

CONSUMER CONFIDENCE IN LEBANON

JANUARY 2012

THE BYBLOS BANK/AMERICAN UNIVERSITY OF BEIRUT
CONSUMER CONFIDENCE INDEX



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ABBREVIATIONS

AUB	American University of Beirut
BdL	Banque du Liban
CATI	Computer Aided Telephone Interviews
CCI	Consumer Confidence Index
EI	Expectations Index
EU	European Union
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GIS	Geographic Information System
GNFS	Goods and Non-Factor Services
ICS	Index of Consumer Sentiment
IMF	International Monetary Fund
MENA	Middle East & North Africa
OSB	Olayan School of Business
PSI	Present Situation Index
SDDS	Special Data Dissemination Standard
STL	Special Tribunal for Lebanon
UAE	United Arab Emirates

Executive Summary

Consumer confidence refers to the opinions and attitudes of consumers about the current and future strength of the economy, and provides a good indication of a country's current and future economic activity and direction. Consumer confidence indices are key economic indicators compiled in many industrialized nations and in a growing number of developing economies in order to help monitor and evaluate economic activity. Consumer confidence is generally considered to be an economic indicator of household consumption expenditures. Consumption is the driver of almost every fundamental aspect of a country's economy. Therefore, measuring consumer sentiment in Lebanon would play a vital role in assessing and evaluating the current and future spending of consumers and in measuring economic conditions.

The Byblos Bank/AUB Consumer Confidence Index is the first national comprehensive consumer confidence index in Lebanon. It is issued by the Byblos Bank Group through its Economic Research & Analysis Department, in cooperation with the American University of Beirut (AUB) through the Olayan School of Business. The index helps monitor consumer sentiment and provides an objective measure of the direction of consumer activity in the Lebanese economy. The index is the first consumer confidence index produced by a banking and financial institution in the Middle East & North Africa and constitutes the first cooperation of its kind between the private sector and an academic institution in Lebanon and the Arab world. This report includes the rationale for a consumer confidence index in Lebanon, the detailed methodology for the index calculation, detailed analysis of the index results, and the full data.

RATIONALE FOR A CONSUMER CONFIDENCE INDEX IN LEBANON

Weak Statistical System

The Lebanese economy lacks a number of key economic indicators, which makes it difficult to analyze in detail the performance of the overall economy, of business cycles, and of individual sectors. It also makes it difficult for policymakers to formulate plans and take decisions that are based on sound data. Basic periodic indicators such as population growth, employment figures, unemployment rates, quarterly readings of GDP growth, household consumption, wages and earnings, manufacturing and non-manufacturing production indices, and the international investment position, among many others, do not exist. Currently, economic data and statistics are published mainly by Banque du Liban, the Central Administration of Statistics, and a limited number of ministries. Despite some attempts to improve this picture, much remains to be done in order to raise the transparency of the Lebanese economy.

Importance of Household Consumption in Economic Activity

Private or household consumption in Lebanon constitutes the largest component of total spending in the economy, and accounted for 83.2% of total GDP on average over the 1997-2009 period and for 79.1% of GDP in 2009. This rate is higher than that of several advanced economies; while Lebanon has one of the highest levels of household consumption in the Arab world. According to the National Economic Accounts of Lebanon, private consumption was the main driver of GDP growth between 1998 and 2009, and grew at a cumulative real rate of 39.6% and an annual average rate of 2.8% during the covered period.

Incomplete Coverage of Lebanon in Externally-Generated Indices

Lebanon has been included in two regional surveys on consumer behavior, but these present several methodological concerns and shortcomings as far as the coverage of the Lebanese economy is concerned. For instance, they are conducted either twice a year or on a quarterly basis only, rather than on a monthly basis. Also, one of the regional surveys is conducted only through the Internet, which generally has a lower rate of response than other approaches. Further, the sample size of Lebanon in the two surveys is not representative of the total Lebanese population.

Consumer Confidence Index to Fill a Major Market Gap

As the Lebanese economy continues to evolve on the one hand, and is subject to political shocks on the other, there is an increasing need for a new generation of indicators that reflect other dimensions of economic activities and that provide a broader and more transparent analytical framework. A consumer confidence index that is properly designed and fully produced locally, that utilizes a solid and transparent methodology, and that provides the detailed data necessary for in-depth analysis of current and future consumer behavior and expectations, would fill a major market gap by measuring a key segment of economic activity in Lebanon. It also increases the transparency of the Lebanese economy and provides a much-needed new dimension for economic analysis. Further, it constitutes an analytical tool to individuals, companies, retailers, investors, business researchers, analysts, academic institutions, policymakers, governments, multilateral organizations, media outlets, and other stakeholders with an interest in the Lebanese economy.

METHODOLOGY AND CALCULATION

The process to develop the Byblos Bank/AUB Consumer Confidence Index started in 2006 when Byblos Bank commissioned a study for the project from an independent consultant to determine the feasibility of such an index in Lebanon. The results of the feasibility study concluded that all elements to develop and implement a national consumer confidence index exist, especially the possibility to assemble a representative sample of the Lebanese population based on key demographic and geographic criteria, as well as the existence of reliable opinion polling firms in Lebanon capable of undertaking the fieldwork.

Opinion Polling and Sample Design

The Byblos Bank/AUB Consumer Confidence Index is based on a survey of a nationally representative sample of adult males and females living throughout Lebanon, whereby residents are asked a number of questions through face-to-face interviews about current and future economic conditions, their personal financial situation, and their intention regarding major purchases. The survey uses a sample size of 1,200 for the monthly waves, given a population size of 4.17 million for Lebanon, a margin of error of $\pm 2.83\%$, a confidence level of 95% and a response distribution of 50%. The questionnaire of the survey is based on the questionnaire used by the University of Michigan for its Index of Consumer Sentiment.

The survey sample is nationally representative in scope and coverage and is not limited to the capital city and its suburbs, known as the Greater Beirut Area. Coverage of Greater Beirut only would be biased and would not be indicative of the sentiment of the entire population, especially that the socioeconomic profile of residents in Greater Beirut varies considerably from that of other administrative districts.

The survey covers the present situation as viewed by consumers, as well as the future expectations of consumers in Lebanon. Also, the questionnaire includes additional questions that assess consumers' intentions to purchase specific items; in addition to their expectations about interest rates, inflation, borrowing plans, vacation plans, and life insurance.

The field survey is conducted on a monthly basis by Statistics Lebanon, one of the leading market research and opinion polling firms in the country. The firm draws a random sample of the population for each monthly survey using the Probability Proportional to Size (PPS) sampling technique.

Index Calculation Method

The Byblos Bank/AUB Consumer Confidence Index is calculated on a monthly basis using five questions from the questionnaire. The index readings are benchmarked against the base month of January 2009. The base month for the index is January 2009 due to the fact that 2009 was a normal year by Lebanese standards and given that the index value for January 2009 is close to the annual average value of the full year.

The index is composed of two sub-indices, the Byblos Bank/AUB Present Situation Index and the Byblos Bank/AUB Expectations Index. The first sub-index covers the current economic and financial conditions of Lebanese consumers, and the second one addresses their outlook over the coming six months. The index calculation started in July 2007 and is produced every month. The data in this report covers the results of the Byblos Bank/AUB Consumer Confidence Index for the 51-month period from July 2007 till September 2011. In addition, the data segregates the index by age, gender, occupation, income, administrative district, and religious affiliation.

Co-Publishing Partner

Believing in the value-added of a partnership with an academic institution for this project, Byblos Bank decided to issue the index in cooperation with the American University of Beirut through the Olayan School of Business.

