

# Role of the Private Sector in the Reform of Educational Institutions

– Analytic Study –



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## Role of the Private Sector in the Reform of Educational Institutions

### Introduction:

The private sector is at the heart of economic and social development processes in most countries of the world. It plays a leading role in various economic and social fields, which has led to a process of economic and social change and readjustment by many countries of the world. The private sector has become the driving force for the contemporary world's economy and plays the leading role in production and services, increasing production, investment, and employment. However, over the past decades in Syria, as in many other developing countries, flawed economic policies and structural imbalances in production and development negatively affect the economy. This is reflected in the nation's private sector performance. The role of the private sector needs to be strengthened in order to strengthen the economic development process.

The Syrian private sector remains weak and, alone, cannot be relied on to raise investment rates and address unemployment problems. This is due to deficient economic policies put in place by the state. The policies of the so-called economic reform in Syria—allegedly aimed at strengthening the position and the importance of the private sector in order to lead the development process—did not achieve their purported goals. This is because of the policies' heavy reliance on natural resources as a primary source of income to meet the country's overall developmental demands. As a result, most economic sectors ceased to develop.

Education plays a key role in meeting the needs of the private sector by increasing the level of productivity and improving the competitiveness of various types of products, which improves standards of living. Education has become increasingly important in light of international economic and social changes and rapid technological developments experienced across the world, which has led to a rapid change in professions and their methodologies. Appropriate action is required to develop an education system based on scientific developments in order to train staff capable of dealing with modern technologies and maintain a balance between educational output and the needs of the private sector.

Unemployment rates have increased among graduates, which makes it necessary for us to review the education system and develop strategies and policies to increase employment opportunities. Educational and training programs related to the need for production and private sector development must be reevaluated. Furthermore, we must structure education and training to meet market and labor demands.

Educational programs must take into account the structure of the labor market and the nature of changing professions imposed by technological innovations in order to meet the needs of the



private sector. Previous experiments proved the ineffectiveness of the public sector in administration. Education alone is insufficient to change the labor market without the active participation of the private sector.

### **The Research Problem:**

Inadequacy of educational institutional outputs and labor market requirements lead to negative results, most notably:

1. Failure to meet the demands of the private sector for technical staff, who are necessary for improving production and increasing competitiveness. The sector suffers significant losses due to its dependence on inefficient labor.
2. A large number of unemployed graduates results in problematic groups in society and has serious negative effects on the social structure. The main reasons for this are the inadequacy of educational institutions and the disengagement of the private sector.

### **The Research Goal:**

Adoption of a comprehensive, developmental vision for reform of educational institutions in partnership with the private sector. This is to be achieved through restructuring educational curriculum, teachers, teaching methods, technologies, buildings and equipment, and educational activities and evaluation. Programs and materials must bridge the gap between scientific innovations and different staffing requirements. This is important because there are complaints from the private sector of low-level graduates not possessing basic skills, even though the state was spending massively on the education sector across all levels.<sup>1</sup>

Educational reform must be carried out across all stages to ensure the graduation of well-qualified staff that possess the necessary skills for different jobs. Graduates should be able to apply functional, efficient standards; compete regionally and globally; think creatively; and remain open-minded in dealing with people from different cultural backgrounds. For example, students who learn more than one language and can adapt to new technologies are better able to meet the requirements of the labor market. If Syrians want to become an active force and contribute to the economic, social, industrial, and political developments (and the overall country), then we must alter the current improvised and spontaneous nature of educational planning to make it structured and scientific.

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<sup>1</sup> The education sector share used to be 11.35% in 2010 national budget.



## **The Importance of the Research:**

To show the importance of our research, a study is required to analyze the relationship between educational outputs and labor market requirements. This research will attempt to accomplish the following:

1. Identify the most significant problems of educational institutions in Syria;
2. Identify the potential private sector role in the reform of educational institutions in Syria;
3. Identify mechanisms for bridging the gap between educational outputs and labor market requirements.

## **The Questions of the Research:**

1. Is there a correlation between educational outputs and labor market requirements?
2. Are there opportunities to reform educational institutions?

## **Research Sample:**

In this research, we took a random sample of 50 business owners and 390 graduates who applied for jobs in or were hired by the private sector.

## **Research Methodology:**

We have conducted this research based on the descriptive and analytical approach and the analysis of data collected in field research using the SPSS program.

