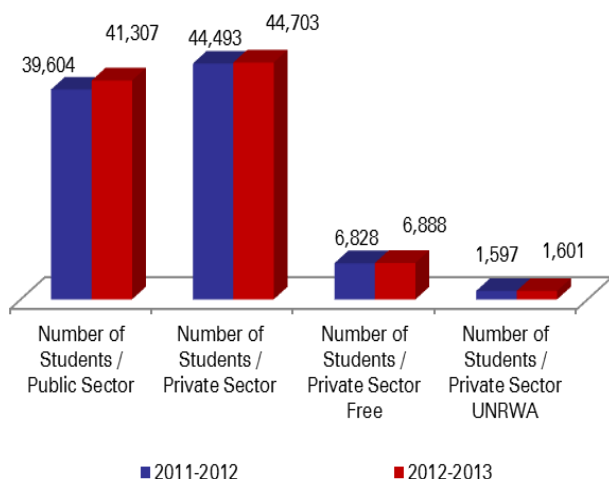




Number of Teachers by Sector



Source: Center for Educational Research and Development (CERD)

May 10, 2014

Contact Information

Research Analyst: Mirna Chami
mirna.chami@blominvestbank.com

Head of Research: Marwan Mikhael
marwan.mikhael@blominvestbank.com

Research Department
Tel: +961 1 743 300 ext:1285

As discussions on approving the wage scale are ongoing, however in their final stages, it is important to shed the light on the education sector as the educational body in the public sector constitutes a large component of public salaries with more than 41,000 teachers by the end of 2013.

Landscape of the Lebanese Education

While preserving its standing as one of the foremost civil rights in the world, education enjoys a high positioning in Lebanon and constitutes a substantial barometer of the country's socio-economic status. With more than 1.26M enrolled students, the yearly performance of education will surely have direct and indirect impacts on the Lebanese economy and population. In this context, education positively contributed over the past few years to the Gross Domestic Product (GDP) with a value added share¹ hovering around 6%.

Over the past decades, Lebanon served as the educational hub of the region. According to the Global Information Technology Report 2014 of the World Economic Forum, Lebanon's education system ranked 13th out of 148 countries in the world due to its superior quality and high standards. Lebanon came second among the MENA countries and was only outpaced by Qatar that stood 4th globally. However, Lebanon outperformed the United Arab Emirates (15th rank), Jordan (27th rank) and Saudi Arabia (39th rank). The country also grasped the 4th international rank in terms of math and science education quality trailing Singapore, Finland and Belgium.

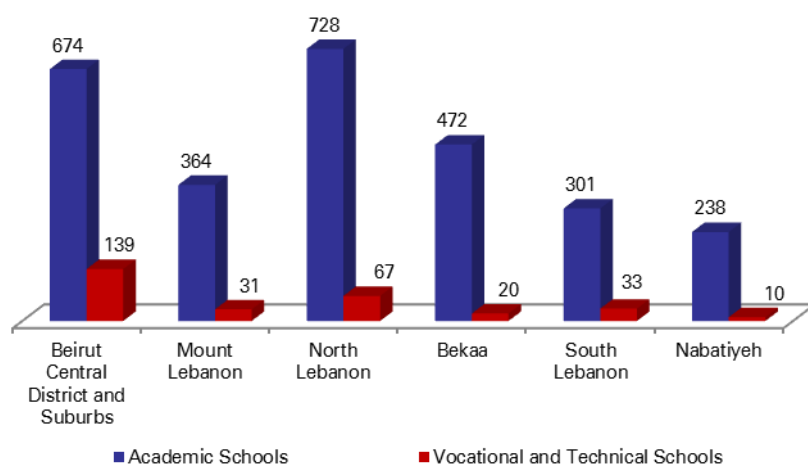
Yet, results of the 2011 Trends in International Mathematics and Science Study (TIMSS) revealed inconsistent figures. According to TIMSS, Lebanon couldn't reach the international averages² in math and science. In details, Lebanon scored 449 in the former and 406 in the later. The contradiction is mostly explained by the poor performance and deficiencies of education in the public sector that will be detailed subsequently.