ANALYSIS OF RESULTS

The Byblos Bank/AUB Consumer Confidence Index reached its highest level in May 2008 at 133.6 and its second highest level in October 2008 at 111.5 during the July 2007-September 2011 period, while it reached its lowest level in August 2011 at 46.4 and its second lowest reading in March 2011 at 47.5.

Analysis on a Calendar Basis

On a calendar basis, consumer confidence was highest in 2009 where the index averaged 96.7, followed by 2008 with an average reading of 81.6, then 2010 when the index's average reached 72.8; the second half of 2007 with an average of 63.9, and the first nine months of 2011 with an average index reading of 55.3.

Timeline Analysis

There are three distinctive periods in the history of the Byblos Bank/AUB Consumer Confidence Index: a period of Great Uncertainties, one of Relative Stability, and a third of Return of Uncertainties. The first period, which was a "high risk" period dominated by political and security uncertainties, starts in July 2007 and ends in April 2008. The CCI averaged 60.1 during this timeframe. The second period was a "low risk" period and extended from May 2008 to June 2010. This timeframe saw several positive political events that helped revive consumer confidence such as the Doha Accord and is characterized by a significantly higher level of confidence, as the CCI averaged 94 during the 26-month span. The third period, which stretches from July 2010 to September 2011, saw the return of uncertainties and an increase in political risks. The CCI averaged 57 during the 15-month period, constituting its lowest reading over the three periods.

Analysis of the Present Situation and the Expectations Indices

The Present Situation Index and the Expectations Index appear, in general, to move in the same direction as the Consumer Confidence Index over the July 2007-September 2011 period. However, the Expectations Index displays a wider span of variation than the Present Situation Index. The results of the Present Situation Index and the Expectations Index show that Lebanese consumers are rather optimistic but remain very skeptical. The near-term expectations of consumers are consistently higher than their views of their current conditions. Therefore, consumers need to see concrete results that improve their economic conditions in order to maintain their level of optimism. There are only four instances between July 2007 and September 2011 when Lebanese consumers were more, or equally, pessimistic about the future than they were about present circumstances.

General Trends

The results of the Byblos Bank/AUB Consumer Confidence Index show that consumer confidence in Lebanon is significantly affected by political events, whether they are negative or positive. There is little impact on confidence from economic developments, especially that there have not been major economic decisions throughout the covered period to raise and sustain the confidence level of Lebanese consumers.

The Doha Accord had the biggest positive impact on confidence between July 2007 and September 2011. Other political events that affected confidence materially include the parliamentary elections of 2009, the formation of the Siniora and Hariri Cabinets in 2008 and 2009 respectively, the designation of Mr. Najib Mikati as Prime Minister in January 2011, and the formation of the Mikati Cabinet in June 2011. The events that negatively affected confidence the most were the assassinations of political and military figures that took place in 2007 and in early 2008, the presidential vacuum that started in November 2007, the border clashes with Israel and the domestic clashes among armed factions in August 2010, and the start of the crisis in Syria in March 2011. The only economic event that positively affected confidence was the raise in the minimum wage and the start of its implementation in October 2008.

A simple correlation analysis was conducted between each of the Byblos Bank/AUB Consumer Confidence Index, Byblos Bank/AUB Present Situation Index and Byblos Bank/AUB Expectations Index on one hand, and each of various factors with monthly available data that could be linked to consumer confidence, on the other. These factors include the inflation rate in Lebanon, the growth in private sector lending, the monthly change in Banque du Liban's coincident indicator, the lending rates in Lebanese pounds and in U.S. dollars, the growth in the number of incoming tourists to Lebanon, and the growth of remittance inflows to Lebanon. The correlation analysis revealed a weak level of correlation between each of the Consumer Confidence Index, Present Situation Index and Expectations Index on one hand, and each of the economic indicators on the other.

The results of the Byblos Bank/AUB Consumer Confidence Index were adjusted by using the ratio-to-moving average method, with the aim to remove possible periodic seasonal fluctuations in the series. The results show little seasonality, in line with seasonally-adjusted consumer sentiment indices in the United States.

Consumer Confidence by Category

The results of the Byblos Bank/AUB Consumer Confidence Index for the July 2007 to September 2011 period show that male and female Lebanese consumers have the same level of confidence; people between 21 and 39 years of age have a higher level of confidence than those above this age bracket; and consumers with household income above \$2,000 per month have

a higher level of confidence than those earning less. Moreover, university students and private sector employees display a higher level of confidence than the self-employed and public sector employees. In addition, the level of confidence is generally close across administrative districts, or *mohafaza*; with the exception of the Bekaa, where the level of consumer confidence is significantly lower than the national average and that of other regions. Further, Christian and Sunni consumers have almost identical levels of confidence, and also have the highest level of confidence among religious denominations. Druze consumers have the next highest level of confidence, while the Shiite consumers display the lowest level of confidence across the covered period.

I - Rationale and Motivation

A - RELEVANCE OF CONSUMER CONFIDENCE INDICES

1 - What is Consumer Confidence?

Consumer confidence refers to the opinions and attitudes of consumers about the current and future strength of the economy...

Consumer confidence refers to the opinions and attitudes of consumers about the current and future strength of the economy, and provides a good indication of a country's current and future economic activity and direction.¹ Consumer confidence is widely considered to be an economic indicator of household consumption expenditures. Consumption is the stimulant behind almost every fundamental aspect of a country's economy. Depending on the economy's structure and depth, consumer spending can account for between 50% to 75% of GDP. Indeed, consumers tend to spend more when they feel confident about the current and future economic situation of their country and their own financial situation. Consumers with high confidence in current and future economic conditions and in their own financial situation are likely to spend more, therefore generating economic activity; while consumers with a lower level of confidence tend to reduce their propensity to spend, thereby slowing economic activity. A rising trend in consumer confidence indicates improvements in consumer buying patterns. For instance, manufacturers would increase production and hiring, banks would expect increased demand for credit, builders would prepare for a rise in demand for housing, and the government would anticipate improved tax revenues based on the rise in consumer spending. Therefore, measuring consumer sentiment plays a vital role in evaluating the current and future spending of consumers, as well as in measuring economic conditions.

...and is widely considered to be an economic indicator of household consumption expenditures

2 - Measuring Consumer Confidence

Measuring consumer confidence is typically based on surveys of a sample of households whereby residents are asked a number of questions about current and future economic conditions, their personal financial situation, and their intention regarding major purchases. After the surveys are conducted, the responses are aggregated into a single number, called an 'index' of consumer confidence.

Consumer confidence indices help monitor and evaluate economic activity

A range of indices has emerged in industrialized and emerging economies to try and quantify variations in consumer confidence. Consumer confidence indices originated in the United States in the middle of the 20th century. The University of Michigan's George Katona first formulated consumer confidence measures in the late 1940s as a way to include empirical measures of consumer expectations into models of spending and saving behavior. Since then, consumer confidence measures have become standard economic indicators compiled across North America, Europe and the majority of industrialized nations. Developing nations have followed the trend and are increasingly making such measures available. As a result, advanced economies like the United States, member-countries of the European Union, Japan and Canada, as well as emerging markets like Russia, Ukraine, South

Consumer confidence indices help economic policy planners, business decision makers and investors detect turning points and forecast future trends

Korea, India, Brazil, Argentina, South Africa, China, Indonesia and Turkey have launched consumer confidence indices. Most of these indices are similar in structure and have been modeled after leading U.S. indices. They are published by a range of bodies from national statistical institutes and government agencies to banking institutions and economic research centers.

