



Your Investment Reference

# THE LEBANON BRIEF

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# TABLE OF CONTENTS

<b>FINANCIAL MARKETS</b>	<b>3</b>
Equity Market	3
Foreign Exchange Market	5
Money & Treasury Bills Markets	5
Eurobond Market	6
<b>ECONOMIC AND FINANCIAL NEWS</b>	<b>7</b>
Kafalat Loan Guarantees Retract by a 14% YTD rate	7
Fiscal Deficit Widens To \$1.17B by July	7
Transfers to EDL Approaching \$1B in H1 2012	8
Port of Beirut Activity Continues to Record Slight Improvement in September	8
Airport Passengers Reach 4.58 Million by the end of September 2012	9
Aid to Lebanon in September: Developing Capabilities to Integrated Border Management	9
<b>CORPORATE DEVELOPMENTS</b>	<b>10</b>
Holcim Liban and Ciment Blancs H1 Unconsolidated Results	10
RYMCO's Unaudited Financials Show Profits Of \$2M in H1 2012	10
<b>FOCUS IN BRIEF</b>	<b>11</b>
Predictive Ability of the Yield Curve: Evidence from Lebanon	11

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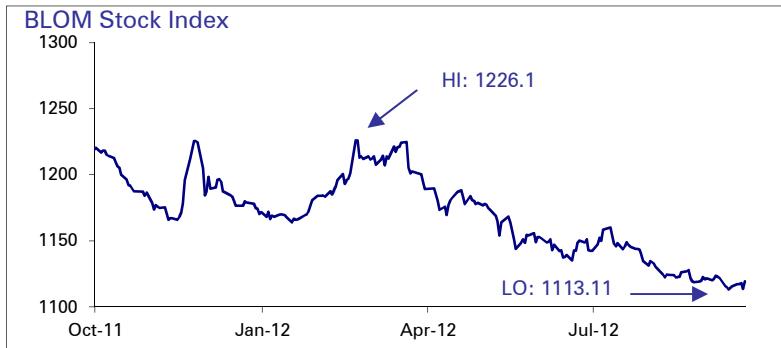
# FINANCIAL MARKETS

## Equity Market

### Stock Market

	12/10/2012	05/10/12	% Change
BLOM Stock Index*	1117.95	1119.39	-0.13%
Average Traded Volume	229,560	163,264	40.61%
Average Traded Value	1,665,099	1,232,267	35.12%

\*22 January 1996 = 1000



### Banking Sector

	Mkt	12/10/2012	05/10/12	% Change
BLOM (GDR)	BSE	\$7.80	\$7.80	0.00%
BLOM Listed	BSE	\$7.40	\$7.40	0.00%
BLOM (GDR)	LSE	\$7.91	\$7.90	0.15%
Audi (GDR)	BSE	\$5.90	\$5.95	-0.84%
Audi Listed	BSE	\$5.50	\$5.39	2.04%
Audi (GDR)	LSE	\$5.88	\$5.90	-0.34%
Byblos (C)	BSE	\$1.48	\$1.49	-0.67%
Byblos (GDR)	LSE	\$79.00	\$79.00	0.00%
Bank of Beirut (C)	BSE	\$19.00	\$18.90	0.53%
BLC (C)	BSE	\$1.90	\$1.90	0.00%
Fransabank (B)	OTC	\$28.00	\$28.00	0.00%
BEMO (C)	BSE	\$1.99	\$1.99	0.00%

	Mkt	05/10/12	05/10/12	% Change
Banks' Preferred Shares Index *		\$106.14	\$106.08	0.06%
BEMO Preferred 2006	BSE	\$100.00	\$100.00	0.00%
Audi Pref. D	BSE	\$10.20	\$10.20	0.00%
Audi Pref. E	BSE	\$100.00	\$100.00	0.00%
Audi Pref. F	BSE	\$100.00	\$100.00	0.00%
Byblos Preferred 08	BSE	\$102.30	\$102.30	0.00%
Byblos Preferred 09	BSE	\$103.20	\$103.20	0.00%
Bank of Beirut Pref. D	BSE	\$26.00	\$26.00	0.00%
Bank of Beirut Pref. E	BSE	\$25.80	\$25.80	0.00%
BLOM Preferred 2011	BSE	\$10.17	\$10.17	0.00%
Bank of Beirut Pref. H	BSE	\$26.17	\$26.10	0.27%

\* 25 August 2006 = 100

Lebanon's stock market saw a better activity this week however more shares exchanged hands than actually traded as most investors were rearranging their portfolios, and one major cross trade involved 900,000 shares of Audi at the price of \$5.5. The BLOM Stock Index (BSI), Lebanon's leading index, slid by 0.13% on a weekly basis resulting in a 4.99% loss since year start. Market capitalization dropped by \$11.4M to \$8.8B while the average daily traded volume was 229,560 shares valued at \$1,665,099 higher than last week's 163,264 shares valued at \$1,232,267.

The Lebanese benchmark outperformed the 3 regional benchmarks as the S&P AFE40 Index lost 0.68% to settle at 54.13points, the S&P Pan Arab Composite LargeMidCap Index dropped 0.81% to 109.93 points and the MSCI Emerging Index fell 0.95% to 995.95 points during this week. On a regional level, Tunisia's stock exchange was the worst performer having lost 1.46% during the week followed by the Saudi Arabia Stock Exchange that dropped 1.31%, while Dubai's stock exchange was the best rising 0.54%.

