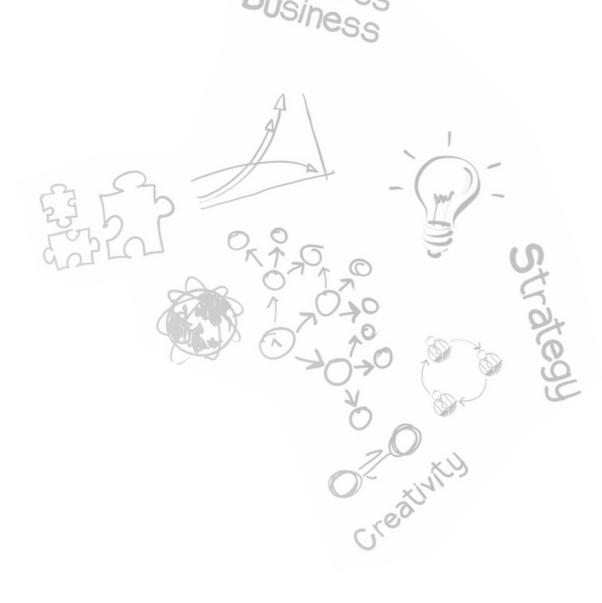
• training activities concerning the planning, coordination, organization and realization of courses, seminars, sets of conferences, courses, training, preparation of teaching

• analysis, inspections, calibrations, measurements and tests on materials, equipment

• excluded: activities funded from public bodies for tasks that must be carried out by the University in accordance with international, EU, national or regional rules; funds which explicitly do not allow, by their own regulation or prohibiting, such sharing of profits.

#### Training activities

- The training activities can be rewarded by profits only if:
  - A specific training framework agreement is existing with the beneficiaries;
  - The training activities are not included in the usual service duties of the trainers, as per declaration of the board of the Unit that will approve the training programme.
  - It is not possible to assign quotas to the FSR and to the Common Fund coming from part of the student contribution and from other tuition fees which constitutes service tax or expressly intended for other purposes according to existing rules.



## **IV. Increased Competition and Income Diversification at Beirut Arab University**

**Abdallah Nassereddine** Assistant Professor of Economics, a.nassereddine@bau.edu.lb

The Lebanese market of tertiary education has noticeably expanded over the last decade. On the supply side, the number of functioning universities, branches, and study centers reached 79 in 2011-2012. On the demand side, the number of students in tertiary education has also significantly increased to reach circa 192,522 in 2011-2012. This paper sheds the light on the increasing competition in the private tertiary education market in Lebanon, mainly in those areas where "new" universities have mostly entered such as business administration, arts, and sciences. These market changes are illustrated by the shrinking market share of the "traditional" universities in the above fields compared to the market share growth of some "new" universities. In the advent of the financial strains resulting from the above changes, Beirut Arab University (BAU), a well established university in Lebanon, has taken additional steps to adjust its traditional funding model that relies almost only on students' contributions. BAU has made substantial progress in designing a modern funding model inspired from the ongoing European reforms and other models, where revenue streams are more diversified. These steps have started to pay off. Despite increased competition in the last few years, BAU's total revenues maintained an upward trend. BAU's Income diversification is expected to widen further in the future due to the potential forthcoming revenues from commercial operations and research-based partnerships with the business sector.

Keywords

Abstract

Lebanon; Competition; Higher Education Institutions; Beirut Arab University; Financial Management; Income Diversification

### JEL Classification: I210; I220

1) Introduction

Worldwide tertiary education underwent a process of "massification" in the last century. Worldwide trends are surprisingly similar, despite the major differences in educational systems and level of economic development across countries (Schofer & Meyer, 2005). This process has intensified over the last decade (Altbach, et al., 2009). In almost all countries, two main trends are notably identified in most academic papers and reports (Standard & Poor's Performance Evaluation Services, 2008). The first trend is all about expansion and competition, referring to the expansion of existing universities, the number of universities, the number of students, and the number of majors. The second trend is about university finance, highlighting lack of funding and its implications on university governance, financial autonomy, and quality assurance. These trends have been extensively highlighted in the academic and policy making literature worldwide.

In Europe's neighboring regions, governments' reaction to these trends was largely influenced by the European remedy. The European Union (EU) for instance, played

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a leading role in formulating radical reforms known as the Bologna Process. The Bologna Process is "an intergovernmental commitment to restructuring higher education systems which extends far beyond the EU" (Keeling 2006, p. 203). The EU reforms are indeed far from isolated and have a significant influence on the reforms in the rest of the world, and in particular in the Mediterranean region. The influence is rather formalized through several cooperative projects between universities in Europe and abroad, through which the European reforms are gradually disseminated in the neighboring regions. Tempus and Erasmus-Mundus projects and other types of partnerships and cooperative agreements between partners in Europe and abroad create a solid platform of exchange, smoothing the transfer of European reforms abroad. The UNAM8 Tempus project, in light of which the current paper is being written, is a good example of the cooperation between European universities promoting best practice of university governance and financial management to other universities in the southern neighboring region. The current paper aims to work in the overlapping ground of the aforementioned trends in the context of Lebanon. The paper highlights the highly competitive nature of the private tertiary education sector in Lebanon and its implications on the so called "traditional" and "new" universities9.

Increased competition has good and bad points. Competition brings good to the market if this market is embedded in the right regulatory framework, otherwise quality suffers. Moreover, changing market shares pushes existing firms to innovate in order to survive, and in failing to do so, the Schumpeter's process of creative destruction brings the necessary replacement to the market that sees them being overtaken. History confirms that demand expansion is not always good news and relying on the firm's well established name cannot bring long lasting solutions. Nokia is a good example. The large demand expansion in the market of smart phones and the reputable international brand name of Nokia hasn't helped to save the company that has seen its mobile phone unit bought off by Microsoft recently.

Due to the market changes, Lebanese "traditional" universities are at a historical turning point which requires them to be innovative. Innovation in this context refers to that in processes as well as that of "positional goods". As to processes, market dynamics have imposed on "traditional" universities to rethink the way they operate, and decide on their governance and funding models. "Positional goods" refer to the provision of education that gives access to social prestige and income-earning (Hirsch 1976, cited in Marginson, 2006). In absence of a strong regulatory framework, it is actually arguable as to what extent private HEIs provide any of these goods. As such, "traditional" universities must decide on the quality of education they are offering in a fiercely competitive environment. These decisions have with no doubt important financial implications. As a case of good practice in financial management, this paper presents the experience of Beirut Arab University (BAU), a well established university since 1961. More precisely, the paper focuses on BAU's income diversification strategy in light of the increased competition in the private tertiary education market.