The relevance of consumer confidence indices has been well established over the years, as variations in these indices have been found to reflect countries' economic cycles. Changes in the level of consumer confidence indices are associated with movements in real GDP, inflation rates, employment levels, and retail sales of durable goods, among others. Also, consumer confidence indices help monitor and identify economic turning points or impeding turning points as reflected by consumer behavior. Therefore, consumer confidence indices help economic policy planners, business decision makers, and investors detect turning points and forecast future trends.

B - SELECT CONSUMER CONFIDENCE INDICES

1 - Consumer Confidence Indices in the United States

Consumer confidence in the United States is measured nationally by two leading sources: the University of Michigan and the Conference Board.

The University of Michigan Index of Consumer Sentiment

The Index of Consumer Sentiment (ICS) is compiled by the Survey Research Center of the University of Michigan, one of the largest university-based social sciences research institutes in the world. The index measures consumers' attitude towards current and expected personal finances, expected business conditions, and current buying conditions for durable goods. The ICS is based on a telephone survey of a nationally representative sample of 500 adult men and women living in households in the United States. The method used to draw the national probability sample is through Random Digit Dialing (RDD) telephone sampling, given that 95% of households in the U.S. have telephones.² The survey has been conducted since the 1940s and became a monthly survey in 1978.

The ICS is based on five questions that have not been changed since its launch. An independent sample of households is drawn for each monthly sample. The respondents chosen in the drawing are then re-interviewed six months later. The total sample for any one survey is normally made up of 60% new respondents and 40% of respondents being interviewed for the second time.

The University of Michigan Index of Consumer Sentiment is derived from the following five questions:

- 1- We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?
- 2- Now looking ahead – do you think that a year from now you (and your family living there) will be better off financially, or worse off, or just about the same as now?
- 3- Now turning to business conditions in the country as a whole – do you think that during the next 12 months we'll have good times financially, or bad times, or what?
- 4- Looking ahead, which would you say is more likely – that in the country as a whole we'll have continuous good times during the next five years or so, or that we will have periods of widespread unemployment or depression, or what?
- 5- About the big things people buy for their homes - such as furniture, a refrigerator, stove, television, and things like that. Generally speaking, do you think now is a good or bad time for people to buy major household items?

The ICS is calculated by first computing the relative scores for each of the five questions. The relative score is the percentage share of respondents who give favorable replies minus the percentage share of those giving unfavorable replies, plus 100. The sum of the five relative scores is divided by the equivalent value for the 1966 base period, and then 2.0 is added to the result as a constant to correct for sample design changes.

In addition, the University of Michigan produces two sub-indices to the ICS: the Index of Current Economic Conditions (ICC) and the Index of Consumer Expectations (ICE). Using a methodology similar to that of the ICS, the ICC is calculated using answers to questions 1 and 5, while the ICE is calculated using answers to the other three questions.

The Conference Board Consumer Confidence Index

The Consumer Confidence Index (CCI) is compiled by the Conference Board, a non-profit business research organization. The CCI was launched in 1967 and is benchmarked to 1985 because this particular year was neither a peak nor a trough. The CCI is based on a mail survey conducted monthly and reaching a nationwide representative sample of 5,000 households, with a different panel of households surveyed each month. The samples are representative based on key demographic and geographic criteria as defined by the U.S. Census Bureau.

The CCI is based on five questions about the appraisal of current business and employment conditions, as well as about expectations regarding these variables and family income for the next six months. Each of the five questions has three response options: positive, negative and neutral. Poll results are then converted into the CCI through the following methodology: the CCI is calculated by first computing the relative scores for each of the five questions. The relative score is the proportion of positive replies to the total

of positive and negative replies. The relative value for each question is then converted into a number relative to a benchmark score of 100 for the base year 1985. The five index values are then averaged together and converted into the Consumer Confidence Index. Opinions on current conditions make up 40% of the questions, while expectations of future conditions comprise the remaining 60%.

The Conference Board also publishes two accompanying sub-indices, the Present Situation Index and the Expectations Index. The first one represents consumers' opinions on the current economic situation, whereas the second one represents consumers' feelings about the future of the economy. In addition to the five index questions, the Conference Board survey also includes questions that assess consumers' intention to purchase specific items (house, durable consumer goods) as well as their expectations regarding the evolution of interest rates, inflation and the stock market.

2 - Consumer Confidence Indices in Europe

The EU Harmonized Consumer Confidence Indicator

The European Commission publishes a monthly consumer confidence index for member states of the European Union. The EU Harmonized Consumer Confidence Indicator was launched in 1985 across nine EU members and was later expanded to cover additional European economies. Currently, the harmonized index is compiled for all the 27 EU member states where more than 40,000 consumers are surveyed. The process is conducted in a harmonized manner through the use of a standard questionnaire and a uniform index calculation method. However, the countries conduct the monthly consumer survey independently and use different agencies and data collection methods.

The EU indicator measures consumers' opinions about savings, financial situation and general economic conditions by combining their replies to four questions. Two questions address the financial situation and the savings possibilities of respondents, and two additional questions deal with the general economic situation and unemployment expectations:

1. Expected change in the financial situation of the household over the next 12 months
2. Expected change in the general economic situation over the next 12 months
3. Expected change in unemployment over the next 12 months
4. Expected change in the savings of the household over the next 12 months

Each question has five answer alternatives: "a lot better", "a little better", "the same", "a little worse", and "a lot worse". The EU Harmonized Consumer Confidence Indicator is the arithmetic average of the balances, in percentage terms, of the answers to the four questions and is expressed as the balance of positive over negative results. Extreme answer options are assigned double weights, as answers of "a lot better" and "a lot worse" get a weight of 'one'; and answers of "a little better" and "a little worse" get the weight of 'one-half'; while the response "the same" has zero weight.

Country	USA	USA	Europe
Index	Consumer Confidence Index	Index of Consumer Sentiment	EU Harmonized Consumer Confidence Indicator
Issuing Body	Conference Board	University of Michigan	European Commission
Survey Method	Mail	Telephone	Face-to-face or telephone
Sample Size	5,000	500	40,000
Frequency	Monthly	Monthly	Monthly
Date Established	1967	1952	1985

Source: Conference Board, University of Michigan, European Commission, Byblos Research

3 - Measures of Consumer Confidence in the MENA Region

The economies of the Middle East & North Africa (MENA) region are at various stages of growth, development, competitiveness and transparency. But they share the common features of being consumption-based societies that lack enough measures to monitor key economic developments. They also are in need to improve their statistical database and to issue more frequent and timely economic indicators.

For example, only four Arab countries subscribe to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund. The IMF established the SDDS in 1996 to guide member countries in the provision of their economic and financial data to the public. The SDDS aims to enhance the availability of timely and comprehensive statistics and, therefore, contribute to the pursuit of sound macroeconomic policies. It also expects to contribute to the improved functioning of financial markets. Subscription to the SDDS is voluntary, but it carries a commitment by a subscribing country-member to observe the standards and to provide certain information to the IMF about its practices in disseminating economic and financial data. Egypt and Morocco became members in 1996, Tunisia adhered in 2001, and Jordan joined in 2010.

In parallel, 12 Arab countries have joined the IMF's General Data Dissemination System (GDDS). The GDDS was established in 1997 to guide countries in the provision to the public of comprehensive, timely, accessible, and reliable economic, financial, and socio-demographic data. It focuses on assisting countries to formulate comprehensive and prioritized plans to improve compilation and dissemination practices. Similar to the SDDS, participation by IMF members in the GDDS is voluntary. Algeria, Bahrain, Iraq, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, the United Arab Emirates, and Yemen have joined the GDDS so far. However, the GDDS is less prescriptive than the SDDS, as the latter sets specific standards that must be observed by subscribing countries.³ The GDDS provides recommendations on good practice for the production and dissemination of statistics. But these recommendations are generally less demanding than the corresponding requirements of the SDDS.