The banking sector dominated the market accounting for 78.6% of total value traded while the real estate sector captured the remaining. Audi GDR lost 0.84% to reach \$5.9 and Byblos lost 0.67% to \$1.48 while Audi listed gained 2.04% to reach \$5.5 and Bank Of Beirut rose 0.53% to \$19. On the other hand, the preferred shares index slightly added 0.06% mainly achieved through the Bank of Beirut Preferred shares rise of 0.27% to \$26.17. In London, BLOM GDR edged 0.15% up to \$7.91, while Audi GDR fell 0.34% to \$5.88.

As for the real estate sector, Solidere's shares were hovering between \$12.50 and \$12.75. Class A lost 1.96% this week to \$12.50 and Class B also dropped 0.64% to \$12.50. On the London Stock Exchange, Solidere GDR dropped 7.09% to \$12.53.

In the industrial sector, no trading occurred and shares prices for Holcim and Ciment Blancs remained stable.

## Real Estate

	Mkt	12/10/2012	05/10/12	% Change
Solidere (A)	BSE	\$12.50	\$12.75	-1.96%
Solidere (B)	BSE	\$12.50	\$12.58	-0.64%
Solidere (GDR)	LSE	\$12.53	\$13.49	-7.09%

Finally, Beirut Stock Exchange still seems far from recovering in light of continuing pressures on the domestic market, with union movements picking up and political divisions over the elections law heating up.

## Manufacturing Sector

	Mkt	12/10/2012	05/10/12	% Change
HOLCIM Liban	BSE	\$15.51	\$15.51	0.00%
Ciments Blancs (B)	BSE	\$3.50	\$3.50	0.00%
Ciments Blancs (N)	BSE	\$3.05	\$3.05	0.00%

## Funds

	Mkt	12/10/2012	05/10/2012	% Change
Beirut Preferred Fund	BSE	\$102.80	\$102.80	0.00%
BLOM Cedars Balanced Fund Tranche "A"	-----	\$6,722.98	\$6,705.34	0.26%
BLOM Cedars Balanced Fund Tranche "B"	-----	\$5,094.48	\$5,080.66	0.27%
BLOM Cedars Balanced Fund Tranche "C"	-----	\$5,106.15	\$5,092.75	0.26%
BLOM Bond Fund	-----	\$9,859.37	\$9,778.40	0.83%

## Retail Sector

	Mkt	12/10/2012	05/10/12	% Change
RYMCO	BSE	\$2.20	\$2.20	0.00%
ABC (New)	OTC	\$16.50	\$16.50	0.00%

## Tourism Sector

	Mkt	12/10/2012	05/10/12	% Change
Casino Du Liban	OTC	\$565.00	\$565.00	0.00%
SGHL	OTC	\$4.50	\$4.50	0.00%

## Foreign Exchange Market

### Lebanese Forex Market

	12/10/2012	05/10/12	%Change
Dollar / LP	1502.50	1502.50	0.00%
Euro / LP	1955.38	1960.05	-0.24%
Swiss Franc / LP	1616.62	1617.84	-0.08%
Yen / LP	19.21	19.22	-0.05%
Sterling / LP	2421.20	2438.98	-0.73%
NEER Index**	103.51	103.33	0.17%

\*Close of GMT 09:00+2

\*\*Nominal Effective Exchange Rate; Base Year Jan 2006=100

\*\*The unadjusted weighted average value of a country's currency relative to all major currencies being traded within a pool of currencies. The NEER represents the approximate relative price a consumer will pay for an imported good.

### Nominal Effective Exchange Rate (NEER)



The exchange rate between the Lebanese Pound and the US dollar remained this week at \$/LP 1,501 - \$/LP 1,504 with a mid-price of \$/LP 1,502.5. Foreign assets (excluding gold) at the Central Bank had decreased by a monthly 0.5% to \$35.09 billion by the end of September 2012, while the dollarization rate of private sector deposits remained slightly below 65% by the end of August 2012, compared to 66% in December 2011.

## Money & Treasury Bills Markets

### Money Market Rates

	12/10/2012	05/10/2012	Change bps
Overnight interbank	2.75	2.75%	0
BDL 45-day C	3.57%	3.57%	0
BDL 60-day CD	3.85%	3.85%	0

### Treasury Yields

	12/10/12	05/10/12	Change bps
3-M TB yield	4.39%	4.39%	0
6-M TB yield	4.87%	4.87%	0
12-M TB yield	5.08%	5.08%	0
24-M TB coupon	5.84%	5.84%	0
36-M TB coupon	6.50%	6.50%	0
60-M TB coupon	6.74%	6.74%	0

In international markets, the euro started the week on a low note due to resurfacing concerns over Spain and Greece, and after Standard & Poor's cut Spain's sovereign credit rating to BBB-. The single currency still regained some of its losses on Thursday and Friday, following a three-day decline, after IMF Managing Director Christine Lagarde said that European countries should be given more time to cut their budget deficits. By Friday October 12, 2012, 12.30 pm Beirut time, the euro closed at €/\$ 1.2971 recording a 0.24% decline from the previous week. The dollar-pegged Lebanese Pound thus appreciated to €/LP 1955.38, from €/LP 1960.05. The Nominal effective exchange rate (NEER) climbed 0.17% to 103.51 points.