#### 2) Market Competition in the Tertiary Education Sector in Lebanon

Something similar to the worldwide trends mentioned above happened in the tertiary education sector in Lebanon. On one hand, the higher education system has witnessed a noticeable expansion over the last decade. The tertiary education sector witnessed an unprecedent increase in universities' size, number of universities, and number of students. On the other, to use the market oriented terminology, the changing market share of HEIs changed the sector's landscape, and generated financial strain on HEIs. In response, the tertiary education sector has largely been influenced by the European reforms agenda, namely the Bologna Process principles. According to the Tempus office in Lebanon, since the establishment of the Tempus office in Lebanon in 2002 and until 2012, 87 individual mobility grants and 23 projects have been funded under Tempus III, and an additional 23 projects under Tempus IV. The program will run until the end of 2013 and is expected to fund at least 5 more projects. These projects have a substantial influence on the Lebanese higher education system.

At the macro level, the most important undergoing reform of the Ministry of Education and Higher Education on Quality Assurance was largely influenced by Tempus through the team of Higher Education Reform Experts (HERE). The drafting law consists of the establishment of a national agency for Quality Assurance in higher education in order to set quality standards for HEIs in Lebanon (Kaissi, et al., 2008). On the micro level, HEIs were invited to re-invent their governance system in order to have a flexible tertiary institution aiming for financial autonomy while setting quality standard in order to achieve national or international accreditations. From that perspective, these projects have raised awareness and shaped a broad vision for reforming the tertiary education sector in Lebanon.

Despite its large expansion and its historical root that dates back to the year 1866 when the Syrian Evangelical College was founded (known today as the American University of Beirut), the tertiary education sector is regulated by two laws only (Directorate General of Higher Education in Lebanon, 2013). In 1961, a first law was enacted but was then modernized by a relevant decree in 199610. The decree in 1996 is particularly important as it states the criteria to set out a HEI. The law has paved the way for the large expansion to follow of the tertiary education sector. Since 1996, the government has granted permission to a large number of HEIs. It was argued that higher education in Lebanon, provided by a restricted number of universities and low enrollment levels, was clearly an elite system, designed to cater for a small upper class (Nahas, 2009). This argument has vanished in the advent of mass higher education illustrated by the large increase in number of HEIs that are now competing for a growing number of prospective students. Intense competition has become the broad economic feature of the private tertiary education sector in Lebanon.

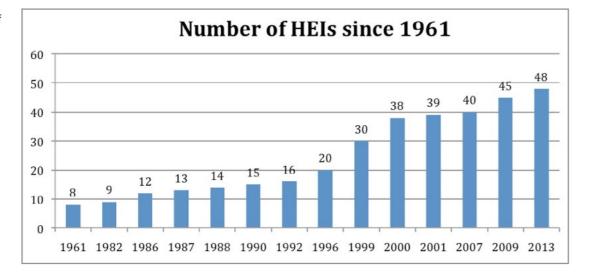
On the supply side, the number of HEIs has more than doubled between 1996 and 2012. As shown in figure 1, this number reached 48 HEIs in 2013, of which only one is public, 36 are universities, and 13 are university institutes. However, in 2009 and 2013, this number includes some universities that were granted permission but are yet to operate. In 2009, this includes Orient University, the Lebanese University for Sciences

<sup>8.</sup> University Network for Arab Managers (UNAM)

<sup>9.</sup> The term "new" university is used in the literature of higher education of Lebanon to refer to universities established after 1996. In this paper we also use the term "traditional" university to refer to those universities that were well established before 1996.

ad Arts, and another university institute of business administration and technology. In 2013, it includes Al Maaref University, Phoenicia University, and Al Azem University.

Figure 1. The Number of Private HEIs since 1961 (Data source: Center for Educational Research and Development, Lebanon)



Many universities have also expanded geographically. To a large extent, this geographical expansion is not licensed and several universities use the term "study center" to set out new branches. Increasing competition among private universities in Beirut pushed many of them to other geographical locations. Gaining market share is one of the major incentives driving this expansion. Figure 2 shows the universities number of branches11. The figure shows that the "new" universities have expanded more than the "traditional" ones, probably suggesting that these universities are seeking to serve niche markets in order to increase their number of students. Some universities, Université Saint-Joseph (USJ) for instance, have several campuses in Beirut, but these are counted as one, since they are all in the same geographical area and each campus serving different majors. Moreover, the American University of Beirut (AUB) has an agricultural center, and BAU set out recently an environmental center, both in the Bekaa region. These centers are not included in figure 2 since they have no students' enrollment and have no teaching taking place. If universities' geographical expansion is added to the above number of universities, excluding university institutes, Lebanon has 79 functioning universities, branches, and study centers.

Figure 2. The Total Number of Functioning Universities, Branches and Study Centers in Lebanon in 2009-2010 (Author's Calculation: Data source: Center for **Educational Research** and Development, Lebanon)



Number of Functioning Universities, Branches, and

**Study Centers** 

11. The list of Lebanese HEIs and their acronyms are provided in appendix A.

Economists use the Herfindahl-Hirschman index (HHI) to calculate the degree of market concentration (Pindyck, 2012). Market concentration is a measurement of competition that depends on the number of firms operating in a well-defined market and their market shares. Highly competitive markets have a low degree of market concentration and vice versa. The HHI is also used by policy-makers in the context of antitrust enforcement. For instance, the Federal Trade Commission (FTC) in the US and the Office of Fair Trading (OFT) in the UK use the HHI to assess the degree of market concentration before and after a merger has taken place. The HHI is calculated by summing the squares of the percentage market shares held by the respective firms12. A relatively low HHI is an indication of more competition and vice versa. The FTC would class an HHI below 1500 as "unconcentrated" (or highly competitive), and between 1500 and 2500 as "moderately concentrated" (or moderately competitive), and above 2500 as "highly concentrated" (or not competitive).

Figure 3 shows the HHI of the Lebanese tertiary education sector from 2003-2004 to 2011-201213. It would have been far more useful if the HHI was calculated from the early 1990s to illustrate the increasing competitive feature of the market. However, the data published by the Center for Educational Research and Development (CRDP) in Lebanon only goes as far back as 2003-2004. The numbers in the graph are based on the calculated market shares of each private HEIs of the total number of students at private HEIs in each academic year between 2003-2004 and 2011-2012. As shown in the figure, apart from its early increase, since 2004-2005, the HHI has steadily decreased. The tertiary education market is "unconcentrated" and increasingly competitive.

950.00 928.19 Data Source: Center for 900.00 850.00 800.00 786.53 750.00 700.00 650.00 600.00 550.00 500.00

Figure 3. HHI of the

(Author's Calculation:

Educational Research

and Development.

Lebanon)

Lebanese Tertiary

**Education Market** 

On the demand side, the number of students entering higher education went from 132,145 in 2003-2004 to 192,522 in 2011-2012, that is a 45.6% increase. In the private tertiary education sector, this number has increased by a greater percentage of circa 83% over the same period, from 64,960 to 118,824 (Center for Educational Research and Development, 2013). The more than proportional increase of the number of students in the private sector could mean the shift of students' preferences toward private education or also the lack of capacity at the only public university in the country, the Lebanese University.

12. For example if the market has 3 firms with market shares of 50%, 30%, 20% respectively each, then the HHI will be: 50<sup>2</sup>+30<sup>2</sup>+20<sup>2</sup>=3800 13. The data for 2008-2009 is not available on the CRDP website. In order to fill this gap, we have used a 2 month moving average estimation.