MENA economies lack enough indicators to properly monitor key economic developments

The private sector has taken some initiatives to fill some of the gap in economic indicators across the region. In particular, several polling firms have covered the various economies of the MENA region in their consumer behavior surveys. For example, the Nielsen Global Consumer Confidence Survey, an Internet-based survey established in 2005 and the largest global survey of its kind, aims to provide an understanding of consumer attitudes towards their economy, their spending intentions and current major concerns. Nielsen interviews quarterly over the Internet around 30,000 consumers in 56 countries in Europe, North and South America, the Asia Pacific region, the Middle East and Africa. The survey's Arab coverage includes the UAE, Egypt and Saudi Arabia.

There are some indicators of consumer confidence in Arab countries

Also, the MasterCard Worldwide Index of Consumer Confidence, issued twice a year by MasterCard International, aims to measure consumer sentiment about economic conditions in the next six months. The most recent survey was based on the responses of around 17,600 consumers to five economic variables that are employment, the economy, the stock market, regular income and the quality of life. The survey covers 25 markets in South Asia, the Middle East and Africa and includes Egypt, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, and the UAE.

Moreover, Internet-based recruiting firm Bayt.com issues consumer confidence indices for the economies of the Gulf Cooperation Countries, as well as for Algeria, Egypt, Jordan, Lebanon, Syria, Morocco, Tunisia and Pakistan. The survey is conducted quarterly by e-mail and covers about 7,500 respondents from across the region.

In addition to the above surveys, ARA, a marketing research and consultancy firm based in the Middle East, issues an index for Lebanon and Kuwait. Its surveys are conducted by Computer Aided Telephone Interviews (CATI). Further, the Dubai Department of Economic Development (DED) started issuing a quarterly consumer confidence index in the fourth quarter of 2011.

C - RATIONALE FOR A CONSUMER CONFIDENCE INDEX IN LEBANON

1 - Weak Statistical System

Lebanon lacks basic periodic indicators...

The Lebanese economy lacks a number of key economic indicators, even by regional standards, which makes it challenging to analyze in detail the performance of the overall economy, of business cycles, and of individual sectors. It also makes it difficult for policymakers to formulate plans and take decisions that are based on sound data. Basic periodic indicators such as population growth, employment figures, unemployment rates, quarterly readings of GDP growth, household consumption, wages and earnings, manufacturing and non-manufacturing production indices, and the international investment position, among many others, do not exist.

*...much remains to be done
to raise the transparency of
the Lebanese economy*

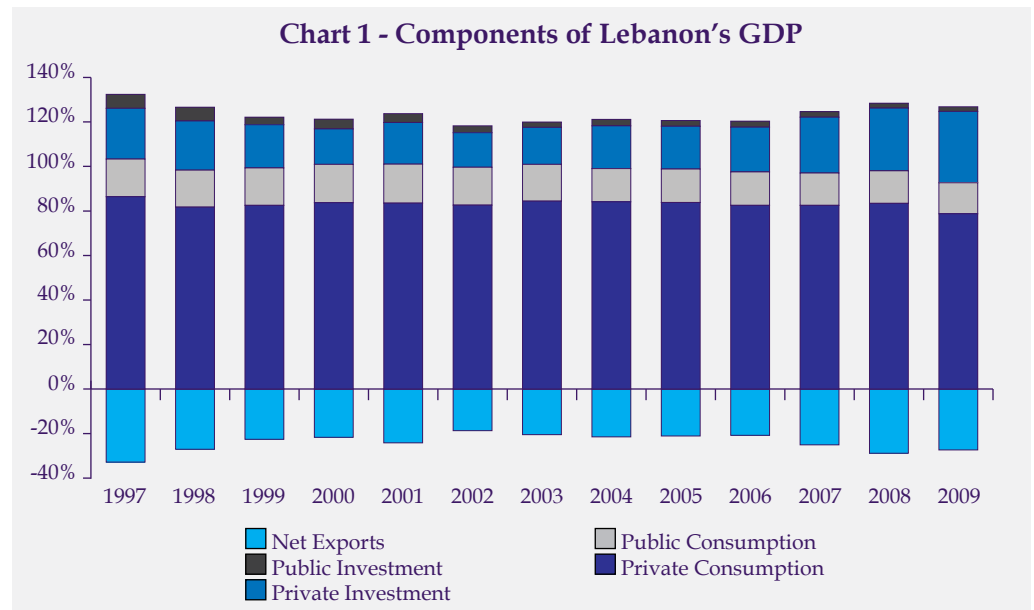
Currently, economic data and statistics are published mainly by Banque du Liban (BdL), the Central Administration of Statistics, and a limited number of ministries. There have been modest attempts to improve this picture that include, but are not limited to, the publication of national accounts covering the 1997-2009 period, upgrading the methodology to calculate the Consumer Price Index, preparing the groundwork to issue a Producer Price Index, and updating the household survey. However, much remains to be done in order to raise the transparency of the Lebanese economy. Multilateral institutions, multinational companies, institutional investors, rating agencies, foreign governments, international donors, research analysts and other stakeholders have repeatedly highlighted the weaknesses in the availability, quality, and timeliness of economic data in Lebanon, and called for improving Lebanon's statistical system. For example, the International Monetary Fund has stated that Lebanon's statistical system is weak and is in need of significant improvement, and called for the compilation of real sector statistics on a timely basis. It highlighted data shortage in national accounts, employment and wage statistics, coverage of the fiscal accounts, balance of payments statistics and sectoral data, among others, as obstacles to proper economic analysis and policy development.⁴

Economic indicators are classified into three categories according to their usual timing in relation to the business cycle: lagging indicators, coincident indicators, and leading indicators.⁵ Lagging indicators confirm long-term trends, but they do not predict them. Some examples are unemployment, corporate profits, and interest rates. All official and periodic economic data and indicators that are published by local institutions about the Lebanese economy are "lagging", in the sense that they cover activity in past periods. Coincident indicators provide information about the current state of the economy, as they change at approximately the same time as the whole economy. A coincident index may be used to identify, after the fact, the dates of peaks and troughs in the business cycle. Banque du Liban publishes a coincident indicator for the Lebanese economy that is a composite of eight weighted economic indicators. The time lag in the publication of the coincident indicator, as well as its components, largely reflect past albeit recent activity. However, the importance of lagging or coincident indicators is that they confirm that a pattern is occurring. So, an increase in spending today may reflect the results of an economy that recovered several months ago. Conversely, a decrease in spending today may confirm an ongoing economic slowdown. In parallel, leading indicators are indicators that usually change before the economy as a whole changes, which makes them useful as short-term predictors of the economic trends and, therefore, of the direction of the economy.