Broad money M3 decreased by LP187B (\$124.05M) during the week ending September 27 to reach LP154,518B (\$102.5B). However, M3 increased by 7.23% y-o-y and 5.42% from end of December 2011. M1 fell during the week by LP38B (\$25.21M) as money in circulation went down by LP76B (\$50.41M), while demand deposits rose by LP38B (\$25.21M). Total deposits (excluding demand deposits) dropped by \$98.8M due to a \$124M decline in deposits denominated in foreign currencies, whereas term and saving deposits in LP climbed by \$25.21M. As for the dollarization rate of broad money, it edged down by 5 basis points on a weekly basis to 58.34%. The overnight interbank rate stood at 2.75% during the month of July, according to the Association of Lebanese Banks.

In the TBs auction held on October 04, the Ministry of Finance raised LP454.89B (\$301.75M) through the issuance of Treasury Bills. Demand was mainly observed on the 36M TB paper, which captured 87.93% of total subscription, while the 12M and 24M papers accounted for 11.82% and 0.25% respectively. During the auction, the average discount rate for the 12M paper and the average coupon rate for the 24M and 36M papers stood at 5.08%, 5.84% and 6.5% respectively. To note that the MoF continues to undertake all accepted bids.

## Eurobond Market

## Eurobonds Index and Yield

	12/10/2012	05/10/12	Change	Year to Date
BLOM Bond Index (BBI)*	109.310	109.390	-0.07%	-1.47%
Weighted Yield**	5.00%	5.02%	-2	22
Weighted Spread***	438	443	-5	32

\*Base Year 2000 = 100; includes US\$ sovereign bonds traded on the OTC market

\*\* The change is in basis points

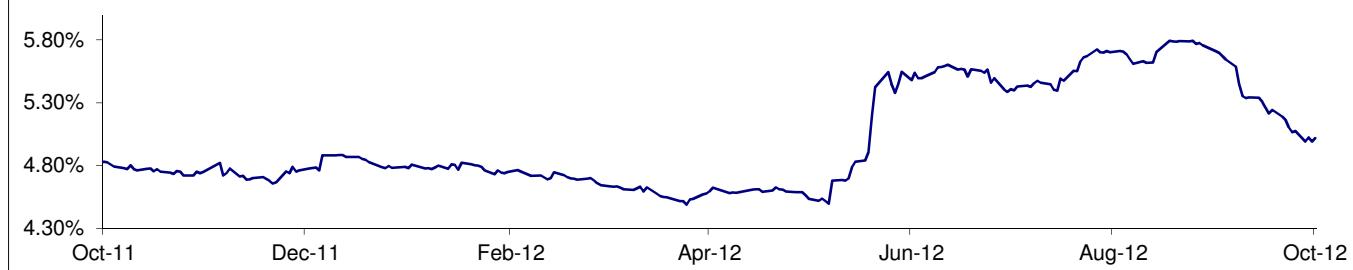
\*\*\*Against US Treasuries (in basis points)

## Lebanese Government Eurobonds

Maturity - Coupon	12/10/2012 Price*	05/10/12 Price*	Weekly Change%	12/10/2012 Yield	05/10/12 Yield	Weekly Change bps
2013, Mar - 9.125%	102.50	102.93	-0.41%	2.83%	2.12%	71
2013, Jun - 8.625%	103.50	104.38	-0.84%	3.34%	2.23%	111
2014, Apr - 7.375%	106.25	106.88	-0.58%	3.06%	2.70%	36
2014, May - 9.000%	108.25	107.94	0.29%	3.46%	3.72%	-26
2015, Jan - 5.875%	104.50	104.50	0.00%	3.76%	3.78%	-2
2015, Aug - 8.500%	111.75	112.50	-0.67%	4.02%	3.79%	24
2016, Jan - 8.500%	112.50	112.50	0.00%	4.34%	4.36%	-2
2016, May - 11.625%	122.50	122.50	0.00%	4.70%	4.73%	-3
2017, Mar - 9.000%	116.25	116.50	-0.21%	4.87%	4.83%	4
2018, Nov - 5.150%	100.50	100.75	-0.25%	5.05%	5.00%	5
2020, Mar - 6.375%	104.50	104.50	0.00%	5.62%	5.62%	0
2021, Apr - 8.250%	116.50	116.50	0.00%	5.76%	5.77%	0
2022, Oct - 6.100%	102.25	102.25	0.00%	5.80%	5.80%	0
2024, Dec - 7.000%	106.63	107.00	-0.35%	6.21%	6.17%	4
2026, Nov - 6.600%	102.50	102.75	-0.24%	6.33%	6.30%	3

- Mid Prices ; BLOMINVEST bank

## Weighted Effective Yield of Eurobonds



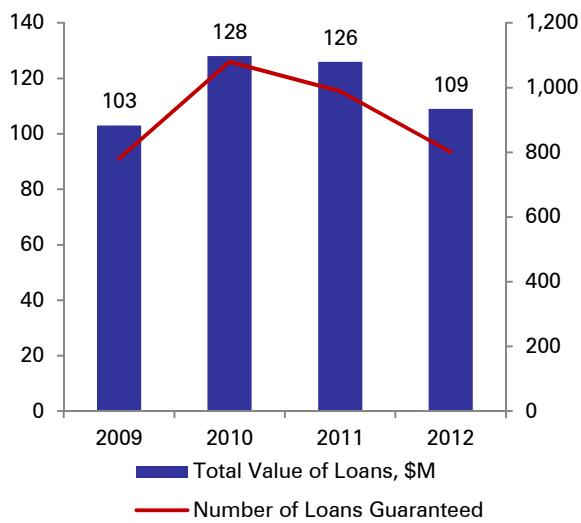
Investors in the Lebanese Eurobonds took a break this week following a 6-week market rally, and ahead of an expected \$2B Eurobond issuance later during the month. The BLOM Bond Index (BBI) slid 0.07% to 109.31 points and the portfolios average weighted yield narrowed 2 basis points (bps) to 5%. The spread against the US benchmark yield contracted 5 bps to 438 bps as US yields increased at a faster pace after positive employment data boosted demand for equities. In comparison, investors in emerging markets remained on the sidelines this week, with the JP Morgan emerging markets' bond index closing flat.