## **The Reality of the Private Sector in Syria:**

The private sector cannot currently reach the size of its ambitions and the expectations of those who support it. If we compare the growth of the private sector achieved in the early 1950s with the present, the increase in wealth in the 1950s was not due to competition and accrued primarily to companies with monopolies. Economically, the actual contribution of the sector at the time was due to industrial, commercial and service projects. It was able to assemble capital and invest it in valuable projects in a timely manner, which led to economic growth that was foreseeable at the time. Compared to the legislative structure of the 1950s, the current structure is repellent to investment. The Syrian planning committee has spent years trying to develop a new legislative structure to encourage investment but has not produced any tangible results. There is an urgent need for legislation to encourage private sector investment in the next phase.



**The private sector in Syria faces several challenges, including:**

- A deficit in the current legislation and regulation to achieve optimal conditions for the private sector.
- An absence of institutional frameworks for the majority of private sector enterprises and supporting organizations such as banks, educational institutions, and business associations.
- Openness to trade exchange with developed trade blocs, such as the European Union, without adequate planning.
- Lack of participation with educational institutions in building a pool of qualified professional and administrative staff, which are the bases for work in the private sector.
- A lack of realistic and integrated studies addressing the need for qualified and skilled workers in the labor market. In addition, there is no labor market database that shows the demand for labor. A failure to provide updated, valid, and clear information in a timely manner will facilitate an imbalance between supply and demand.

The number of self-employed businessmen in Syria in 2010 amounted to 213,094, of whom 6,584 were women. The participation of female entrepreneurs in the private sector amounted to only 3%.

In 2010, the private sector contributed nearly 60% of Syria's total fixed capital, an annual growth rate estimated at 5.6%. It contributed 49.3% to total Syrian exports that year, with 79.4% being non-oil exports, and 74.7% to total imports<sup>(2)</sup>.

In terms of employment: the private sector employed 3.7 million workers in 2010, accounting for 73% of total employment in Syria. Table (1) shows the distribution of workers in the private sector according to their level of education.

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<sup>2</sup> - Central Bureau of Statistics, the 2010 Statistical Abstract.



**Table (1)**

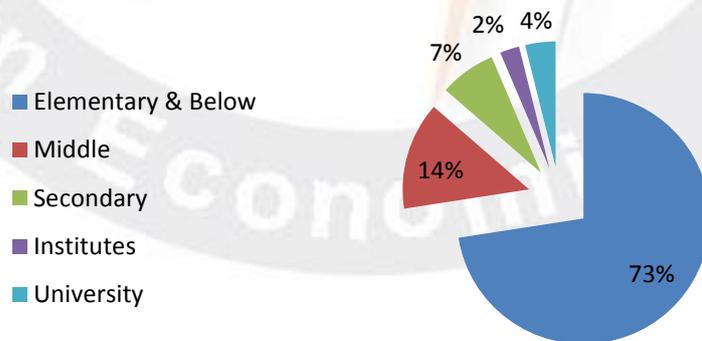
**Number of Private Sector Workers According to Their Level of Education**

Percentage	Number	Level of Education
73%	2671309	Elementary & Below
14%	511204	Middle
7%	265656	Secondary
2%	91619	Institutes
4%	142679	University
100%	3682467	Total

Figure (1) shows that 73% of the workforce in the private sector is uneducated, and the proportion of workers with education of secondary school and institutes amounts to 9%, which is low when compared to developed countries (60-65%). Improvements in the quality of labor in developed countries have played an essential role in increasing and improving production, decreasing waste, and promptly responding to the rapid technological developments in different production methods.

**Figure (1)**

**Distribution (percentage) of private sector workers according to their educational level**





Hence the question: why doesn't the private sector hire the educated labor force instead of workers with a low educational background? They are abundant in the community, and there could be great benefits for the private sector.

In 2010, the unemployment rate had reached almost 10% of, of which secondary school and institute graduates account for 34.7%. The private sector can utilize these graduates if they meet the necessary requirements. Here lies the importance of our research, wherein we bridge the gap between graduates and efficient employment in the labor market.

The data we collected in the analytical study surveys a number of businesspeople regarding why private sector employers do not employ more graduates.

The private sector has the ability to play a key role in Syria's future development process, and this can only be effectively accomplished if it actively participates in restructuring educational institutions. This should be done by integrating the rapid changes and developments in technology, means of production, and laws of market economics.