Figure 5. Market

Calculation; Data

source: Center for

and Development,

Educational Research

HEIs (Author

Lebanon)

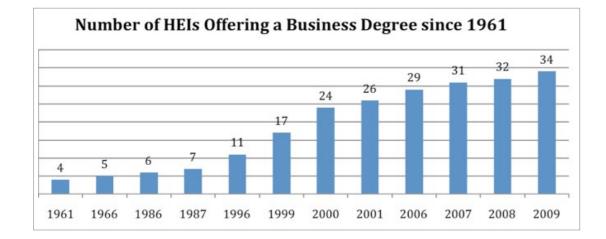
Shares of Lebanese

The future prospects of the private tertiary education sector are promising. In 2011-2012, approximately 62% of higher education students were at private HEIs. This number was barely 50% a decade ago, justifying the large number of new entrants and their expansion. However, these students are distributed across 91 universities, branches, study centers, and university institutes14, reflecting the intensity of competition.

The intensity of competition is not alike across disciplines. Lebanese HEIs vary in terms of faculties, majors offered, historical roots, national and international reputation, employability of graduates, and ethical considerations. As such, this differentiation allows the degree of competition to differ across majors, geographical locations, and other attributes. However, one of the most competitive areas is in business education. By law, private universities must have at least three faculties and university institutes can have less. Almost every HEI in Lebanon has faculties of business administration, arts, and sciences. Figure 4 shows the number of HEIs that offering a major in business administration since 1961. Since 1996, the number has more than tripled, changing the market shares in favor of the "new" universities.

In 2009-2010, almost 12% of university students were doing a business major, of which the majorities were at private universities (Yaacoub & Badre, 2012). For instance, the business major tops the list of the 10 most studied majors in private universities. While almost 19% of private university students were doing a business degree, this figure was barely 4% at the public university. In raw numbers, these figures refer to 18,571 business students distributed across 34 HEIs, of which many have several branches and study centers. The above numbers are based on the International Standard Classification of Education (ISCED) which counts separately students enrolled for business degrees, management, and banking & finance. If all these disciplines are added together, they make up to 24% of private university students.

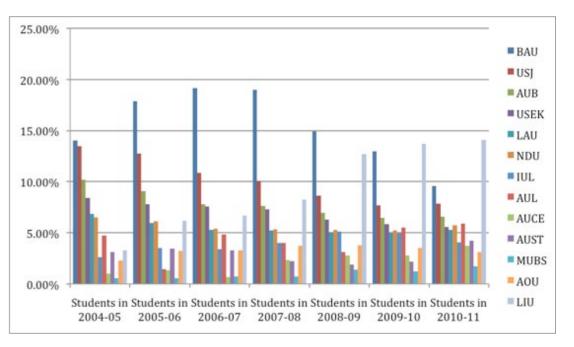
These figures highlight a preference toward private universities when it comes to business education, and show a large demand for business education in the private tertiary sector. At first glance, one could consider that this might be due to the fact that many private universities that offer a business major are not as academically strict as the public university and some other "traditional" private universities. One could also assume that the marginal effort on business education at the public university doesn't cover its marginal benefit in terms of employability and that the public university is not perceived to offer a justified added-value in business education.



14. 79 universities branches and study centers, and 12 university institutes

However, a further look may reveal that this might be rather due to the limited capacity for enrollment at the public university in addition to the entrance exams.

However, this doesn't mean that competition is restricted to business education alone. Many universities increased their number of majors. For instance, the University Saint-Esprit of Kaslik (USEK) has now 13 faculties; the Antonine University (UPA) has 8 faculties, and the Lebanese International University (LIU) has 6. It is perceived that in the coming years, intense competition will also hit the disciplines that until now, "new" entrants haven't intensively stepped in yet.



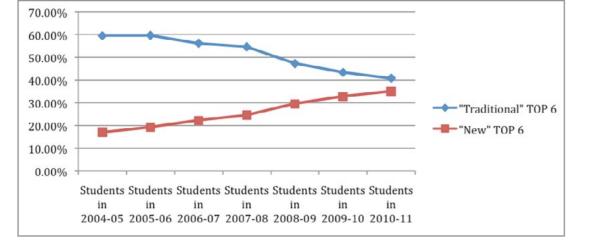
### 3) The Implications of Competition on "Traditional" Universities' Market Share

One striking feature of the market of HEIs in Lebanon since 2004-2005, is the changing patterns of market shares. Since then, "traditional" universities witnessed a gradually decreasing market

share in some fields mentioned above, while that of many "new" universities witnessed an increasing trend. Losing market share is not always a bad thing. Some universities prefer to increase their tuitions and cater for the elites in order to preserve their luster. This is probably the case of AUB that has maintained a stable number of students between 7000 and 8000 in the last 10 years. Some of the "new" universities have grown rapidly to overtake the "traditional" ones. Figure 5 shows the market shares of a sample of some "traditional" and "new" universities from 2004-05 to 2010-11. The figure shows clearly that "traditional" universities such as BAU, USJ, and AUB have gradually lost market share in the abovementioned fields of study, compared to some "new" universities such as LIU, AUL, and AUCE that have in contrary gained market share. More specifically, BAU and USJ, two universities that have for long dominated the market share of the private tertiary sector in Lebanon, were overtaken since the academic year 2008-2009 by LIU, a university that is considerably new. In other words, the barriers of entry that protected the "traditional" universities for long has now been seriously challenged due to the excessive number of branches of "new" universities offering generous financial incentives to students. This scenario occurred in the US at the end of the 1990s when traditional research universities where challenged by new entrants (Lloyd Armstrong, 2002).

This argument is reinforced in figure 6 that shows the market share of the "traditional" top six universities and that of the "new" top six universities. The "traditional" top six universities are the "traditional" universities that had the greatest market shares in 2004-2005, namely BAU, USJ, AUB, USEK, LAU, and NDU. The "new" top six universities include those with the highest market shares among the "new" in 2010-11, which are IUL, AUL, AUCE, AUST, AOU, and LIU. The figure shows that the position of "traditional" universities is gradually changing in the current competitive era. It is important to note that over this period, the demand for higher education has overly increased by 60,000 students in a way that would make it difficult to the "traditional" universities to catch the largest proportion of new students. The demand increased by 60,000 students and this might have been translated into lower market shares for "traditional" universities that were unable to respond to this large expansion.





#### 4) The Impact of Competition on Income Diversification at Higher Education Institutions

The economic conventional wisdom that the private sector is better than the public sector to supply good and services doesn't hold in the context of higher education in Lebanon. Increased competition of the kind that occurred in the private tertiary education sector in Lebanon can raise several questions regarding the quality of education, the balance between teaching and research, and the geographical and disciplinary distributions.

In the context of Europe, the rapid expansion of the private higher education market in Portugal in the 1990s, in absence of strong State regulation "has resulted in a situation of deep crisis" (Amaral & Teixeira 2000, p. 245). In Lebanon, the impact of increased competition is not clear, but it would be difficult to argue that this rapid expansion has brought more good than bad to the market of higher education.