Lebanon's credit default swap for 5 years (CDS) continued to slowly improve and was last quoted between 430-460 bps. In regional economies, Dubai and Saudi Arabia 5-year CDS quotes ended the week at 269-279 bps and 81-91 bps respectively, also down from last week. In emerging Turkey and Brazil, 5-year CDS quotes were almost unchanged at 154-157 bps and 112-114 bps respectively.

# ECONOMIC AND FINANCIAL NEWS

## Total Portfolio Value & Number of Loans Guaranteed

Up to September

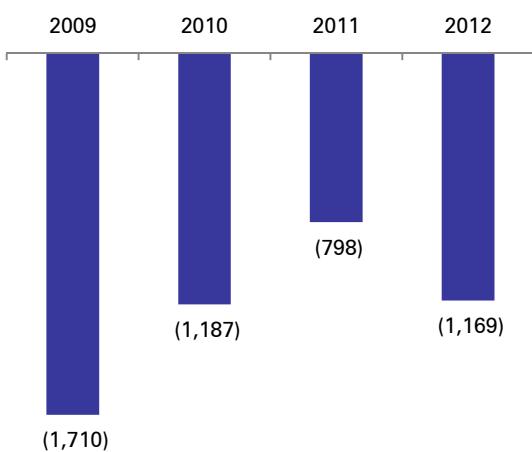


Source: Kafalat

## Kafalat Loan Guarantees Retract by a 14% YTD rate

Business loans guaranteed by Kafalat stood at 111 in September for a total value of \$13.9M, i.e. a yearly drop of 21.8% compared to the 146 loans worth \$17.8M guaranteed in September 2011. Total portfolio value since year start was less by 14% ending September at \$108.8M compared to \$126.2M in the same period of last year. The decreasing figures go in line with the uneasy atmosphere that's reigning in the country and discouraging entrepreneurs in need for a nurturing environment for their new businesses. Despite that, September portfolio value actually grew by 15% compared to August's, and while diminishing opportunities for touristic businesses led their share to account for 19% of guaranteed loans with 21 new loans approved, focus remained on the Industrial and Agricultural sectors that took 40.5% and 37% respectively with 45 and 41 new loans guaranteed respectively in each sector. Businesses located in Mount Lebanon made up the major part with 40% of guaranteed loans concentrated there, followed by Bekaa at 20.7%, the North at 18% and the South at 8.11%.

## Government Fiscal Deficit up to July (\$M)

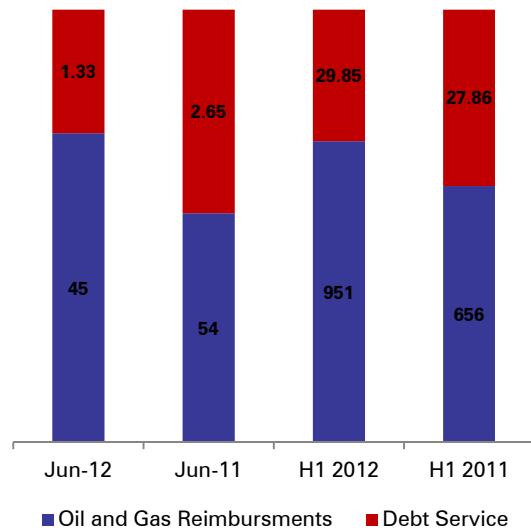


Source: Ministry of Finance

## Fiscal Deficit Widens To \$1.17B by July

Lebanon's YTD fiscal deficit ended July at \$1.17B, compared to \$798M registered in the first 7 months of 2011, and represented 16.34% of total expenditures, while primary surplus recorded \$931M or 13% of total expenditures compared to \$1.43M last year or 22% of total expenditures, according to data released by the Ministry of Finance. Over the seven months period, total revenues increased by 5.66% to \$5.98B whereas expenditures grew higher by 10.69% to reach \$7.1B. In details, revenues improvement was brought by tax revenues, namely the VAT collections which increased by 7% to \$1.4B compared to 2011, and the Telecom proceeds amounting to \$836M. On the other hand, expenditures were distressed by the transfers to EDL that witnessed the largest increase compared to 2011 growing 63% to \$1.2B, as well as by withdrawals on the treasury account of \$1.2B. Nevertheless, some economies were made on the previous budget expenditures and debt service. In the month of July alone, figures reflected a budget deficit of \$36M and a primary surplus of \$158.7M.