### **Educational Institutions in Syria:**

Education in Syria suffers due to its inability to meet the demands of the labor market. Students, professors, administrators, and officials must work together to develop and implement strategies to meet the demands of the market and graduates. This will help to secure a state of stability and security, and a sound economical, political, and social atmosphere. Furthermore, in the long term, accessible and quality education will contribute to the reduction of poverty, famine, terrorism, and a consolidation of peace.

Recent developments in Syria require the educational curriculum to be revised across primary, secondary, and post-secondary levels. This includes the period before and after classroom instruction. This revision must be done so that educational institutions can supply competent graduates for the private sector.

### **Some Problems Educational Institutions Face in Syria:**

1. The educational curriculum does not meet the labor market's needs, and educational institutions are isolated from society. In general, education does not meet the needs of the private sector, and the disciplines required for private sector employment are not available.
2. Traditional teaching methods are not linked with advanced modern means and technologies available to the private sector. Furthermore, the theoretical aspect of education is dominating the practical aspect, and the educational institutions do not provide adequate training to prepare students for the private sector.



3. Insufficient employment of competent faculty members, low salaries, and lack of financing/grants for scientific research. There is a lack of periodic evaluation of faculty performance that effects the improvement and development (input and output) of educational institutions.
4. Poor infrastructure for laboratories (equipment), libraries, halls, and a lack of available resources.
5. University admission policies do not take into account the aspirations and suggestions of the students enrolled. The admission policies for studying various scientific disciplines are not in line with the country's socio-economic development needs<sup>3</sup>.
6. Existing laws and regulations that hinder the development of educational institutions. For example, the law of full-time employment at universities prevents teachers from working with the private sector.
7. The negative role played by the Baath Party, which interferes in university admission policies and curricular structure, including material that has more to do with propaganda than with education<sup>4</sup>, and interference in the university management and administration.

We must work to reform the educational system in Syria, with priority given to the private sector to prepare a clear policy for educational institutions. We can learn from the successful experiences of unique and distinctive states that have implemented comprehensive educational reform through the restructuring of curriculum, infrastructure, training, etc.

### **Private sector policymaking models for educational institutions in developed countries:**

States that do not face government interference with the planning, supervision, and financing of educational institutions are successful. In the majority of these states, the private sector actively participates in education reform. The following is a summary of each experiment:

#### **1. United States of America:**

- Broad participation by private sector groups in program planning and preparation, curricula drafting, training, and implementation.
- Private sector provides training opportunities for students and trainees, participates in monitoring and supervising training in the workplace, and guides and evaluates performance.
- Private sector finances training programs.

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<sup>3</sup> Even if the high school student graduated with perfect marks in scientific subjects, he or she may not be eligible to apply for certain scientific colleges because of his or her total marks, without taking into account the perfect scientific marks.

<sup>4</sup> For instance, a mandatory material called "National Education" in all Syrian universities requires all college students to memorize a number of Hafez and Bashar al-Assad quotations.



## 2. Canada

- The private sector participates with institutions in planning educational and training programs and defines objectives that are in line with the labor market requirements.
- Board of directors of consultant firms, vocational schools, or training centers have programs prepared by representatives of relevant private sectors.

## 3. Germany

- Labor market provides indicators that determine the quantitative relationship between the requirements on one hand, and education and training on the other. The operating requirements and the employers determine the qualitative aspects of training and education.
- Workplace is responsible for field training the trainees.
- Private sector funds training in the workplace
- Partnership between the private sector and educational institutions in the formulation of education policy, vocational training, and the planning and implementation of programs.

## 4. Sweden

- Private sector organizes training courses for students and encourages them to participate in technical and professional programs they can pursue in the future.
- Industrial companies provide sites that students and trainees can work in and conduct projects.
- Private sector provides teachers and trainers opportunities to further their education and expand and update their knowledge of new technologies and production strategies.

## 5. Japan

- Private sector provides equipment for educational and vocational training centers.
- Private sector offers business expertise in the development of curricula, programs of study, and training, as contributing to their implementation.
- Private sector provides field-training opportunities for students and trainees in the workplace.
- Private sector offers economic incentives for exceptional trainees by employing them.



### **Analytic Study:**

After showing the reality of the private sector and the problems facing educational institutions in Syria, as well as displaying cases of developed countries and their balance between the private sector and educational institutions, we can conclude that there is a big gap between the output of education in Syria and requirements of the labor market. Reforming educational institutions in Syria is a must, and the private sector should be given priority to participate in that reform and offer clear policies for educational institutions.