2 - Importance of Household Consumption in Economic Activity

Household consumption in Lebanon accounted for 83.2% of total GDP on average over the 1997-2009 period

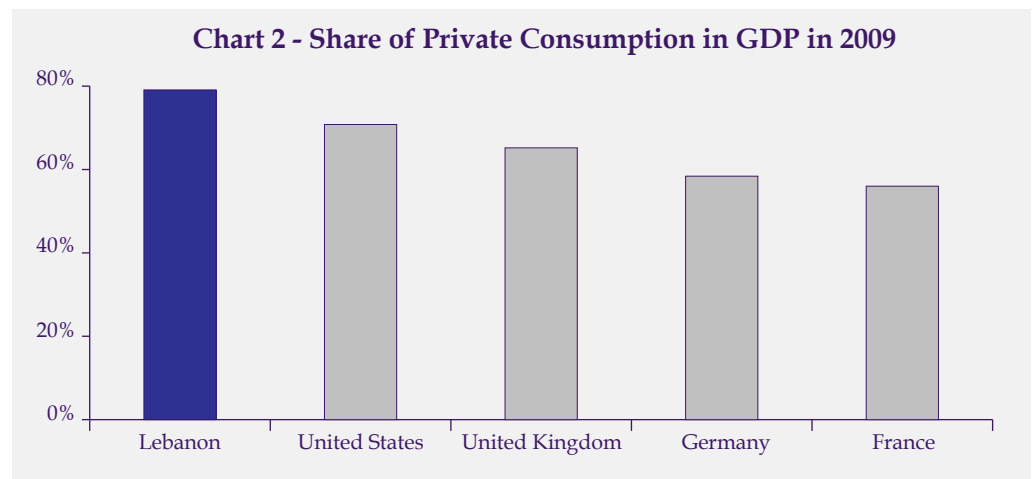
Private or household consumption in Lebanon constitutes the largest component of total spending in the economy, and accounted for 79.1% of GDP in 2009, the latest available year with official figures. Further, household consumption in Lebanon accounted for 83.2% of total GDP on average over the 1997-2009 period, the 13 years covered by national accounts. It reached a nominal value of \$27.6bn in 2009, compared to \$25.2bn in 2008 and \$20.8bn in 2007.



Source: Economic Accounts of Lebanon

The level of household consumption in Lebanon is high compared to advanced economies

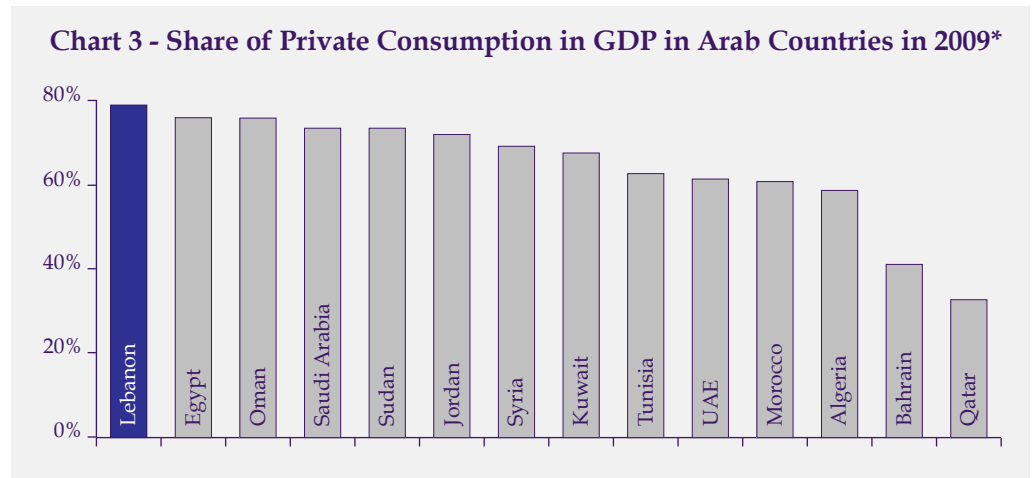
The Lebanese economy is characterized by a high rate of private consumption compared to advanced economies. For instance, private consumption reached 65.2% of GDP in the United Kingdom, 58.4% of GDP in Germany and 56% of GDP in France in 2009. Further, the level of household consumption in Lebanon is high even when compared to the United States economy, where private consumption accounted for 70.8% of GDP in 2009.



Source: Economic Accounts of Lebanon, UNSTATS, Byblos Research

Lebanon has one of the highest levels of household consumption in the Arab world

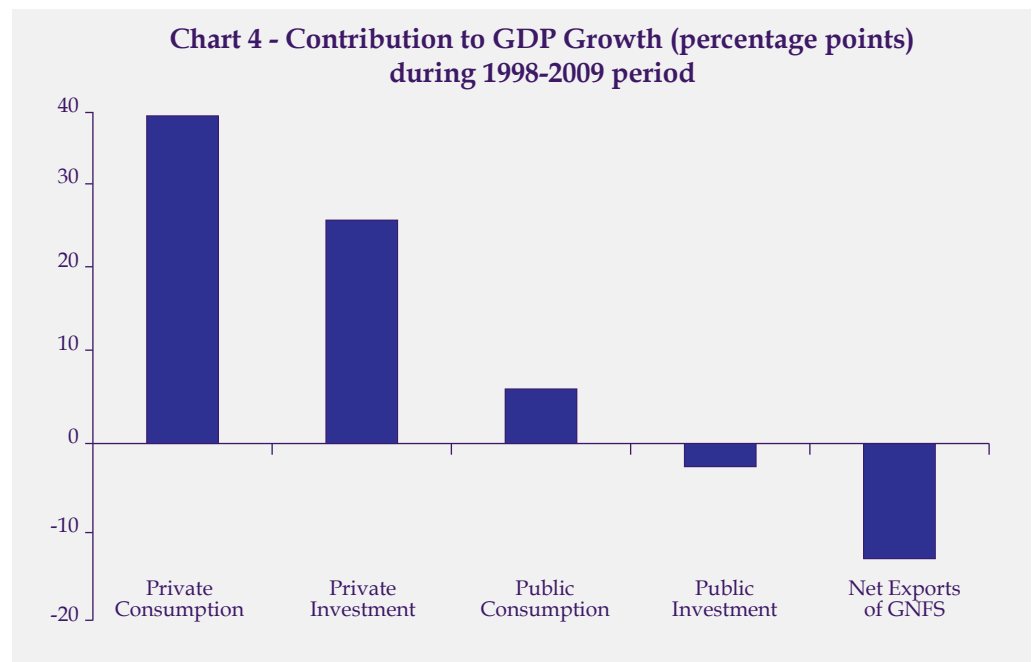
Also, Lebanon has one of the highest levels of household consumption in the Arab world. It has the most elevated level of private consumption among Arab oil importers, as aggregate household consumption in six oil-importing economies accounts for 70.1% of their total GDP. On an individual basis, some Arab oil importers are characterized by a relatively high private consumption level, but it is still below Lebanon's level. For instance, household expenditures accounted for 76% of GDP in Egypt, 72.1% of GDP in Jordan, and 69.3% of GDP in Syria in 2009. Further, household spending was equivalent to 62.8% of GDP in Tunisia and 61% of GDP in Morocco. The trend is similar when comparing to oil exporting countries, as the level of private consumption in Lebanon relative to the size of its economy is higher than the level of household consumption relative to the non-oil GDP of eight Arab oil exporters. Private consumption accounted for 76% of non-oil GDP in Oman, 73.6% of non-oil GDP in each of Saudi Arabia and Sudan, 67.7% of non-oil GDP in Kuwait, 61.5% of non-oil GDP in the UAE, 58.8% of non-oil GDP in Algeria, 41.2% of non-oil GDP in Bahrain, and 32.8% of non-oil GDP in Qatar in 2009. The ratio of total household consumption of the eight Arab oil exporters was 60.9% of their aggregate non-oil GDP.