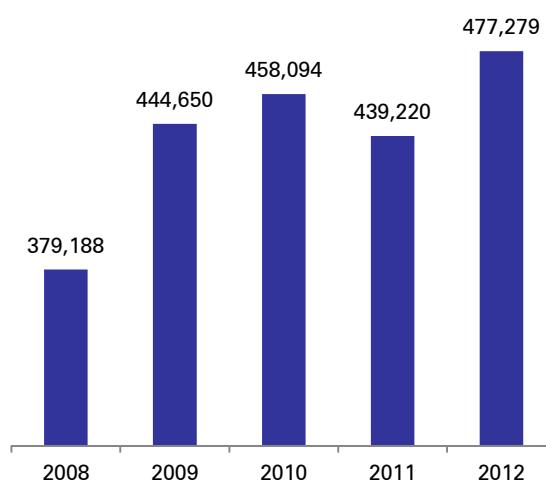
### Transfers to EdL Components: Values (In \$M) and Percentages



Source: Ministry of Finance

### Container Activity at Port of Beirut (Excluding Transshipment)

Up to September, TEU



Source: Port of Beirut

### Transfers to EDL Approaching \$1B in H1 2012

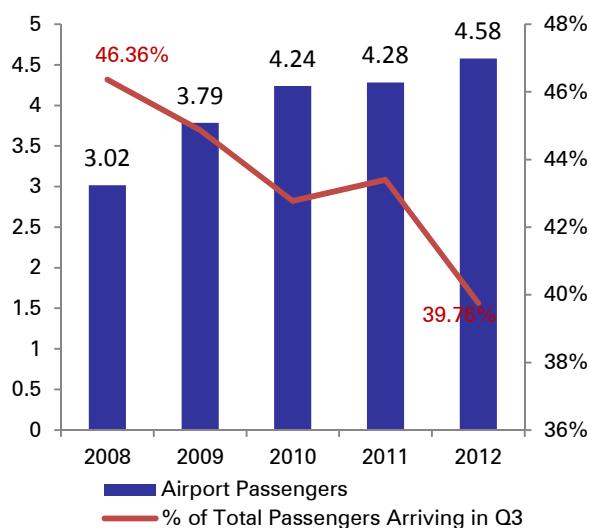
Transfers to EDL increased by 43% during the first half of 2012 to reach \$981M compared to \$683M in H1 2011. This rise was driven by a \$ 331.6M increase in payments to reimburse KPC and Sonatrach for fuel oil and gas oil purchases, according to data released by the Ministry of Finance. The 54% jump in fuel costs was due to both, a larger amount of oil imports to compensate for the halt of natural gas supply from Egypt's EGAS, and an annual increase in international oil prices. Average prices of crude oil imported between May and December 2011, and consumed during H1 2012 were \$111.2/barrel, 36% higher than the price paid for fuel imports that were consumed in H1 2011. Debt service stood at \$29.8M by the end of June 2012 compared to \$27.9M during the same period in 2011. Finally, EDL had contributed to 2.2% of the fuel suppliers' bill. In nominal terms, the company had paid a higher contribution in 2011 of \$55M compared to \$21.2M this year.

### Port of Beirut Activity Continues to Record Slight Improvement in September

Total container activity at Port of Beirut Lebanon's main port, increased by 3.57% y-o-y in the three quarters of 2012 to reach 795,823 twenty-foot equivalent units (TEU) following a 5.57% y-o-y rise during the same period a year earlier. Transshipment activity slid 3.23% y-o-y to 318,544 TEU, after having increased by 22% during the same period in 2011. Container activity (excluding transshipment) jumped by 8.67% y-o-y 477,279 TEU, whereas the total volume of merchandise (imports and exports) reached almost 5.45 million tons, or up by 8.4% y-o-y. The number of imported cars increased by 27.14% y-o-y to 61,496, but was still well below the 73,501 vehicles imported in the first nine months of 2010. In September alone, total container activity was 92,049 TEU, up by 2.35% from the same month a year earlier. The number of cars imported in August surged by almost 52% y-o-y to 6,501 recording the largest annual increase this year.

## Airport Passengers up to September & % of total in Q3

Up to September, In Millions



Source: Rafic Hariri International Airport

## Airport Passengers Reach 4.58 Million by the end of September 2012

It seems that regional instability and domestic cleavages between political parties ahead of next year's parliamentary elections started to take their toll on airport activity, as the number of passengers declined in September for the second time in three months, sliding by 6.1% from September 2011 to 546,784. Arrivals and departures were respectively 7.3% and 4.8% less. Transit passengers dropped by 1 third from last year to 3,864. However, over the first three quarters of 2012, the annual change in the number of passengers remained in positive territories, rising by 6.89% year-on-year to \$4.58 million, after having nudged up by only 0.4% y-o-y to 3.7 million in the same period last year. According to figures released by Rafic Hariri International Airport, total arrivals in the first three quarters rose 5% y-o-y to 2.23 million passengers, departures climbed 8.8% y-o-y to 2.31 million, while the number passengers making transitory stops at the airport declined by 6.8% y-o-y to 41,481.

## Major Aid Projects from the EU in Q3 2012

Description	Value (euro)
Promotion of human rights policy and practice in the prisons of Lebanese women	-
Inauguration of six legal electronic compendiums	1.1 M
Agricultural and Rural Development Program	1.81 M
Development Projects in North Lebanon	2.5 M

Source: Ministry of Finance

## Aid to Lebanon in September: Developing Capabilities to Integrated Border Management

One aid project was signed during the month of September, entitled "Developing National Capability for Integrated Border Management" and assigned a budget of Euro 3.6 million, according the AID Coordination newsletter released by the Ministry of Finance. The European Union signed the contract with the International Center for Migration Policy Development (ICMPD) to implement the project through the Lebanese Customs and the General Security. The 3 years project aims at supporting the Lebanese Authorities to secure and control the borders in accordance with national and international Integrated Border Management standards.