In order to address questions regarding graduates lacking positions in the private sector, a number of businessmen answered a questionnaire composed by SEF to identify nine problems. The questionnaire was distributed to 50 people, 39 of whom completed it: a 79% response rate. We analyzed this information, and the results are shown below.

Furthermore, we corresponded with a number of graduates and people in the labor market and questioned them about the most prominent problems faced in the private sector in relation to their fields of study. We organized questionnaires composed of 12 problems and distributed them to 400 Syrian graduates. Of them, 390 questionnaires that met the criteria have been submitted: a response rate of 97%. The results are shown below.

We used the Likert Scale for the questionnaires, in which every problem was described as a phrase and answered by one of the five following: strongly agree, agree, neutral, disagree, and strongly disagree. They take the values of the following numbers: 5, 4, 3, 2, and 1, respectively.

### **Validity and Reliability of the Questionnaires Used in the Research:**

The drafting of the questionnaire was based on theories, resident expertise, and previous research on the same subject. In addition, we have presented the questionnaire to a number of external specialists and academics that have helped us refine it. The questionnaire has been modified to meet the requirements of the research and the views of the academics; thus, it achieves standards of academic integrity.

We used the Alpha Cronbach to measure the stability of the questionnaire, through the SPSS program, and express the coefficient alpha of the degree of internal consistency of the questionnaire. The results indicate the coefficient alpha used in the search amounted to 69.5%. This means that the questionnaire is internally stable.

### **Frequencies and Percentages for Questionnaire Phrases:**

To show the views of businesspeople regarding the problems experienced by the educational outputs, Table (2) shows the mean regarding each question and their statistics.



**Table (2)**

**Average Perceptions of Businessmen Regarding Graduates' Problems**

Question		Mean	Sig. (2-tailed)	Std. Error Mean
Lack of the mastery of a foreign language	Pw1	3.6615	.000	.05918
Lack of the mastery of computer technology	Pw2	3.6103	.000	.05768
Lack of the mastery of scientific competence skills	Pw3	3.4205	.000	.06220
Absence of a database in order to know the competencies and skills needed by the labor market	Pw4	3.4821	.000	.06233
Lack of optimum utilization of information and skills acquired from the university	Pw5	3.5487	.000	.05510
Inability to keep pace with developments in the technical level of the means of production	Pw6	3.9744	.000	.06139
Existence of large numbers in the same specialty	Pw7	3.1513	.018	.06372
University degree is insufficient and graduates need to qualify and train for jobs	Pw8	3.5692	.000	.06673
Teaching methods are incompatible with the developments in the labor market	Pw9	1.4615	.000	.03693

We can see from Table (2) that the views of businesspeople have an acceptable statistical probability of 95%, and the majority of businessmen's responses were greater than 3—toward agree and strongly agree. This affirms the existence of these problems with graduates, however, with relatively small deviations. There is also a different opinion regarding the following question: (teaching methods are incompatible with the developments in the labor market. This question averaged less than 3.

As for the opinions of graduates regarding the problems they face in the labor market, Table (3) shows the views of graduates, the mean of every question, and their statistics.



**Table (3)**

**Average Views of Graduates Regarding Labor Market Problems**

Problems according to Graduates		Mean	Sig. (2-tailed)	Std. Error Mean
No cooperation from the workers of the labor market in which you seek to work	P1	3.7923	.000	.06195
The lack of income to work in your specialty	P2	4.2333	.000	.05553
Failure to adopt real competency standards, the achievement of promotion, and the increase of wages and incentives	P3	3.9308	.000	.06210
Practical sessions planned for the materials do not earn the student practical skills needed in the labor market	P4	2.6103	.000	.06176
Curriculum within the study material is unsuitable for the student's preparation for the labor market within their specialty	P5	2.2077	.000	.05447
Scheduled hours for practical sessions were misused	P6	4.4872	.000	.04039
Large number of students affects the level of students' benefit from the theoretical and practical sessions	P7	4.2436	.000	.04951
Disqualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market	P8	3.9333	.000	.06919
Inadequate equipment, whether of raw materials or laboratories for practical lessons, affects the level of mastery of the labor market's skills	P9	3.9256	.000	.05391
University admission policy weakens the efficiency of the university students' preparation	P10	3.2333	.000	.05898
There is not a link between wages and the years of study	P11	3.3487	.000	.06313
Weakness of economic activity and the lack of job opportunities	P12	3.3154	.000	.07254

Table (3) suggests that the graduate views have a statistically acceptable probability of 99%, and the mean views of most graduates are greater than 3—toward agree and strongly agree. This indicates that graduates faced these problems in the labor market in deviations that are relatively small. There are differences in their opinions for the following questions: practical sessions planned for the materials do not earn the student practical skills needed in the labor market; and curriculum within the study material is unsuitable for the student's preparation for the labor market within their specialty. These questions took less than the average number 3.