* share of private consumption for oil exporters is calculated as a percentage of non-oil GDP
 Source: UNSTATS, Economic Accounts of Lebanon, Institute of International Finance, Byblos Research

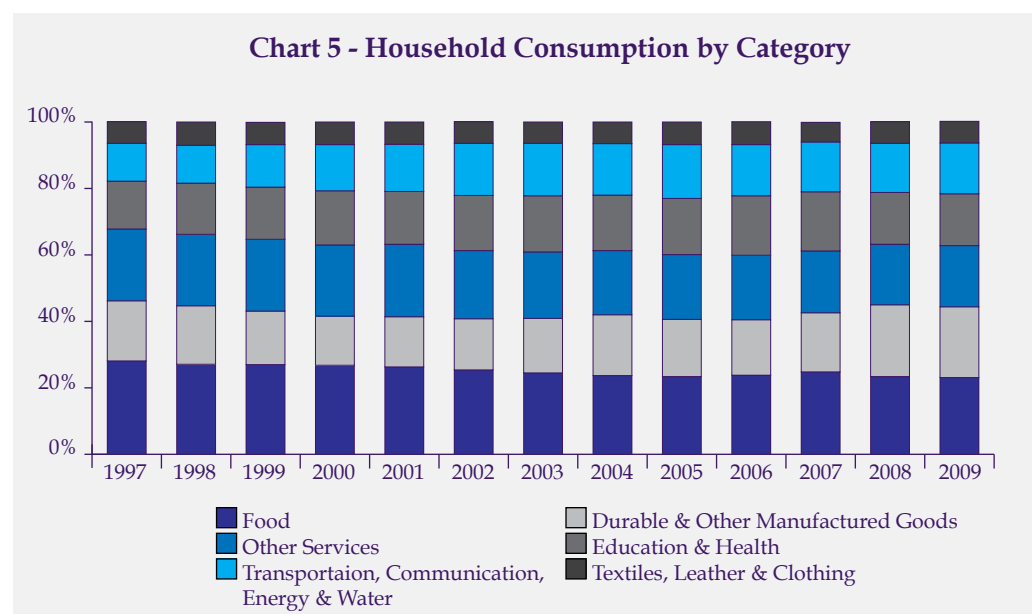
Private consumption was the main driver of GDP growth between 1998 and 2009

According to the National Economic Accounts of Lebanon, private consumption was the main driver of GDP growth between 1998 and 2009, and grew at a cumulative real rate of 39.6% and an annual average rate of 2.8% during the covered period. It was distantly followed by private investment that posted a cumulative real growth rate of 27% and an annual average growth rate of 2%, and public consumption with an aggregate real growth rate of 6.6% and a yearly average rate of 0.5%. The contribution of public investment to real GDP growth was negative over the 12-year period and stood at a cumulative rate of -2.8% and an annual average rate of -0.2%, while the net exports of Goods and Non-Factor Services (GNFS) recorded a cumulative rate of -13.9% and an annual average of -1.2% over the covered period.



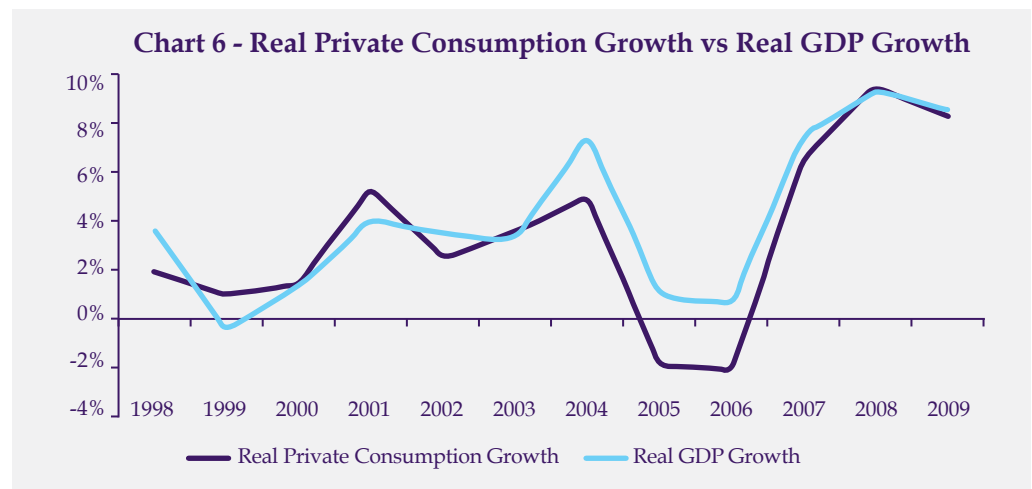
Source: International Monetary Fund, March 2011

The largest component of household expenditures in Lebanon has traditionally been food consumption that accounted for 23.1% of the total in 2009. It is followed by education & health with 15.6%, durable goods (14.6%), other services (9.9%), transportation & communications (8.9%), other manufactured goods (6.7%), textiles, leather & clothing (6.5%), energy & water (6.4%), housing services (5.8%), and tobacco & alcohol (2.6%).



Source: Economic Accounts of Lebanon

The National Economic Accounts of Lebanon calculated household consumption data by estimating private consumption on the national territory and by subtracting the consumption of tourists and adding consumer expenditures of Lebanese citizens traveling abroad. The value of this consumption was estimated during the preparation of the Household Budget Survey in 1997, with extrapolated estimates for subsequent years using appropriate indicators.



Source: International Monetary Fund, March 2011

3 - Incomplete Coverage of Lebanon in Externally-Generated Indices

Lebanon has been included in two regional surveys of consumer behavior mentioned in the previous section. However, these surveys present several methodological issues and shortcomings as far as the coverage of the Lebanese economy is concerned. First, they are conducted either twice a year or on a quarterly basis only, rather than on a monthly basis. Consumer confidence indices in other advanced and emerging economies are all conducted monthly in order to better track changes in consumer behavior and attitudes. More specifically, the pioneering indicators of consumer confidence, the University of Michigan Consumer Sentiment Index and the Conference Board’s Consumer Confidence Index, are conducted on a monthly basis.

Surveys that cover consumer behavior in Lebanon present several methodological issues

Second, one of the regional surveys is conducted only through the Internet. In general, Internet-based surveys have a significantly lower rate of response than other approaches, given that they are dependent on the time and willingness of e-mail recipients to fill out the survey and answer all of the questions, in addition to the difficulty of collecting the e-mail addresses of a representative sample of the population. In addition, Internet penetration rates in the Arab world remain low relative to the rest of the world, despite growing rapidly in recent years. Indeed, Internet penetration, or the ratio of Internet users per 100 inhabitants, grew from 8% in 2005 to 24% in 2010

in the Arab region. But this penetration level remains low compared to a penetration rate of around 30% worldwide, 38% in the Commonwealth of Independent States, around 50% in the Americas, 67% in Europe, and 68% in advanced economies in 2010.⁶

Third, the sample size for Lebanon is not consistent, therefore not representative of the Lebanese population in either of the two surveys. For example, the Bayt.com survey uses a sample that has averaged 192 respondents per survey for Lebanon over the past 11 waves. In addition, the MasterCard International survey approaches “400 or more” persons in each market, with the sample size for Lebanon varying for each wave. Both surveys do not specify the selection criteria of the sample in Lebanon or in other covered markets, but the latter selects respondents from capital cities. MasterCard indicates that it collects the data for the countries it covers via Internet surveys, personal, telephone and CATI, without specifying which method is used specifically in Lebanon.⁷ In addition, ARA does not detail its methodology, the sample size, or the criteria of sample selection other than to indicate on its website that the survey is conducted by CATI.

As the Lebanese economy continues to evolve on the one hand, and is subject to political shocks on the other, there is an increasing need for a new generation of indicators that reflect other dimensions of economic activities and that provide a broader and more transparent analytical framework. A consumer confidence index that is properly designed and fully produced locally, that utilizes a solid and transparent methodology, and that provides the detailed data necessary for in-depth analysis of current and future consumer behavior and expectations, would fill a major market gap by measuring a key segment of economic activity in Lebanon. It also increases the transparency of the Lebanese economy and provides a much-needed new dimension for economic analysis. Further, it constitutes an analytical tool to individuals, companies, retailers, investors, business researchers, analysts, academic institutions, policymakers, governments, multilateral organizations, media outlets, and other stakeholders with an interest in the Lebanese economy.