# CORPORATE DEVELOPMENTS

## Holcim Financial Highlights (\$M)

	Jun-12	Dec-11	% change
<b>Total Assets</b>	283.53	300.57	-5.67%
<b>Total Capital</b>	197.82	215.17	-8.06%
<b>Net Sales</b>	89.81	97.05*	-7.46%
<b>Net Income</b>	9.09	19.90*	-54.32%

\*: Up to June 2011

Source: Company Data

## Holcim Liban and Ciment Blancs H1 Unconsolidated Results

Holcim Liban released its unconsolidated results for the interim period ending June 30, 2012 revealing an annual decrease in net profits to LP13.7B (\$9.09M) compared to LP30B (\$19.9M) recorded a year earlier as net sales declined by 7.46% y-o-y in the first half of 2012 to LP135.39B (\$89.81M). The company's total assets also dropped by 5.67% from year start to LP427.42B (\$283.53M). On the other hand, Holcim Liban's junior counterpart white cement producer, the Societe Libanaise des Ciments Blancs (SLCB), posted a net income of LP1.73B (\$1.15M) up to June 2011 as opposed to LP4.7B (\$3.12M) registered a year earlier.

## RYMCO Financial Highlights (\$M)

	H1 2012	H1 2011	% Change
<b>Total Assets</b>	115.57	133.71	-13.6%
<b>Total Equity</b>	53.14	51.80	2.6%
<b>Net Sales</b>	84.21	73.7	14.3%
<b>Net Profit</b>	2	(0.42)	-

Source: Company's Data

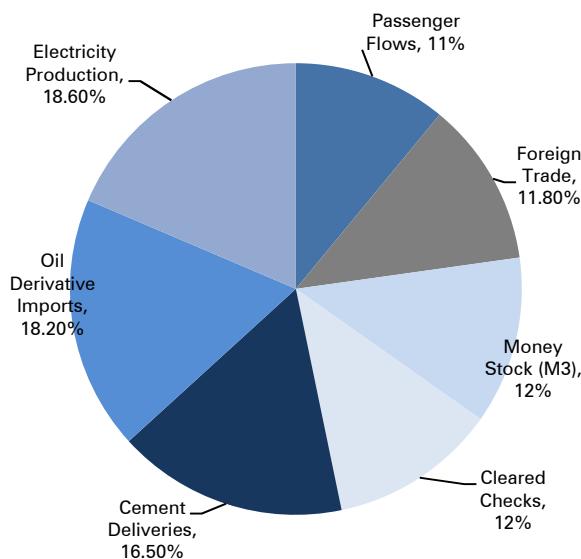
## RYMCO's Unaudited Financials Show Profits Of \$2M in H1 2012

Rasamny Younis Motor Co. SAL (RYMCO), the exclusive dealer of Nissan, GMC and Infiniti in Lebanon, released its unaudited financials for the period ending on 30/6/2012. Net profits showed a positive \$2M compared to a loss of \$425k in the first half of 2011. Sales have increased by 14% to reach \$84M and gross margin enhanced from 9% in 2011 to 12%, together leading to a better coverage of operating charges. On the balance sheet, total assets saw a decrease of 13.6% to \$115M where receivables made up 42% of totals, conserving their nominal amount of \$48M, while inventory of cars and spare parts decreased by 40% to reach \$29M. Self-financing ratio went up from 39% to 46% as some of the short and medium term loans were settled.

# FOCUS IN BRIEF

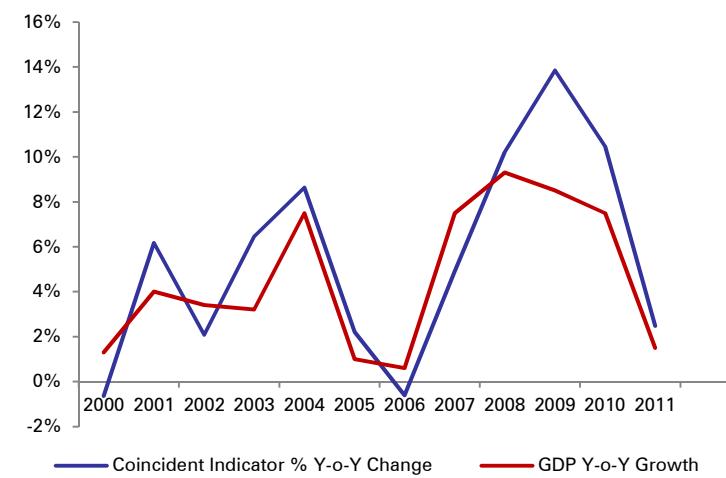
## Predictive Ability of the Yield Curve: Evidence from Lebanon