To understand the most important issues in Tables (2) and (3), we studied the data using advanced statistical analysis, and assembled these problems in several factors which are less than the number of the individual problems.



## Statistical Analysis of the Questionnaire's Statements Using Factor Analysis:

Factor analysis aims to convert a large number of problems (variables) into a small number of independent orthogonal factors. Each factor consists of close-knit variables with the basic factor and has little connection with other factors.

A problem, which belongs to a particular factor, can be judged by its saturation on that factor. The significant value of saturation ranges statistically by the absolute value—the higher the absolute value of the saturation is, the greater the statistical significance becomes.

We adopted the method of factor analysis to come to an arrangement of the problems of the educational institutions in Syria, as seen by business owners. Thus, Table (4) shows the relative importance of these problems in order from greatest to least.

**Table (4)**

### Relative Importance of Graduates' Problems from the Standpoint of Businesspeople

The percentage of the questionnaire in the factors	Graduates' Problems (questionnaire)
76.6%	Teaching methods are incompatible with the developments in the labor market
68.7%	Lack of the mastery of computer technology
66.7%	Absence of a database in order to know the competencies and skills needed by the labor market
64.4%	Lack of the mastery of a foreign language
62.4%	Lack of optimum utilization of information and skills acquired from the university
55.2%	Existence of large numbers in the same specialty
55.1%	Inability to keep pace with developments in the technical level of the means of production
50.6%	University degree is insufficient and graduates need to qualify and train for jobs
46.3%	Lack of the mastery of scientific competence skills

We arranged the problems according to the relative importance of each issue regarding all problems. Thus, as the results shown in Table (4), the first problem was that teaching methods are incompatible with the developments in the labor market, receiving the largest percentage of 76.6%, followed by the lack of the mastery of computer technology, with a percentage of 68.7%, and so on. The least significant problem involved in the factors is the lack of the mastery of scientific competence skills, with a percentage of 46.3%.

We have also adopted the method of factor analysis to reach a compilation of the problems of the educational institutions in Syria as seen by businessmen with the fewest number of factors, and the results in Table (5) show the extraction of four main factors, from all the statements in



the questionnaire. Those factors, combined, explain 60.66% of the total variation of phrases. This is a ratio of more than 60%, which is considered good in social research. We also note from Table (5) that the eigenvalues of all extracted factors is greater than one, which means that the extracted factors are statistically significant.

**Table (5)**

**Results of the Factor Analysis of the Basic Components of the Survey of Businesspeople**

Saturation of Factors				Factors
The Fourth	The Third	The Second	The First	Questionnaire's Phrases
			.800	Lack of the mastery of a foreign language
			.819	Lack of the mastery of computer technology
			.672	Lack of the mastery of scientific competence skills
		.811		Absence of a database in order to know the competencies and skills needed by the labor market
	.667			Lack of optimum utilization of information and skills acquired from the university
.540				Inability to keep pace with developments in the technical level of the means of production
		.654		Existence of large numbers in the same specialty
	.675			University degree insufficient and graduates need to qualify and train for jobs
.854				Teaching methods are incompatible with the developments in the labor market
1.009	1.147	1.254	2.050	Eigenvalues before rounding
1.062	1.163	1.331	1.904	Eigenvalues after rounding
11.81	12.92	14.79	21.15	Percentage of explained variance
60.66	48.86	35.94	21.15	Percentage of cumulative variance

Table (5) illustrates that the first factor explains 21.15% of the questions' overall variance, which is the largest percentage of explanation for the overall variation. It contains three questions with saturations greater than 65%, i.e., their link to the factor is good: the lack of the mastery of computer technology, the lack of the mastery of a foreign language, and the lack of the mastery of scientific competence skills. We note that this factor reflects special problems of the graduate himself.