¹ According to 2011 national accounts of the Central Administration of Statistics (CAS)

² Each of the International averages in math and science equal 500

Lebanese youth enjoys high degrees of literacy (89.6%) and enrollment with minimal gender discrimination. The Gross Enrolment Ratio (GER)³ in pre-primary level was estimated in 2012 at 93.1% for male and 89.2% for female. The GERs of Basic (Primary) education hit 111.4% for male and 101.9% for female, noting that education is compulsory over the intermediate cycle and available to all Lebanese students. In secondary education, GERs stood at 73.7% for male and 74.3% for female. As for higher education, GERs for the tertiary education reached 44.5% for males and 47.8% for females over the same period.

Geographical Breakdown of Lebanon's schools in 2013



Source: Center for Educational Research and Development (CERD)

Education in Lebanon is provided by the public sector as well as the private sector around the different Lebanese regions. The public sector, which is practically free of charge, runs around 1,275 schools, 117 vocational schools and the Lebanese University⁴. As for the private sector, that charges a tuition fee for admission, it encompasses around 1,502 private schools, 300 vocational schools and about 40 universities spread around the country. Yet, schools seem to be asymmetrically distributed as Greater Beirut preserved in 2013 the highest concentration of academic and vocational schools at 26.4% of the total. North Lebanon and Bekaa followed with 25.8% and 16.0% respective shares, while Mount Lebanon, South Lebanon and Nabatiyeh held 12.8%, 10.9% and 8.1% of the total, respectively.

Financing Education in Lebanon

Education costs upheld their ascendant trend and are estimated to grow at a CAGR of 7.0%. In details, and within the consumer price index (CPI)⁵, the "education" sub-category recorded a 60.5% surge between 2007 and 2013. The CPI attributes a 7.7% weight for education⁶ in its basket, noting that it contains the cost of education in private schools including institutes of technical education. 2013 witnessed a 7.1% yearly increase on prices and this year registered a marginal 0.1% year-to-date growth up to March.

Education is gaining over the time higher standings in terms of government and household spending. In this context, Lebanon's total spending on education by the private and public sectors is estimated at 5.5% of GDP in 2011. Public spending on education reached 1.6% of GDP in 2011, while households private spending stood at 7% of GDP over the same period.

³ According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the GER is "the number of pupils or students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. For the tertiary level, the population used is the 5-year age group starting from the official secondary school graduation age"

⁴ According to CERD

⁵ According to the Central Administration of Statistics (CAS)

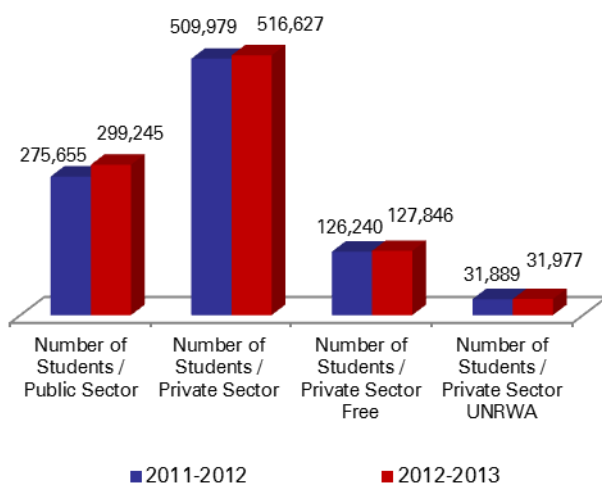
⁶ CPI with Base Year December 2013

As a share of government's expenditures, public spending on education represented 7.1% in 2011, a share that has followed a downward path over the period 2006-2010. On a comparative scale, the average of public expenditure on education as a percentage of total government spending hovers around 18.6% in the MENA and around 14.2% in the world⁷.

On the household spending front, private expenditure on education exceeds 8% of the households' final consumption. This reveals the high educational expenses incurred by families to insure the education of their children, particularly at the higher educational level.

Another crucial indicator to assess spending in the education sector is the expenditure per student rate. As for Lebanon's expenditures per tertiary student, it has followed a descending trend from 18.5% of GDP per capita in 2005 to 8.8% in 2011. Yet, the ratio went up again in 2012 to 14.1% of GDP per capita.