Graph 1: Coincident Indicator Components



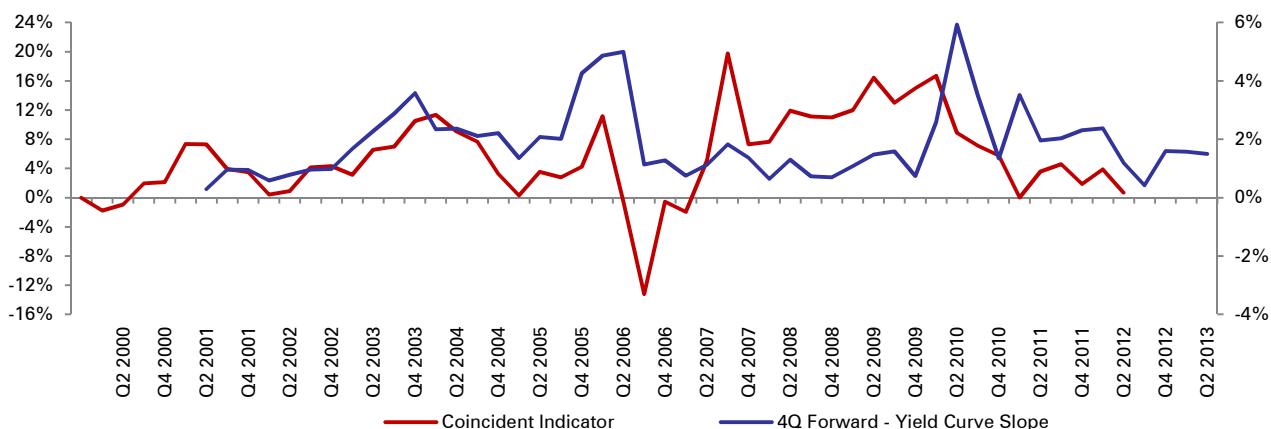
Source: BdL

Graph 2: Coincident Indicator and GDP



Source: BdL, National Accounts, Blominvest Research Department

Graph 3: Yield Curve Slope as a One-Year Leading Indicator vs Coincident Indicator



Source: BdL, Blominvest Research Department

A new angle on the relationship between interest rates and economic activity gained attention in the late 1980's when studies began to examine the ability of the yield curve to forecast economic trends and business cycles.

The slope of the yield curve, defined as the spread between interest rates on designated long and short bonds<sup>1</sup>, was tested as an alternative and shorthand method to estimate real GDP growth rates or to estimate the probability of future recessions.

Most studies on the subject have to the best of our knowledge used evidence from the US and to a lesser extent, Japan and Europe, to represent this relationship. The obvious reason for doing so has been the availability of reliable data on GDP figures and interest rate spreads, and which span long enough for the results to be significant. In this study, we examine the extent of the application of such a model in Lebanon. As we cannot find similarly accurate and long spanning data for monthly GDP growth rates and the yield curve slope, we use proxies that represent both the abovementioned variables spanning from January 2000 to June 2012.

Empirical evidence from studies conducted in the late 1980's and early 1990's<sup>2</sup> revealed that a steepening yield curve usually signals a near-future period of faster economic growth, whereas the inversion of the yield curve – when yields of short term papers exceed yields of longer term papers – precedes an economic contraction by four to six quarters. Data shows that the last six recessions in the US before 2008<sup>3</sup>, were preceded by an inversion in the yield curve.

Theoretical models<sup>4</sup> that have opted to explain this phenomenon attributed "relationships between the term structure of interest rates and macro-economic variables"<sup>5</sup> to monetary policy. Using evidence from the US, economists, such as former Federal Reserve Chairman Alan Greenspan and current Chairman Ben Bernanke have suggested that the policy instrument behind the relationship is the Federal Fund's Rate (FFR). Bond Yields follow movement in the FFR. Monetary tightening triggers a rise in short term interest rates, causing the yield curve to flatten and economic activity to slow.

Other studies have attributed the relationship between the slope of the yield curve and economic growth to market dynamics and investors' expectations. Simply put, changes in yields are indicators of saving and investment levels, which influence future growth rates.

Antagonists of this theory argue that in the modern economy, such a relationship between interest rates and growth doesn't necessarily apply. They base their argument on the idea that large spreads between international interest rates that induce global flows of capital and speculative investments, dwarf the effect of domestic monetary policy and local propensities to save or invest. This automatically changes the relationship between interest rates and future growth trends. However, recent evidence has also shown that the financial crisis of 2008 was preceded by cues that were in line with this stipulation. The yield curve of US Treasuries began to invert during the second half of 2006 and the spread between 10-year and 3-month Treasuries fell to negative 65 basis points between 5 and 6 quarters before September 2008, when Lehman Brothers filed for bankruptcy. Moreover, while this may be true in cases of extreme capital flows, the relationship between yield fluctuations and economic activity should ideally hold true in economies that are inherently dependent capital inflows, such as Lebanon's dependence on remittances.

Testing the hypothesis in Lebanon, the primary limitations we face are related to the lack of required data on monthly GDP growth rates and long term Treasury bill rates. Lebanon's National accounts have only issued annual growth rates since the beginning of 1997. Likewise, and although data for short term or 3-month TB rates exists as far back as 1977, the Lebanese government only issued its first 10-year paper as recently as September 2012, and therefore, proper data on the spread cannot be directly used.