The second factor explains 14.79% of the questions' overall variance. It contains two questions with saturations greater than 65%, i.e., their link to the factor is good: the absence of a database in order to know the competencies and skills needed by the labor market, and the existence of large numbers in the same specialty. This factor expresses particular problems in the labor market.

The third factor explains 12.92% of the questions' overall variance. It contains two questions with saturations greater than 65 % in the absolute value, i.e. their link to the factor is good: the lack of optimum utilization of information and skills acquired from the university, and university degree is insufficient and graduates need to qualify and train for jobs. This factor reflects the special problems of educational institutions.

The fourth factor explains 11.81% of the questions' overall variance. It contains two questions with saturations greater than 50%, i.e. their link to the factors is acceptable: the inability to keep pace with developments in the technical level of the means of production, and teaching methods are incompatible with the developments in the labor market. This factor reflects the special problems of educational institutions.

Regarding the order of the problems faced by graduates, it was arranged according to the importance of each problem relative to all problems. Thus, the results were as shown in Table (6): the greatest problem was weakness of economic activity, which received 76.3%; followed by the scheduled hours for practical sessions were misused, with 75.8%; and no cooperation from the workers of the labor market in which you seek to work, with 72.5%; and so on. The least significant problem involved in the factors is that university admission policies weaken the efficiency of the university students' preparation, which received 35.1%.



**Table (6)**

**Relative Importance of Graduates' Problems from the Standpoint of Graduates**

The percentage of the questionnaire in the factors	Graduates' Problems (questionnaire)
76.3%	Shortage of economic activity and the lack of job opportunities
75.8%	Scheduled hours for practical sessions were misused
72.5%	No cooperation from the workers of the labor market in which you seek to work
72.0%	There is not a link between wages and the years of study
70.2%	Large number of students affects the level of students' benefit from the theoretical and practical sessions
69.1%	Curriculum within the study material is unsuitable for the student's preparation for the labor market within their specialty
66.5%	Lack of qualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market
66.4%	Practical sessions planned for the materials do not provide the student with the practical skills needed in the labor market
63.6%	Lack of income to work in your specialty
58.6%	Inadequacy of equipment, whether of raw materials or laboratories for practical lessons, affects the level of mastery of the labor market's skills
57.7%	Failure to adopt real competency standards, the achievement of promotion, and the increase of wages and incentives
35.1%	University admission policy weakens the efficiency of the university students' preparation

We adopted the same method of factor analysis in the compilation of the educational institutions' problems in Syria in the fewest factors possible, as seen by graduates. The results in Table (7) indicate six main extracted factors from all of the questionnaire's statements. Those factors, combined, explain 66.6% of the phrases' total variation, which exceeds 60%, and is therefore considered good in social research. We note from Table (7) that the eigenvalues of all extracted factors is greater than one, which means that the extracted factors are statistically significant.

Table (7) shows that the first factor explains 13.3% of the questions' total variation, which is the largest percentage within the overall variation. It contains two questions with saturations greater than 80%, i.e. their link to the factor is very good: practical sessions planned for the materials do not provide the student with the practical skills needed in the labor market, and curriculum within the study material is unsuitable for the student's preparation for the labor market within their specialty. We note that this factor reflects special problems of educational institutions, in both the practical training and the curriculum.



**Table (7)**

**Results of the Factor Analysis of the Basic Components of the Survey of Graduates**

Saturation of Factors						Factors
The Sixth	The Fifth	The Fourth	The Third	The Second	The First	Questionnaire's Phrases
.842						No cooperation from the workers of the labor market in which you seek to work
.741						Lack of income to work in your specialty
	.643					Failure to adopt real competency standards, the achievement of promotion, and the increase of wages and incentives
					.810	Practical sessions planned for the materials do not provide the student with the practical skills needed in the labor market
					.829	Curriculum within the study material is unsuitable for the student's preparation for the labor market within his specialty
			.808			Scheduled hours for practical sessions were misused
			.653			Large number of students affects the level of students' benefit from the theoretical and practical sessions
				.750		Lack of qualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market
	.757					Inadequacy of equipment, whether of raw materials or laboratories for practical lessons, affects the level of mastery of the labor market's skills
				.500		University admission policy weakens the efficiency of the university students' preparation
		.557				There is not a link between wages and the years of study
		.850				Weakness of economic activity and the lack of job opportunities
1.02	1.04	1.15	1.31	1.40	1.92	Eigenvalues before rounding
1.08	1.15	1.22	1.28	1.53	1.59	Eigenvalues after rounding
9.0	9.6	10.1	10.7	12.8	13.3	Percentage of explained variance
66.6	57.6	47.0	36.9	26.2	13.3	Percentage of cumulative variance

The second factor explains 12.8% of the questions' total variation, and it contains two questions with saturations greater than 65%, i.e. their link to the factor is good: university admission policy weakens the efficiency of the university students' preparation, and the lack of qualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor



market. This factor reflects the special problems of educational institutions, specifically the policy of admission and the teaching staff.