Number of Students in Lebanon's Education System



Source: Center for Educational Research and Development (CERD)

Private Education versus Public Education

It is commonly asserted that the private school student outperform the public school student. 88.3% of total enrolled students in private schools passed their class in 2013, while the percentage slips to 77.2% in the public sector. This was translated in the number of students in private schools where the quality of learning is more competitive, in spite of the heavy financial burden incurred. The total number of students for the year 2012-2013 was 975,695 among whom 30.7% were enrolled in public schools, 16.4% in subsidized or free private schools, and 52.9% in private schools.

Households will consent the expensive additional charges when it comes to their children education. Families have many reasons to enroll their children in private schools of which their socio-economic status, the higher quality of education, the stricter discipline and the better structure and facilities of the private sector institutions. Accordingly, total enrolled students in the private sector rose by a yearly 1.2% to 676,450 students in 2013.

Public schooling in Lebanon embraces weak quality control and frail teaching that need to be reformed urgently. If not, the whole sector will be affected and will continue to post sluggish performance.

The considerable dropout and repetition rates reflect that the return of education remains inadequate compared to the high level of spending. In the elementary level, 25.2% was the repetition rate amongst

⁷ According to the World Bank

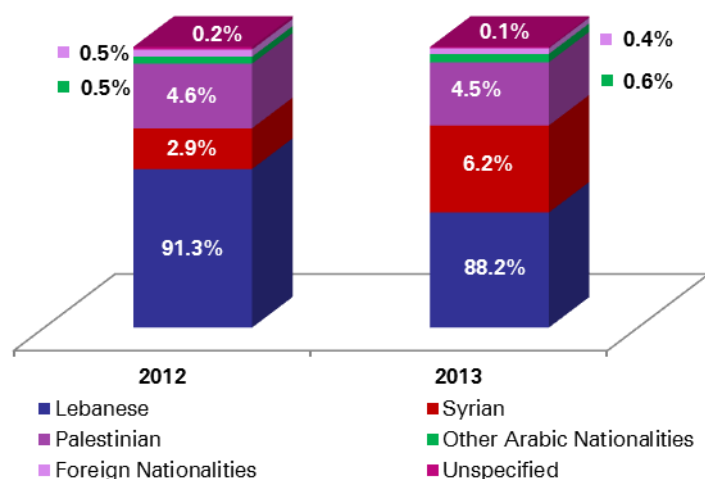
public students, while it was only 5.3% in private schools. 2013's data show that around 7.3% of enrolled students repeated their classes in 2013, of which 69.7% were in public schools. The scholastic drop-out rate in primary schools averaged 9.21% according to CERD. If not prioritized, this will constitute a very dangerous indicator that will threaten the society's principles and aspirations especially with the existing regional disparities in school dropout rates.

Given their vital role in the education process, Lebanon's education sector tried to provide, to a certain extent, well-trained workforce. The total number of teachers (public and private sectors) rose by 2.1% y-o-y to 94,499 teachers in 2013. However, the lack of governmental supervision and investment to assess and train teachers resulted in an inefficient development of the system with under-qualified personnel where only half of them (around 47,000 teachers) holds bachelor degrees, while 22.3% have the official Lebanese baccalaureate certificate and 8.6% survived to the last grade of elementary level. Yet, when comparing to the previous year, the share of high degree holders edged up from 7.3% in 2012 to 8.0% in 2013, an addition of 710 new highly-qualified teachers.

Also, the absence of public management allowed the number of teachers in public schools to reach alarming levels. 2013's overall pupil to teacher ratio stood at 7:1 in Lebanon's public schools and at 13:1 in the private sector. The following ratio shows that the government is carrying unnecessary expenses that could be reduced by rationalizing the number of existing teachers according to the actual number of students. This will help tempering the governmental spending, particularly public salaries and wages, as well as enhancing the competency of teachers.

Wages and salaries of education personnel constitute also an extra burden on the Lebanese government. The total amount of basic salaries for the public educational body reached \$572.5M in 2013 compared to \$527.40M⁸ in 2012. Accordingly, public wages saw an 8.6% yearly increase or \$44.44M that is partly explained by the respective rises of \$13.93M, \$25.20M and \$15.08M in the salaries of permanent, primary and secondary trainee teachers and contractual teachers at the Directorate General of Education⁹. Several reasons may also explain the 8.6% annual increase in 2013 such as the recruitment of new contractual and permanent teachers, the promotion of current workforce, the cost of living adjustment etc...