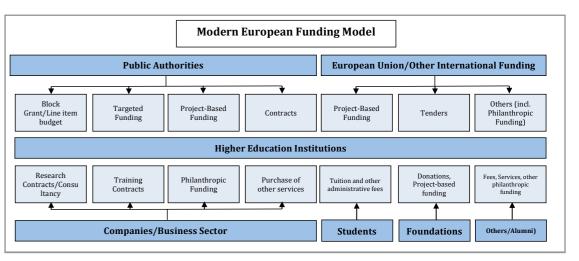
Generally speaking, academic competition has good and bad implications. On the positive side, competition provides more options to students and forces HEIs to "follow the leader" and improve its performance. On the negative side, guality suffers when competition increases in a poorly regulated market. This is mainly true when the market has a large number of for-profit HEIs. There are counterarguments for these positive and negative implications. One could argue that following the leader is not always good since each university must have its own mission (Altbach, 08/12/2010). One could also argue that more competition can have serious financial implications that would push universities to be more innovative in order to survive (EUA, 2008). As such, improving

Figure 7. Modern European Funding Model (Source: European University Association, 2011)



The literature on HEIs in Europe has a wealthy number of papers exploring the effect of markets and funding pressures on the funding models of European HEIs. Providing a detailed review of these studies is outside the scope of the current paper. The European University Association (UAE) provides an excellent reference for income diversification at European universities. Geiger (2009) and Shattock (2008) are also additional key references in the field. Johnstone, et al. (1998) focuses on the financing and management of HEIs covering among others, the search for non-government revenues and the proposed reforms in light of market expansion. In brief, this literature sheds the light on several aspects of market changes, but mainly on the reduction of public funding and increased competition. The literature discusses the implications of these aspects on university governance and income diversification.

In light of these changes, European universities were given incentives, engineered by the European Commission (EC), to re-design their funding model. In other words, the EC encouraged more financial autonomy as a preliminary driver for income diversification. In nearly every country of Europe, universities are following a similar path toward diversifying the sources of funding. This funding model is believed to have substantial positive knock-on effects on the universities performance. The funding model suggested by the EC is summarized in figure 7 (Esterman & Pruvot, 2011). In the context of Europe, the model encourages universities to be less reliant on public fund, and explore further sources of income streams.



In the modern funding model, it is argued that in an arena of mass education, where education is perceived of significant importance to the whole community, higher education shouldn't be funded by the government alone, but also by other stakeholders such as businesses, foundations, and students. This allows the government to free up some of its resources directed toward education, and forces universities to be more innovative in designing their business model. This forces universities to be closer to its community, and producing more research

performance under increased competition requires good financial management. Financial management is not about budgeting alone, but also about choices and healthy decision making. From that perspective, the issue of financial management in HEIs has attracted a lot of attention in the US due to intense competition in the late 1990s. Similarly, the fiscal pressures occurring in Europe in last few years and the resulting budget cuts hitting European universities have raised academic interest in the that is better-tailored to its business environment. In brief, the model enlarges the scope of universities role, making performance as an intrinsic part of its revenue streams.

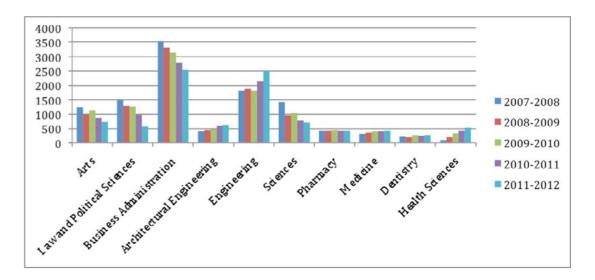
As such, the concept of income diversification includes ideally the following streams of revenues: 1) Public funding; 2) Students' contributions; and 3) Other Income Streams. Public funding, relying essentially on taxpayers, takes the form of block grants, targeted funding, project-based funding, and contracts with public institutions. Students' contributions, relying essentially on households, include essentially tuition fees, registration fees, and any other type of fees that students pay. Other income streams include a wide range of other revenue streams. For instance, it includes revenues from contracts with business partners. These contracts are primarily based on the dissemination of universities research into industries progress and innovation. Philanthropic funding is also included in the other income streams. Philanthropic funding is mainly income received from foundations and charities in the form of grants. It also includes the donations of the business sector and fundraising with alumni and individuals. In addition, other income streams include service-related income such as catering and accommodation and the management of facilities, consultancy and training services, and other revenues related to interests received from financial activities or income obtained through property management. Finally, international funding refers to income received by the European Union institutions, including Tempus projects.

Several universities in Europe have indeed proved the above funding model to be of great success. The University of Warwick for instance, is probably one of the most successful universities in Europe at this level. Only 23% of the University's fund comes from the government, compared to 60% at the European level. The success of its worldwide company Warwick Manufacturing Group provides revenue streams that allow the university to be less reliant on public funds (Thrift, 2011). The immense success of several other universities in Europe in designing their own funding models in light of the above model must encourage other universities, not in Europe only, but also in other regions, to follow the same path. Indeed, the direction toward financial autonomy and income diversification is explicitly reflected in the Tempus projects' goals funded by the EC, in which BAU participates and has widely been influenced.

#### 5) Income Diversification at BAU

BAU is a Lebanese private institution for higher education, founded by the Lebanese El-Bir and Ihsan society in 1960. The university currently consists of 10 faculties. Since its establishment, BAU had always a substantial share of the market of tertiary education in Lebanon due to its very affordable tuition fees and its reputation highlighted by the prominent success of its alumni in the Middle Eastern Region. As highlighted in section 2 of this paper, over the last decade, the market of higher education has seen unprecedent expansion that was translated into a lower market share for the "traditional" universities in some disciplines. Figure 8 shows the number of students at BAU across its 10 faculties since 2007-2008. This figure shows two important patterns. On the first hand, the faculties subject to harsh competition i.e. business administration, arts, and sciences, have suffered a declining trend due also partly to the closure of a BAU's branch that enrolled mostly students in these disciplines. On the other hand, the number of students in the other faculties have increased especially in the medicines and engineering schools.