The third factor explains 10.7% of the questions' overall variance. It contains two questions with saturations greater than 65%, i.e., their link to the factor is good: the scheduled hours for practical sessions were misused, and the large number of students affects the level of students' benefit from the theoretical and practical sessions. This factor reflects the special problems of educational institutions, in terms of the practical section.

As for the fourth factor, it explains 10.1% of the questions' overall variance. It contains two questions with saturations greater than 55%, i.e. their relation to the factor is acceptable: there is not a link between wages and the years of study, and the weakness of economic activity and the lack of job opportunities. We note that this factor reflects the special problems of the private sector, regarding wage policy and the low level of economic activity.

The fifth factor explains 9.6% of the total variation of the questions and contains two questions with saturations larger than 9.6%, i.e. their link to the factor is good: failure to adopt real competency standards, the achievement of promotion, and the increase of wages and incentives; and the lack of qualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market. We note that this factor reflects common problems between the private sector and educational institutions, concerning wages and compensation policy and equipment.

The sixth factor explains 9.0% of the total variation of the questions and contains two questions with saturations greater than 70%, i.e. their link to the factor is good: no cooperation from the workers of the labor market in which you seek to work, and the lack of income to work in your specialty. We note that this factor expresses particular problems in the private sector, regarding cooperation between the private sector and graduates, wages, and compensation.

### **Summary and Recommendations:**

We here provide a summary of the most important results reached in this study, along with suitable recommendations.

### **Summary of Key Statistics:**

In this report, we analyzed the most significant problems facing the educational outputs in Syria, and the gap between those outputs and labor market requirements.

Below is a summary of the most important findings of this study:



### **From the Standpoint of Businesspeople:**

**First Factor** This factor reflects special problems of the graduate himself: the lack of the mastery of computer technology, the lack of the mastery of a foreign language, and the lack of the mastery of scientific competence skills.

**Second Factor** This factor expresses particular problems in the labor market: the absence of a database in order to know the competencies and skills needed by the labor market, and the existence of large numbers in the same specialty.

**Third Factor** This factor reflects the special problems of educational institutions: the lack of optimum utilization of information and skills acquired from the university, and university degree is insufficient and graduates need to qualify and train for jobs.

**Forth Factor** This factor reflects the special problems of educational institutions: the inability to keep pace with developments in the technical level of the means of production, and teaching methods are incompatible with the developments in the labor market.

### **From the Standpoint of Graduates:**

**First Factor** This factor reflects special problems of educational institutions, in both the practical training and the curriculum: practical sessions planned for the materials do not provide the student with the practical skills needed in the labor market, and curriculum within the study material is unsuitable for the student's preparation for the labor market within their specialty.

**Second Factor** This factor reflects the special problems of educational institutions, specifically the policy of admission and the teaching staff: university admission policy weakens the efficiency of the university students' preparation, and the lack of qualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market.

**Third Factor** This factor reflects the special problems of educational institutions, in terms of the practical section: the scheduled hours for practical sessions were misused, and the large number of students affects the level of students' benefit from the theoretical and practical sessions.

**Forth Factor** This factor reflects the special problems of the private sector, regarding wage policy and the low level of economic activity: there is not a link between wages and the years of study, and the weakness of economic activity and the lack of job opportunities.

**Fifth Factor** This factor reflects common problems between the private sector and educational institutions, concerning wages and compensation policy and equipment: failure to adopt real efficiency competency standards, the achievement of promotion, and the increase of wages and



incentives; and the lack of qualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market.

**Sixth Factor** This factor expresses particular problems in the private sector, regarding cooperation, wages, and compensation: no cooperation from the workers of the labor market in which you seek to work, and the lack of income to work in your specialty.