There is an increasing need for a new generation of economic indicators in Lebanon

II - Methodology and Calculation

A - HISTORICAL BACKGROUND

The process to develop the Byblos Bank/AUB Consumer Confidence Index started in 2006 when Byblos Bank, through its Economic Research & Analysis Department, commissioned a study for the project from an independent consultant to determine the feasibility of such an index in Lebanon, as well as to identify the necessary steps to design, set up and produce a national consumer confidence index. The decision to commission an independent feasibility study was based on the need to ensure an objective assessment about the availability of the required components to produce a credible national consumer confidence index in Lebanon. Ms. Roula Yazbeck, an experienced consultant and market researcher, conducted the feasibility study. Ms. Yazbeck's solid background in consumer research techniques, her in-depth understanding of the Lebanese consumer, and her extensive experience with research agencies in Lebanon provided a good fit for the requirements of the assignment.⁸

A feasibility study concluded that all elements exist to develop a national consumer confidence index in Lebanon

The results of the feasibility study concluded that all elements to develop and implement a national consumer confidence index exist, especially the possibility to assemble a representative sample of the Lebanese population based on key demographic and geographic criteria, as well as the existence of credible market research and opinion polling firms in Lebanon capable of performing the required fieldwork. The study also identified the appropriate research methodology to produce the index and its results, and provided the framework for further developing the index. Consequently, we took several steps to ensure that all the procedures were put in place for the launching of the index. The steps included selecting the opinion polling company, determining the relevant questions and drafting the questionnaire, determining the sample size, choosing the data collection methodology, and selecting the index calculation method. In addition, the steps included testing, validating and refining the index methodology and data collection process, as well as starting to conduct the monthly waves and calculating the index.

B - OPINION POLLING FIRM

Consumer confidence indices are based on consumer feedback collected via public opinion polls. The selection of the most suitable opinion polling firm for this project took place through a rigorous and systematic process. First, the independent consultant conducted primary research to determine the reliability of the sampling frames used by the main local and international opinion polling firms operating in Lebanon. The consultant then assessed their service offerings and professionalism in order to determine their fit to undertake the fieldwork for this particular project. The third step consisted of shortlisting the six most suitable companies for this project, briefing them about the project (without disclosing any confidential information), and obtaining their quotations for undertaking the fieldwork. The fourth step saw the shortlisting of two companies. The fifth and final step was the selection of Statistics Lebanon sarl as the company to conduct the opinion polls for the Byblos Bank/AUB Consumer Confidence Index. The firm was selected due to numerous factors that include its proven expertise in conducting opinion polls across all areas of Lebanon, its ability to select a representative sample of the Lebanese population, its logistical capabilities, its quality standards, its hard and soft infrastructure, and its reliable and transparent processes that are in line with internationally-accepted research practices and standards. The company's responsibilities include selecting the sample, designing the survey, pilot testing the questionnaire, training the fieldworkers, collecting and processing the data, tabulating the results, and validating the data statistically.

The opinion polling firm was selected through a systematic and rigorous process

C - THE QUESTIONNAIRE

Most consumer confidence indices worldwide are based on feedback obtained from the answers of a closed-ended questionnaire administered to a sample of the population. Generally, the questionnaire includes 10 to 15 questions. However, the index is calculated based on feedback to four or five questions that generally cover:

- Appraisal of current and/or future business and economic conditions
- Appraisal of current and/or future employment conditions
- Appraisal of households' current and/or future financial conditions

The Byblos Bank/AUB Consumer Confidence Index is composed of five questions

Most indices follow the model adopted by the Conference Board, the University of Michigan or the European Commission. The Byblos Bank/AUB CCI questionnaire is based on the questionnaire adopted by the University of Michigan. The Byblos Bank/AUB CCI is composed of five questions: two questions assess current conditions and three questions measure future expectations. We adopted a time lag of six months rather than one year when asking consumers about their expectations about future economic conditions.

The survey questionnaire is of a directive style and is divided into three parts:

- i. An introduction about the party conducting the research, showing that it guarantees anonymity
- ii. A total of 22 direct questions that include prompted and non-prompted questions, open-ended questions, and closed-ended questions, of which five questions are used to calculate the index
- iii. A concluding part that covers the profile of the respondents and that is used in the analysis and the data cross-tabulations

The Byblos Bank/AUB Consumer Confidence Index is based on responses to the following five questions:

- 1- Would you say that you and your family are better off or worse off financially today than you were six months ago?
- 2- Do you think that, six months from now, you and your family will be better off financially or worse off or just about the same as now?
- 3- Do you expect that business conditions in the country will be better or worse than they are at present or just about the same?
- 4- How about people out of work in the coming 6 months, do you think that unemployment will be higher than now, about the same or less?
- 5- Do you think this is a good time or a bad time for people to buy major household items?

Two questions assess current conditions and three measure future expectations

The first two questions assess respondents' financial condition and expectations. The third and fourth questions evaluate consumers' expectations about the Lebanese economy and unemployment. The fifth question measures current consumption tendency of consumers.

In addition to the five index questions that are used for the calculation of the Byblos Bank/AUB Consumer Confidence Index and its sub-indices, the survey includes other questions that assess consumers' intentions to purchase specific items; in addition to their expectations about interest rates, inflation, borrowing plans, vacation plans, and life insurance.

The questionnaire was initially drafted in English. The questions were reformulated to remove any confusion in meaning and to improve the questionnaire flow. Several versions were presented before a final draft was approved for a pilot test to be conducted by Statistics Lebanon. The questionnaire was then translated into Arabic by Statistics Lebanon and was edited by a certified professional translator. Pilot testing is a preliminary run of a study on a limited number of respondents (generally 10 to 20) for the purpose of verifying that the questionnaire is well-formulated in terms of flow and comprehensiveness. The Byblos Bank/AUB survey questionnaire was piloted over 25 respondents; and the results of the pilot test were positive, as respondents found the questions to be simple, clear and quick to answer.

D - OPINION POLLING AND SAMPLE DESIGN

We consider determining the size of the sample and selecting the sample to be very important elements of the opinion polling process.

1 - Sample Size

The size of the sample is an important parameter, as it needs to be large enough to ensure reliability requirements. The factors that are usually taken into consideration in determining the sample size include the size of the population, the level of precision required, and the confidence level. The survey for the Byblos Bank/AUB Consumer Confidence Index is a national sample and needs to cover the entire Lebanese territory. Therefore, the sample size has to be sufficient to be representative of the entire Lebanese population. Moreover, the level of data segmentation is also taken into account to determine the size of the sample. This refers to how the data is broken down and analyzed by groups or segments (for example, by age, geographic area, etc). In this case, an average sample size of around 100 per cluster is needed to be able to carry out significance testing. Given that we are analyzing the results along a number of categories, the Byblos Bank/AUB Consumer Confidence Index requires a sufficient sample size. Assuming a population size of 4.17 million for Lebanon, a margin of error of $\pm 2.83\%$, a confidence level of 95% and a fraction of responses of 50%, the recommended size of the survey is 1,200, which is the survey size we are using for the monthly Byblos Bank/AUB CCI waves. Also, the average rejection rate is around 35% per wave, but Statistics Lebanon maintains the total sample interviewed at 1,200 for each wave.