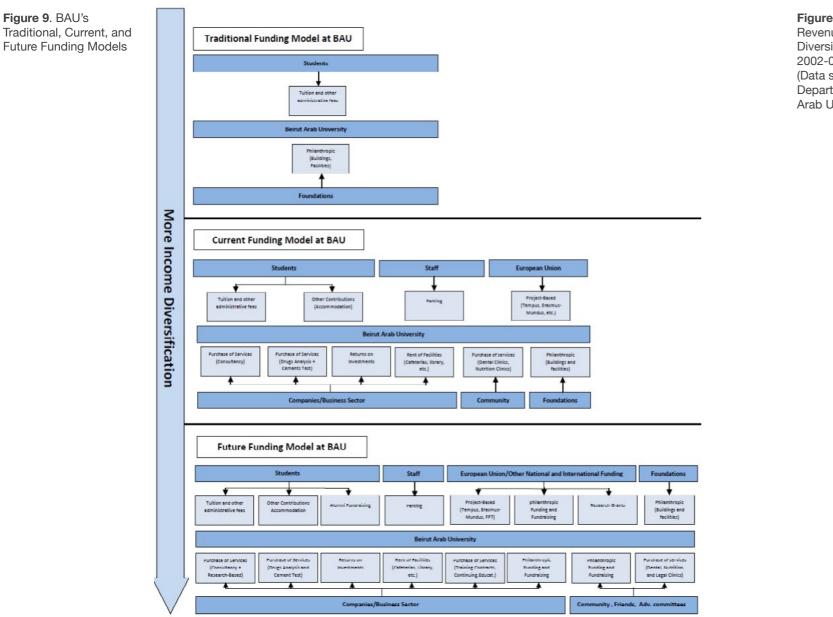
Figure 8. Number of Students across BAU's Faculties (Data Source: BAU's Annual Report 2011-2012)



These changes have important financial implications on BAU. One would expect the declining number of students to cause a parallel decline in tuition revenues. Although the percentage change of number of students turned negative after 2007, suggesting a declining number of students, BAU's tuition revenues maintained a growing trend. In fact, the revenue figures are affected by two main reasons that allowed BAU to escape a revenue fall out. On the one hand, since 2007, BAU has shifted to a credit hour system that generates revenues per student that are different to than the annual system that existed before, notwithstanding the additional effect generated by the relatively mild tuition fees increase compared to the increasing expenses associated with the increased flexibility offered to students under a credit hour system. On the other hand, and more importantly, BAU continued its efforts to enhance its financial management plan based on income diversification. The plan aims to rely on more alternative funding sources, other than tuition fees.

The finance department at BAU made ambitious steps toward modernization since 2006 which paid off at the financial management level. The new structure of the finance department and the installation of Microsoft Navision helped access in having the necessary data in the decision making process. The remaining part of this paper will shed the light on the income diversification strategy at BAU.

In the traditional model, as a private university, BAU has always been primarily dependent on students' contributions. Tuitions have always made-up on average 90% of its overall revenues. The remaining revenues were received in the form of grants and donations. Gradually, BAU has diversified its stream of revenues in order to develop a new funding model in light of the highly competitive market of tertiary education. Figure 9 shows the traditional, current, and future funding models at BAU. In the traditional funding model, BAU revenue streams come essentially from tuition fees and donations. In the modern funding models, both in the current and the future ones, revenues are far more diversified. BAU has more diversified students' funding contributions including students housing and alumni fundraising; a variety of commercial operations to the community and the business sector with consultancy and research-based services; a fruitful approach to philanthropic funding focusing on buildings and facilities; several services offered to the community such as dental and nutrition clinics; and project-based funding from the European Union and other international organizations. The flows of funds illustrated in figure 9 can be grouped into two main categories: 1) students' contributions and 2) other revenue streams. Following are a few examples of BAU's distinctive approach to these activities.



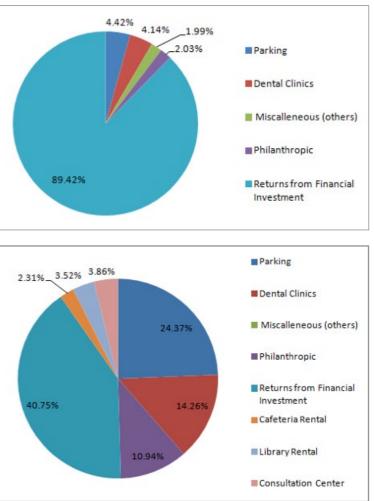
#### 1. Students' Contributions

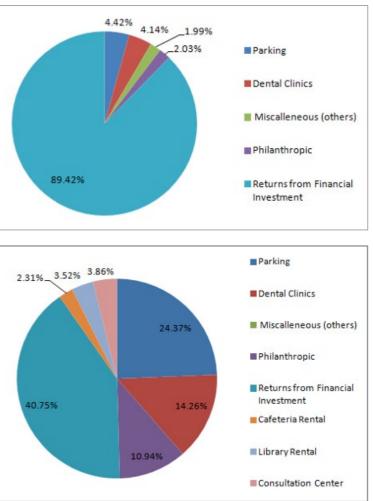
The students' contributions include the tuitions and all other types of administrative fees. The tuition covers undergraduate and postgraduate programs across BAU's 10 existing faculties, the freshman and preparatory programs, and students housing revenues. Lately, BAU has established the Foundation Programs that include: Freshman courses; Preparatory courses; Intensive English; and Remedial courses.

#### 2. Other Revenue Streams

In this category, the income streams at BAU, other than tuitions are listed and explained. These income streams are at key for the success of income diversification. The objective is to increase the contribution of these streams into the total university's revenues in light fast changing tertiary education sector. These streams entail a wide range of activities from commercial operations to philanthropic funding, and European Union project-based funding. The commercial operations are not necessarily addressed to the business sector as it might sound, but it is currently principally addressed to the community.







As shown in figure 10, the diversification of resources streams, other than students' contribution, have increased. The other revenue streams that account for approximately 10% of total revenues are more diversified in the academic year 2010-2011 than in 2002-2003. This trend is set to continue in the future with new revenue streams from the recently established nutrition clinic and the Center of Consultation. An overview of these revenue streams are detailed in the following.

#### a. Commercial Operations

Commercial operations have been one of the most successful stories at BAU. The university has successfully stepped into some service-related operations in which it has an expertise, targeting the community and the business sector. The commercial operations include primarily the dental clinics including 78 dental units distributed throughout the faculty of dentistry equipped with state-of-the-art technology. In 2013, BAU has opened the door for the nutrition clinic to the community that is believed to make, as the dental clinics, substantial contributions into BAU's funding model. The dental and nutrition clinics are both addressed to the community.

As part of its income diversification model, BAU aims for an optimum use of its facilities. Some universities in the UK have successfully adopted this kind of diversification strategy. University of Loughborough, for instance, is an excellent model of the best use of its facilities by renting it to the community and the business sector. BAU rented out some of its facilities to the private sector but more effort is needed at this level. This includes cafeterias, shops, and libraries rentals. This diversification will be enhanced in the coming years.

Students' accommodations at Debbieh Campus are of major importance to students and have been sensibly priced and provide another source of revenue to the university.

Another initiative with enormous funding potential is the Center of Consultation. The Center was established in 1998 but has been re-launched in 2012 to stimulate the link between the university and the business sector. The Center has yet to make any significant funding contribution, but recent changes are promising. Relying on the university's expertise, it offers a wide range of consultancy services, laboratory testing and experimentation, and training courses. The consultancy services include among others, architecture and urban planning, engineering services, arbitration and legal counseling, and economic feasibility studies. The consultancy services are still in the early stages of development but have important prospects. The laboratory testing and experimentation include the drugs analysis and cement tests. BAU has some of the most advanced laboratory equipments in the country. These laboratories allow BAU to offer some services to the business sector. For instance, Under the Lebanese law, pharmaceutical firms need a validation prior to importing drugs into the Lebanese market. BAU is one of the main centers in the country approved by the Ministry of Health, providing drugs analyses and further validation. Moreover, BAU has several laboratory sets allowing the university to provide cement tests and other hard concrete tests, and some water and soil tests. Although not substantial, these services open up new links with the business sector and strengthen BAU's position as a credible university in the tertiary education sector.