To counter such problems, we use instead proxies for each of the abovementioned data sets. First, to account for economic activity, we utilize the Central Bank's (BdL) Coincident Indicator (CI). The CI is a composite indicator adopted by BdL in 1994 and acts as a monthly approximation of GDP. "It is composed of eight variables that reflect economic activity (See Graph 1), and is computed from the total of these quantitative variables, weighed according to their importance in the GDP"<sup>6</sup>. To

<sup>1</sup> The spread most commonly used is that between 10-year and 3-month Treasury Bills

<sup>2</sup> Harvey (1988), Laurent (1988, 1989), Minshkin (1990, 1991), Bernanke and Blinder (1992)

<sup>3</sup> "The Yield Curve as a Predictor of US Recessions" Arturo Estrella and Frederic S. Mishkin, *Current Issues in Economics and Finance Federal Reserve Bank of New York; Volume 2, no. 7, July 1996*

<sup>4</sup> Estrella and Minshkin (1995), Estrella (1997)

<sup>5</sup> Estrella (1997)

<sup>6</sup> "The Use of Surveys to Measure Sentiment and Expected Behavior of Key Sectors in the Financial System and the Economy: Evidence from the Business Survey conducted by the Central Bank of Lebanon". Sana Souaid Jad, *Fifth IFC Conference on "Initiatives to Address Data Gaps Revealed by the Financial Crisis" Basel, 25-26 August 2010*

assess whether the CI can make a good proxy for GDP growth, we calculate annual averages of the coincident indicator and test their percentage change against annual GDP growth rates from the National Accounts (See Graph 2). The two data sets show an 87.8 percent correlation.

Secondly, in order to measure the difference between interest rates on long and short bonds, we use Eurobond<sup>7</sup> yields rather than interest rates on local currency denominated Treasury bills. First, considering that while data from BdL on the coupon and return rates of 3-month Treasury bills stretches as far back as 1977, data on 5-Year Treasury bills exists only since 2005. Therefore, available slope figures constitute a very short time frame for our results to be significant. The slope data we thus use is the difference between yields of Eurobonds maturing in the next three months to account for short-term rates and yields of Eurobonds with an average 5 year maturity; noting that not all years in our series contain papers maturing in 10-years; a preferred measure for longer term rates as tested by previous works.

In addition to solving the problem of our data deficiency, we find that using figures from the secondary Eurobond market offers several advantages that could arguably produce much more accurate results. Primarily, Eurobond yields are essentially treasury rates less a margin that represents Lebanon's local currency risk, and therefore have monetary policy as an underlying determinant. Typically, 85% of Eurobonds are publicly traded and therefore, the Eurobond market is significantly more liquid than the market for Treasury bills and better reflects investors' expectations about future economic activity. Eurobonds are a major foreign currency investment channel for local banks. Therefore, aside from policy and expectations, Eurobond rates signal the evolution of foreign capital inflows into Lebanon, which in turn play a major role in determining near future investments and consumption trends.

Examining our results, we find that the slope between 2000 and mid 2006 correspondingly precedes the trend of annual change in BdL's Coincident Indicator by an average three to five quarters. Values of both series do not change at equivalent rates as the fluctuation of the slope is more severe. The correlation of the two series is still almost 60%.

Between 2006 and 2010, the positive relationship between the slope of the yield curve and the coincident indicator seemed less discernible. After the Q3 2006 fluctuations, in which the CI drops substantially with the July war, economic growth rates spike up to decade-highs while the yield curve remains almost flat. This is especially evident after the financial crisis when sharp drops in international interest rates drove large capital flows into emerging economies with high deposit rates; Lebanon saw unprecedented inflows of foreign funds, of which large investments went into medium and long term Eurobonds and flattened the yield curve. Lebanon's economy during those years was also booming, with record tourist numbers and foreign direct investment inflows. Annual changes in the coincident indicator remained above 10% between Q4 2007 and Q1 2010 while annual GDP growth averaged 8.5% during the period.

Between 2010 and 2012, the correlation between the slope of the yield curve and the coincident indicator jumped to 71%. Political developments during the period, which resulted in yield curve fluctuations did not have a direct effect on the economy and were met in the following four to six quarters with corresponding changes in the coincident indicator.

In periods when economic developments were influenced by the political environment, changes in real activity that geared the coincident indicator were consistently preceded by cues from the bond market. Political tension is usually followed by an immediate decline in the spread as a bearish short term economic outlook raises the preference for stable and higher yielding papers, while shorter papers lose their risk-return appeal. Moreover, as political tension also causes an increase in the dollarization of deposits in local banks, investments by financial institutions increase in longer term papers. Both factors result in the flattening of the yield curve. This effect however doesn't materialize immediately in real activity, except when political turmoil is acute, as was the case in the July war of 2006.

While we cannot say that the inversion of the yield curve in our data is consistently followed by an economic contraction, due to the short-time frame of our study and the lack of occurrences where the slope went into negative territory, the correlation between the slope of the yield curve and economic activity is certainly discernible in our data, where a steepening yield curve is followed by faster economic growth and a flattening yield curve, by deceleration of economic growth if not contraction.

<sup>7</sup> Lebanese Eurobonds have constituted 28% and 55% of total government debt between 2000 and 2012

Another factor that we find interferes with the correlation between the slope and real activity in Lebanon is the dependence of domestic interest rate policy on US policy. Lebanon's currency peg to the US dollar calls for a need to adjust domestic interest rates in line with US rates. This is especially crucial in cases when the US Federal Reserve hikes interest rates, given that Lebanon has to maintain a minimum spread against US rates to account for the country's risk and to continue drawing in foreign funds.

Finally, judging from our model, we can expect economic activity to begin picking up by the end of 2012 and early 2013. The yield curve slope had touched a low of 0.42% in Q2 2011, before moving up to 1.6% and stabilizing at around that rate up to Q1 2012. This however again hinges on the notion that the political environment doesn't deteriorate further.

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