### **Recommendations:**

We have discussed in this research the analysis and the processing of data about the private sector and the outputs of educational institutions. Our attention focused on showing the most important problems and arranging and grouping them into several factors from business community's and graduates' points of view. Based on the previous findings, we offer the following recommendations:

#### **The Role Proposed For The Private Sector in Education Institutions in Syria:**

- 1- Create a team of expert specialists including private sector leaders to prepare an urgent plan to reform the educational institutions before the gap between developed countries and Syria becomes even larger.
- 2- Based on the actual needs of the labor market, curricula and theoretical and practical teaching methods should be re-evaluated and updated. Practical sessions, tailored to the required specialties, should be conducted in cooperation with representatives of business sectors and educational institutions.
- 3- Appropriate methodologies should be implemented for the participation of the private sector in order to upgrade the efficiency of the performance of educational institutions. This should include the provision of more modern and sophisticated equipment and workshops to train the teaching staff.
- 4- The characteristics of the labor market must be studied to identify the qualifications and skills that graduates will need to prepare for employment in the private sector. This should be accomplished through the establishment of effective channels of communication between the private sector and educational institutions.
- 5- The private sector must help formulate policies for wages, incentives, and promotions to achieve justice among the workers. Workers should be paid salaries commensurate with their years of experience, among other factors, and provided some measure of job security.



6- The private sector should be invited to invest in education institutions, by creating industrial high schools, industrial institutes, or private universities, or to invest in students by making agreements with them to bear the costs of their tuition in specific specialties, in return for their work after graduation. These investments will help alleviate the high unemployment rate in Syria.

7- A Nationwide Alumni Association should be created to build a database for graduates to communicate with each other; this will enable them to discuss the problems and difficulties they face in the labor market, and the success of educational institutions and programs in preparing them to face these difficulties or challenges.

### **The Proposed Mechanism for the Participation of the Private Sector in Education Institutions in Syria:**

The process of harmonization between the outputs of educational institutions and the needs of the private sector can be accomplished through multiple channels and mechanisms, such as the following:

#### **1- Participation of the boards of directors:**

The participation of the private sector on the boards of directors of educational institutions and the participation of educational institutions on the boards of private sector institutions. This is one of the most effective mechanisms for formulating education policy and determining the content of the curriculum, as well as for analyzing the needs of the labor market for competencies, skills, and programs.

#### **2- Advisory Committees:**

The participation of a group of specialists working in the private sector in the advisory committees of the educational institutions that prepares and develops curricula, teaching programs, and educational materials.

#### **3- Specialized Committees:**

The formation of specialized, private-sector committees within educational institutions for each specialty or field, such as curriculum committees, equipment committees, and test and evaluation committees. These committees can contribute to improving the quality of the outputs of education institutions.



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## Questionnaire

### Graduates' Problems from the Standpoint of the Labor Market

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Coding	The Phrase Select an answer for each statement of the five answers
					PW1	Lack of the mastery of a foreign language
					PW2	Lack of the mastery of computer technology
					PW3	Lack of the mastery of scientific competence skills
					PW4	Absence of a database in order to know the competencies and skills needed by the labor market
					PW5	Lack of optimum utilization of information and skills acquired from the university
					PW6	Inability to keep pace with developments in the technical level of the means of production
					PW7	Existence of large numbers in the same specialty
					PW8	University degree is insufficient and graduates need to qualify and train for jobs
					PW9	Teaching methods are incompatible with the developments in the labor market



## Questionnaire

### Graduates' Problems from Their Point of View

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Coding	The Phrase Select an answer for each statement of the five answers
					P1	No cooperation from the workers of the labor market in which you seek to work
					P2	Lack of income to work in your specialty
					P3	Failure to adopt real competency standards, the achievement of promotion, and the increase of wages and incentives
					P4	Practical sessions planned for the materials do not earn the student practical skills needed in the labor market
					P5	Curriculum within the study material is unsuitable for the student's preparation for the labor market within his specialty
					P6	Scheduled hours for practical sessions were misused
					P7	Large number of students affects the level of students' benefit from the theoretical and practical sessions
					P8	Disqualification of the teaching staff affects the level of students' efficiency in acquiring the skills of the labor market
					P9	Inadequate of equipment whether of raw materials or laboratories for practical lessons affects the level of mastery of the labor market's skills
					P10	University admission policy weakens the efficiency of the university students' preparation
					P11	There is not a link between wages and the years of study
					P12	Weakness of economic activity and the lack of job opportunities