Regarding training courses, BAU has a plan to offer a wide range of corporate courses in different fields and continuing education courses. This branch is in the process of business development and hasn't made a financial contribution yet. Finally, in the last few years, BAU opted to charge parking subscriptions to its staff. These fees allow the university to cover the costs involved with the maintenance of the parking facilities and pay its staff.

#### b. Philanthropic funding

BAU philanthropic strategy relies mainly on foundations' donations for buildings and facilities. Examples include the donations of the Foundation of the Prime Minister Najib Mikati for partially funding BAU's Tripoli campus and the generous donations of the Foundation of the Finance Minister Mohamed El Safadi.

#### c. European Union Funding

BAU is a partner is several EU funded projects in Lebanon and the region. BAU has participated in almost every Tempus project since the establishment of the Tempus office in Beirut in 2002 (The Education, Audiovisual and Culture Executive Agency of the European Union, 2011). Recently, the UNAM Tempus project has offered 18,000 Euros for upgrading the financial management equipments of the finance department at BAU. In addition, in the framework of the ASPIRE15 Tempus project, the EU has partly funded the BAU's Center of Entrepreneurship (CFE) and helped with the training of its staff. Funding includes also the International Relation Office Center, the Quality Assurance Center, in addition to some training and video conferencing equipments.

#### d. Returns on Investment

In the last couple of years, BAU invested in the domestic market seeking an additional revenue opportunity. The initiative has been very successful and has added a substantial amount of revenues to BAU.

#### 6) Conclusion and Recommendations

In order to prevent lower revenues, raising tuition fees is not a viable long-term option since the highly competitive environment have given an upper hand to university's students. This is mainly true in the disciplines of business administration, arts, and sciences that are subject to intense competition. As such, universities have to rethink their model of governance, and come up with more suitable financial management strategies. In that context, the European reforms in light of the Bologna process provide a good inspiration to initiate new funding models.

The highly evolving competitive market in the last decade was an incentive to BAU to set a plan to diversify its revenue streams. In other words, the changes that occurred in the market meant that the traditional funding model relying almost solely on tuition fees have lost its sparkling. In the last few years, BAU have developed a new approach that has led indeed to income diversification as shown in section 4. In light of these reforms, the present article urges the university to pursue its plan and stress on the following recommendations:

#### R1) Contract with private partners

Enhancing the link with private sector must be one of main priorities of BAU to achieve effective income diversification. Since its establishment in 1961, BAU was mainly focused on teaching. Its mission was to make quality education accessible to the middle as well as the lower middle class. In the last few years, BAU has gradually increased its interest in research. With the emergence of a large number of "teaching" "new" universities in Lebanon, BAU is determined more than ever to produce high quality research that have important implications on the community and business sector. It is well understood that BAU is planning to establish an office of grants and contracts to assist faculties in applying for research grants. This step would certainly stimulate more research. For instance, AUB has recently managed to attract a substantial amount of research funds exceeding 1.5 million dollars from the Lebanese government alone, targeting mainly medicine research. This area is of primary importance for the university to adjust its current funding model. BAU can increase its commercial operation funding by taking into account the following suggestions:

research that has potential investment dimensions.

16. These projects are: 1) Macrophytic Community of Litani River and Qaraoun Lake; 2) The impact of Agricultural Water Practices on Ground Resources in Bekaa; and 3) Flood Risk Management in Semi Arid Regions of Lebanon

a. In 2011, BAU has established the Research Center for Environment and Development (RCED) in the Bekaa region. The Center is envisaged as a platform to create awareness in the context of sustainable development and produce research related to environmental protections. The Center has been successfully used as an environmental hub in the region. Moreover, until 2013, the Center has received 3 research grants for 3 different projects16 from the National Council for Scientific Research (CNRS) in partnership with other universities in Lebanon and abroad. The university is highly encouraged to bring more quality calibers to the Center to produce

<sup>15.</sup> Achieving Sustainable Programs in Regeneration and Entrepreneurship (ASPIRE)

- b. Now that all universities offering a medical degree have established their own university hospitals, BAU is putting efforts to move in that direction in order to support the learning process and offer its healthcare services to the Lebanese community. BAU is working on a fundraising and philanthropic strategy to get the required funding. This project is highly encouraged as it would generate important alternative revenue streams to the university.
- c. Finally, the Center of Entrepreneurship offers a space for creative students with an entrepreneurial spirits to set up new businesses. BAU has already shown support to the Center but require setting a platform for business implementation. Good ideas should be given more chances to be tested on the market. If only one idea succeeds and grows, this could be an important breakthrough. After all, the world giant Google was a university student's project.

#### R2) Alumni Fundraising

BAU has an Alumni office. However this office is not specifically meant to deal with fundraising. This is not to say that alumni's fundraising is totally absent from BAU. In contrary, several faculties such the faculty of medicine and the faculty of dentistry have already established their alumni networks encouraging donations to support improvement needs of clinical facilities, classrooms, and laboratories. Saarland University in Germany, a partner of the UNAM Tempus project, provides a good example on how to implement an alumni fundraising strategy. Alumni's fundraising is far more complex than is thought. It's a long process that starts with creating students belongings and integration. In fact, students with good experience and memories are far more likely to get back with donations than students with a bad experience. BAU has recently started to discuss new initiatives to enhance the student's life at university. BAU is urged to invite its faculties to join efforts and work on an alumni fundraising strategy at the broad university level. Within that framework, the role of the current alumni office can be extended to work on fundraising.

To conclude, increased competition in Lebanon has the potential to cause serious damage to the higher education system by harming the well established universities. Only by generating the right governance and funding models that redefine the universities core mission will it be possible to protect this system. The BAU income diversification strategy is an attempt in that direction.

#### Acknowledgments

The author wishes to acknowledge Professor Sobhi Abou Shahine, the Dean of Student Affairs at BAU for his time, suggestions and valuable comments. I would also like to thank the director of finance at BAU, Mr Mohamed Koleilat, and auditor in the same department, Mr Amin Hashem for their full support with BAU's financial data.