Breakdown of Students' Nationalities in the Public Sector



Source: Center for Educational Research and Development (CERD)

The Syrian crisis aggravated the educational cost in the public sector. In details, the number of students in the public sector witnessed an 8.6% annualized rise to 299,245 students. This is explained by the 3-Year war

⁸ Basic salaries excluding retroactive payments

⁹ According to the Ministry of Finance

in the neighboring Syria that forced the majority of refugees to register their children in Lebanon's public schools which they can afford. On a yearly basis, the Syrian stake of students in the public education rose from 2.9% to 6.2% in 2013. The Syrian crisis weighed over the educational public institutions that will need further funding from the state to survive. Accordingly, the crowding of schools might have an adverse impact on the cost of education and the government finances, and the coming academic years and efforts will determine its size and direction.

Higher Education in Lebanon

Higher education comprises Technical and Vocational Institutes, University Colleges, University Institutes and Universities. Private universities, which accounted for 62.8% of total enrolled students, saw their student enrolment rate increase by 1.3% y-o-y to 120,348. Meanwhile, the Lebanese university grasped a 37.2% share or 71,440 students over the same year, down from 73,698 students in 2012.

On one note, 2013 witnessed a switch in university graduates to total students' ratio. The Lebanese University outpaced private universities in 2012 with a 17.1% ratio compared to 16.8% in the private tertiary sector. However, Lebanon's public university saw its ratio go down to 14.5% in 2013 while that of the private universities climbed to 18% thanks to the sector's continuous efforts to boost their students' academic outcome.

As for the persistent gap between vocational and academic higher education, it started to tighten in 2013. The former posted a timid 0.5% yearly increase in the number of enrolled students to 90,228 students, while the latter slipped by 0.4% y-o-y to 191,788.

The regional competition mainly from GCC countries threatens Lebanon's position as educational hub. The country will have to heavily invest in the education system to maintain its regional reputation in higher education. In this context, Lebanese universities are challenged to communicate their advantages and high standards to the region at a time of growing competition. The government should also settle a renewed management framework that provides supervision, affordability, participation, quality, accreditation and autonomy to monitor the private sector involvement in higher education, in order to guarantee the competitive position of the Lebanese education system.

Finally, reducing the number of incompetent public schools and restructuring the remaining ones is fundamental as the majority is non-efficient. In details, students' enrolment rate in several public schools is marginal and only increases education costs and public spending. Several actions to reform the sector were launched by the Ministry of Education and Higher Education, yet they remain slow. In this context, 7 public schools were closed in 2013 versus 2 in the private sector. The closure is promising as it was mainly due to their lack of efficiency which will positively impact the overall sector's performance. Worth noting, households' final consumption will be reduced as improving the quality of the learning system will encourage families to send back their children to public schools thus lowering unnecessary expenses in private schooling.

Nevertheless, the Council for Development and Reconstruction (CDR) initiated in 2012 the construction of more than 10 public schools. Several projects are also under preparation (2013-2015) totaling \$58.22M with expected completion dates by 2018. However, those projects will only have a positive impact on the sector's performance if they went hand in hand with the closure of the incompetent public schools. At this stage, a public transportation scheme will turn out to be necessary as the remaining public schools may become hardly accessible by students.

In conclusion, it is of maximum importance for the government to activate its efforts on the education front. This could be achieved through the implementation of a clear official strategic vision that would enhance the

technical needs of public schools and efficiently allocate spending to invest more in staff training, as teachers are at the core of any competent educational system.

For your Queries:

BLOMINVEST BANK s.a.l.

Research Department
Verdun, Rashid Karameh Str.
POBOX 11-1540 Riad El Soloh
Beirut 1107 2080 Lebanon

Tel: +961 1 743 300 Ext: 1283
research@blominvestbank.com

Marwan Mikhael, Head of Research
marwan.mikhael@blominvestbank.com
+961 1 743 300 Ext: 1234

Disclaimer

This report is published for information purposes only. The information herein has been compiled from, or based upon sources we believe to be reliable, but we do not guarantee or accept responsibility for its completeness or accuracy. This document should not be construed as a solicitation to take part in any investment, or as constituting any representation or warranty on our part. The consequences of any action taken on the basis of information contained herein are solely the responsibility of the recipient.