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### Appendix A. List of HEIs in Lebanon in 2013 (Source: Directorate of Higher Education in Lebanon)

Acronym	HEI Name		
AUB	American University of Beirut		
UOB	Balamand University		
BAU	Beirut Arab University		
ULS	University Sagesse		
USEK	University Saint-Esprit Kaslik		
MEU	Middle East University		
USJ	Universite Saint-Joseph		
LAU	Lebanese American University		
HU	Haigazian University		
LIU	Lebanese International University		
IUL	Islamic University of Lebanon		
BIU	Beirut Islamic University		
NDU	Notre Dame University		
MU	Makassed University		
UPA	Antonine University		
JU	Jinan University		
GU	Global University		
AOU	Arab Open University		
MUT	Manar University in Tripoli		
RHU	Rafic Hariri University		
AUST	American University of Science and Technology		
AUT	American University of Technology		
LGU	Lebanese German University		
MUBS	Modern University for Business and Sciences		
AUL	Arts, Sciences, and Technology University in Lebanon		
ULFTSA	Universite Libano-Francaise de Technology et des Sciences Appliques		
LCU	Lebanese Canadian University		
AKU	AI Kafaat University		
USF	Holly Family University		
UT	University of Tripoli		
AUCE	American University of Culture and Education		
ESA	Ecole Superieure des Affaires		
OUC	Ozai University College		
SUC	Sidon University College		
JUIT	Joya University Institute of Technology		
MUIT	Matn University Institute of Technology		
RAUHS	Rassoul Aaazam University of Health Sciences		
IUSICRL	University Institute for Nursing Sciences of the Lebanese Red Cross		
-	Saint-Boulos Institute of Theology and Philosophy		
-	Neat East College of Theology		
-	Tripoli University Institute of Islamic Studies		
_	Daawa University Institute of Islamic Studies		

## **V. Funding Higher Education Institu**tions: Best Practices from Modern **University for Business & Science** (MUBS) Lebanon

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Abstract

The role of education in developing the competitive advantage of a country has never been as prevalent as today; moreover, education is no longer exclusive to a certain social class or strata.

Unfortunately, quality education comes at a price, which is sometimes beyond the ability of most individuals. The increased demand on higher education put an upward pressure on cost for both the individual and the higher education institutions. Traditional funding channels are no longer sufficient to meet the increased cost of higher education. As a consequence, higher education institutions are compelled to develop innovative, entrepreneurial, and secure means to fund their operations. The Modern University of Business and Science (MUBS), in its attempt to decrease its dependence on traditional funding sources, developed three programs (the market research fund, the adopt-a-village fund and the reduce, reuse and recycle fund) in cooperation with its students and staff to generate funds which could be used by select students based on a given set of criteria and, which constitute a "Best Practice" in funding HEIs. The results of these programs were encouraging. Further means to fund the students and the university are currently under study and development by MUBS students and staff.

#### Keywords

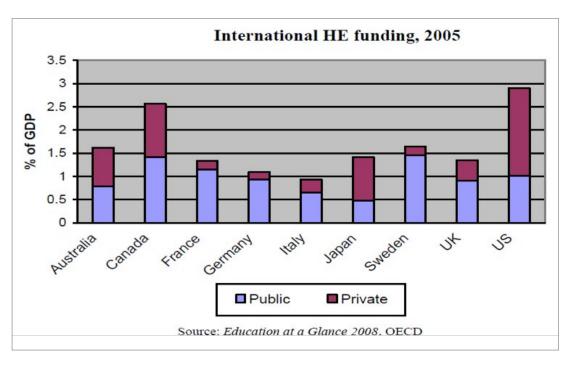
Higher education-Funding-Traditional finance-Best practices

#### Introduction

Education plays an important role in the societal and economic development of any country. The most significant contribution towards prosperity and economic growth within any country is perpetuated through higher education institutions (HEIs). HEIs, therefore, must recognize these facts and be prepared to confront certain challenges in order to uphold their role. The objective of this paper is to briefly review the status of HEIs' funding in Lebanon, and to present the best practices in this field followed by MUBS in order to alleviate the dependence on traditional funding channels and find innovate ways to fund HEIs. Beside the challenge to achieve a level of quality that is competent at the international level, HEIs' most prevailing challenge is to secure a perpetual and diversified source of

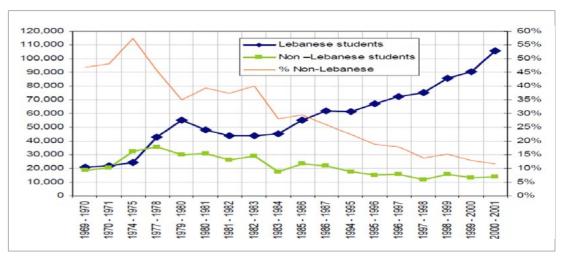
funding and to develop a system of governance and accountability to manage and disperse these funds on a need and importance basis. Therefore, HEIs must adapt a strategy, which aims at making funding a top priority. Several countries are implementing or are in the process of introducing specific policy documents that outline national strategic priorities for ensuring the financial sustainability of the higher education sector (Figel, 2008). Not only funding is a major issue for HEIs in various countries, the level of funding also varies from one country to another (see Figure 1).

Figure 1: International **Higher Education** Funding

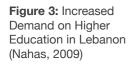


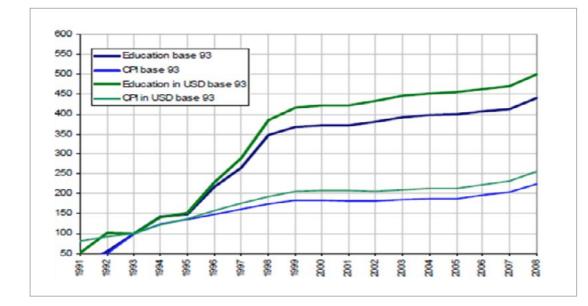
Needless to say, Lebanese HEIs are confronting similar challenges related to financing and disbursing funds. These challenges are attributed to the increased number of higher education institutions in Lebanon, which in turn led to an increase in the number of students (see Figure 2), putting additional pressure on finding new methods to fund HEIs in a creative and ethical manner.

Figure 2: Number of Lebanese and non-Lebanese students in universities



Source: Centre for Research and Educational Development. 2007.





According to the chart in Figure 3, the intensity of demand for higher education in Lebanon led to a 400% increase in tuition fees between 1992 and 2008 versus only 150% increase in the Consumer Price Index (CPI). Simultaneously, the increased number of students required a larger number of administration staff putting additional cost pressure on HEIs.

#### Lebanese Higher Education Institutions

Lebanon's higher education institutions are the oldest in the region. The establishment of formal higher education in Lebanon began with the founding of the Syrian Evangelical College by the American Evangelical Mission in 1866, which in 1920 came to be known as the American University of Beirut (AUB). In 1883, the Society of Jesus founded St. Joseph University (USJ) to counter the Protestant influence. This university was a branch of the University of Lyon in France, and it gained its independence in 1975. In addition to these two institutions, a third institution was founded by the American Protestant Mission in 1885, and named Beirut University College; it was primarily established as a women's college. It is presently known as the Lebanese American University (LAU) (Nahas, 2008).

Nowadays, there are 44 higher education institutions operating in Lebanon. All these universities are locally accredited and some of them have international accreditation (institutional and/or program). MUBS was established in 2000 as The Middle East Canadian Academy of Technology (MECAT). Between the years 2000 and 2010, a decade of 30 semesters at MUBS was a period of determination in the face of increasing challenges. The basis of this vision is one, but its dynamics have evolved; thus the course of the mission has multiplied and the plans and programs have become more focused (Alamy, 2012). Over the years, MUBS grew to include four campuses (Beirut, Damour, Aley and Baakline) and 2500 students. In addition, MUBS expanded its specialization offerings to include Business Administration, Computer and Graphic Design, Education and Social Work (all at the B.S and MBA levels), and most recently, Health Sciences. In addition, MUBS offers a DBA in Business Administration through its affiliation with The University of Staffordshire in Great Britain. For a small country like Lebanon, there is an abundance of higher education institutions; however, this field is dominated by the private sector. There is only one publicly-funded university: the Lebanese University (LU). It is also worthy to note the parity in tuition and expenditures between the private higher education, and the only public

Lebanese University. Below is a brief comparison between the Lebanese University (LU) and the American University of Beirut (AUB) in 2007:

LU expenditure: \$ 100 million Vs. AUB: \$ 108 million LU number of students 72,000 Vs. AUB with 6,000 students Cost per student enrolled student: 1,380 USD for LU and 15,500 USD for AUB Student teacher ratios: LU has a 1:16 & AUB 1:8

This parity in tuition and expenditure is putting an added pressure on finding innovative means to fund HEIs.

#### Traditional Funding Means of Higher Education in Lebanon

Due to the private nature of the Lebanese universities, accurate and reliable information about financing, funding and disbursement is difficult to obtain. However, funding higher education can be broadly divided into government spending, household spending and external or private grants (see Figure 4).

Figure 4: Financing HEIs in Lebanon

(In Billions of LBP)	2004	2005	2006	2007
Total Government Spending on Higher Education	188.9	188.9	194.8	205.3
Spending on Higher Education % of primary Spending	3.0%	2.8%	2.4%	2.4%
Spending on Higher Education % of total Spending	1.9%	1.9%	1.5%	1.5%
Spending on Higher Education % of GDP	0.6%	0.6%	0.6%	0.5%
GDP	32,815	32,955	33,824	37,754
Source: Economic Accounts of Lebanon, Pre	esidency of the Co	uncil of Ministers	, 2007 and author	or's calculations

education in Lebanon:

Direct government spending on higher education does not exceed 0.5 % of the GDP, which is below the average levels of OECD countries and lower middle income countries which both amount to 1 % of GDP. Indirect spending includes, mainly, the Government's educational allowances and transfers allocated to government employees. Due to the strong presence and spread of private education, household spending on education in Lebanon far exceeds that of government spending at all levels of education. In addition to government and household expenditure, a third source of funding comes from external or private grants. Foreign governments provide support to some universities and schools. Many charitable and/or political foundations and some foreign governments grant scholarships to students. Finally, many schools and universities belong to religious communities that provide not only the land but also the labor cost of the members of the religious order working as teachers or administrative staff (Jammal, A., 2009).

The below passage is a quoted brief description of the traditional means of funding higher

#### Innovative Best Practices in Funding Higher Education Institutions and Accountability

The increased demand on higher education in Lebanon put a strain on traditional funding methods and led to an increase in tuition fees throughout all Lebanese HEIs, which in turn prompted Lebanese private universities to develop new ways to fund HEIs. Modern University for Business & Science (MUBS) has developed several ways to fund the students' financial aid. Of all these methods, three have proven to be of best practice.

#### Funding Through Market Research

Universities around the world are coming under greater pressure to increase their productivity, often because of reduced funding in the context of increasing student demand. At the same time, many governments are looking to universities to produce shortterm practical outcomes, commercialize their intellectual property, and chase funding, no matter what the implications of winning it (Group of Eight, 2013). Following the above statement, a group of upper-level- division students and graduate students, supervised by select instructors established an "Industry Research Office" at the University. This group conducted market research for several companies and institutions. "The Association of Industrialists in AI-Chouf" is one of few organizations to mention, which this group conducted a market research for and provided web design and engineering services to increase the association's exposure. The fees collected for each research depend on the nature of the research requested by the organization. These funds are then channeled to the Business Office of the University. The disbursement and accountability of these funds are subject to the rules set forth by the accounting/audit department of the university and are subject to periodic audit and review. This method has been proven successful and is considered a best practice at MUBS. As a result of the revenues generated from this program, 45 students were able to continue their education at MUBS through the scholarships provided by the generated funds.

#### Funding Through Adopt-A-Village

The Adopt-a-Highway program, also known as Sponsor-a-Highway, is a promotional campaign undertaken by U.S. states, provinces and territories of Canada, in addition to national governments outside North America to encourage volunteers to keep a section of a highway free from litter (Wikipedia, 1999). The students at MUBS implemented the same concept above with a minor difference. Instead of Adopt-a-Highway program, they implemented an Adopt-a-Village perspective. The Students' committee reached an agreement with several "Municipalities" to conduct weekend cleaning of select villages within a certain geographic location. This program includes 30 students divided into three teams of 10 students on a voluntary basis. Each weekend, the university secures transportation for these students to (3) scheduled villages, where they spend a total of 8 hours a day, for two days cleaning the streets, parks and public places within the villages. The compensation awarded by each municipality is then transferred to the University Business office, where the above accountability and control measure are applied regarding financing and disbursing funds to select students. The students' Committee is currently in the process of increasing the number of volunteers for this program and is working on reaching additional agreements with other "Municipalities" in the region. The importance of this program lays in the fact that it provides funding for the students and it is environmentally friendly. The success of this program is reflected by the 30 students who benefited from the revenues provided by the Adopt-A-Village program in form of scholarships and donations.

#### Funding Through Reduce, Reuse and Recycle strategy

Recycling is a process to change materials (waste) into new products to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, reduce energy usage, reduce air pollution (from incineration) and water pollution (from land filling) by reducing the need for "conventional" waste disposal, and lower greenhouse gas emissions as compared to plastic production (Porritt, 2006). Beside the social responsibility aspect of recycling, the "reduce, reuse and recycle" strategy has proved to be beneficial for MUBS and its students. In coordination with a committee from the Students' Council and MUBS's Business Office, several "recycle" containers (Glass, Plastic and Paper) have been placed throughout the four MUBS campuses. An agreement was reached with a local recycling company to collect these materials from the university branches, on a weekly basis, and then to compensate the committee for the value of the recyclable materials, which in turn will be used to fund the education of selected students who meet certain predetermined criteria. Although only 20 students reaped the benefits of this program, the potential of this program to expand into other institutions beside MUBS is substantial. The disbursement and control of these funds is also subject to the above mentioned rules and regulations.

Summary	Increased demand on higher education numbers let to an increase of tuition compensate additional staff in the Hill pressure and cannot provide proper methods to close the gap on funding practical for the size of our institution
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	Nahas, C. Financing and Political Eco
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tion reflected by the constant increase of students' fees in order to accommodate these students and IEIs. Traditional funding channels seem to be under <sup>r</sup> funding. Therefore, MUBS developed three funding g. These methods have proven to be applicable and n

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This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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