The survey uses a representative sample of 1,200 respondents per wave

We used the following formulas to calculate the sample size n and margin of error E :

$$x = Z \left(\frac{c}{100} \right)^2 r(100 - r)$$

$$n = \frac{Nx}{((N - 1)E^2 + x)}$$

$$E = \sqrt{(N - n)x/n(N - 1)}$$

where N is the population size, r is the fraction of responses that we are interested in, and $Z \left(\frac{c}{100} \right)$ is the critical value for the confidence level c .

2 - Selection of the Sample

National Coverage

Credible consumer confidence indices are generally national in scope. The samples of indices produced in developed and industrialized nations such as the U.S. and Western Europe cover the entire population. In contrast, many indices produced in emerging markets and developing economies that have a high level of poverty are generally based on samples representing the urban population and/or the middle and upper classes. The main reason behind the narrow sample is that in such countries, consumers with low purchasing power have little bearing on consumer spending and, consequently, a negligible impact on economic activity.

The sample is national in scope...

Lebanon is divided into six administrative districts: Beirut, Mount Lebanon, North Lebanon, South Lebanon, Nabatieh, and the Bekaa.

In view of the large variations across Lebanese administrative districts, or governorates (*mohafaza*), and to ensure that the Byblos Bank/AUB Consumer Confidence Index accurately reflects consumer sentiment across Lebanon, we concurred with the results of the feasibility study that the survey sample must be nationally representative in scope and coverage, rather than be limited to the capital city and its suburbs, known as the Greater Beirut Area. Coverage of Greater Beirut only would be biased and would not be indicative of the sentiment of the entire population, especially that the profile of residents in Greater Beirut varies considerably from that of other administrative districts in terms of population concentration and socioeconomic status. Also, Lebanon benefits from relatively good standards of living and is classified as an Upper Middle-Income country by the World Bank. This, along with the small size of the population, supported our decision to have a nationally representative sample.

...and covers all regions and socioeconomic classes proportionately

The survey sample represents the entire Lebanese population proportionately across regions, both urban and rural, and across socioeconomic classes A, B, C and D (A= upper social class, B= middle social class, C= lower social class and D= lower lower social class) as defined by Statistics Lebanon (see Appendix IX).

In the presentation of the data, we have opted to merge Nabatieh with the South given their geographical proximity and the similarity in socioeconomic profiles.

Classification by Category

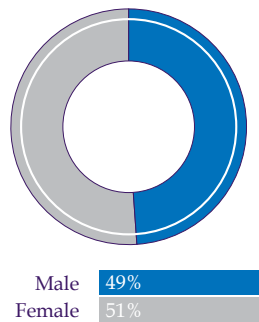
We selected our survey sample to represent the adult population at large in terms of gender, age, occupation, income, administrative district and religious affiliation. As such, the survey sample was classified under these six categories, each of which was, in turn, classified under different sub-categories. The breakdown of the sample is as follows:

Category	Sub-category
Gender	Male
	Female
Age	Age group 1: 21-29 years
	Age group 2: 30-39 years
	Age group 3: 40-49 years
	Age group 4: 50-59 years
	Age group 5: 60 years and older
Occupation	Private sector employee
	Public sector employee
	Self-employed
	Student
	Housewife
	Unemployed
Monthly Household Income	\$500 or less
	Between \$501 and \$1,000
	Between \$1,001 and \$2,000
	\$2,001 or more
Administrative District	Beirut
	Mount Lebanon
	North
	Bekaa
	South (including Nabatieh)
Religious Affiliation	Christians
	Sunnis
	Shiites
	Druze

The selected survey samples follow very similar breakdowns to those of the Lebanese population. For example, the charts below present the estimated actual population breakdown and the March 2011 survey sample breakdown by gender, age, income, administrative district and religious affiliation.

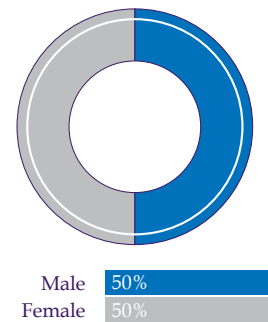
Chart 7 - Estimated Actual Population vs Sample Breakdown

Estimated Actual Population Breakdown by Gender



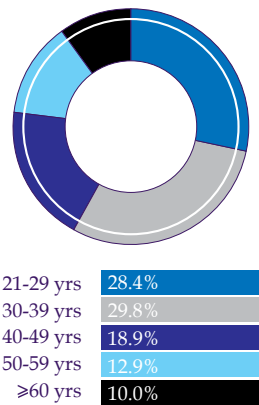
Source: World Bank, 2010 data

Population Breakdown by Gender Taken in Sample



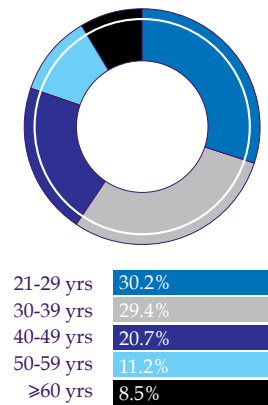
Source: Statistics Lebanon

Estimated Actual Population Breakdown by Age



Source: Statistics Lebanon

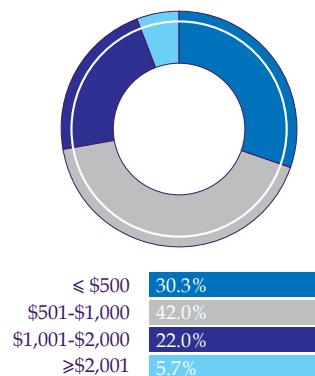
Population Breakdown by Age Taken in Sample



Source: Statistics Lebanon

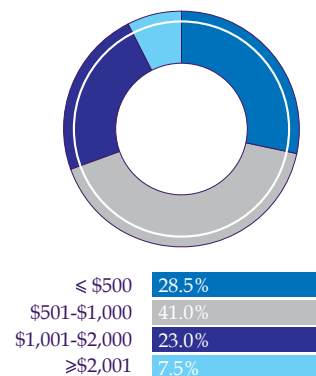
The survey samples follow very similar breakdowns as those of the Lebanese population

Estimated Actual Population Breakdown by Income*



* monthly household income
Source: Statistics Lebanon

Population Breakdown by Income Taken in Sample*



* monthly household income
Source: Statistics Lebanon

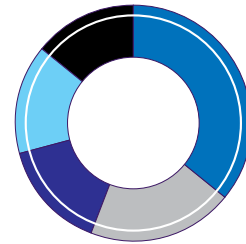
Estimated Actual Population Breakdown by Administrative District



Mount Lebanon	39.5%
North	20.3%
South	17.6%
Bekaa	13.0%
Beirut	9.6%

Source: Statistics Lebanon

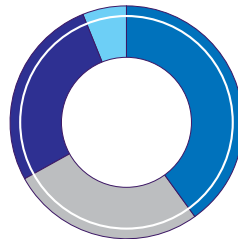
Population Breakdown by Administrative District Taken in Sample



Mount Lebanon	36%
North	20%
South	15%
Bekaa	15%
Beirut	14%

Source: Statistics Lebanon

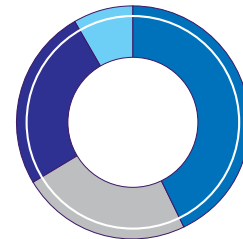
Estimated Actual Population Breakdown by Religious Affiliation



Christians	39.0%
Sunnis	27.5%
Shiites	27.5%
Druze	6.0%

Source: Statistics Lebanon

Population Breakdown by Religious Affiliation Taken in Sample



Christians	42.9%
Sunnis	23.7%
Shiites	25.2%
Druze	8.2%

Source: Statistics Lebanon

The sampling methodology is based on the Probability Proportional to Size technique

The Probability Proportional to Size Sampling Technique

In order to ensure that the sample accurately represents the Lebanese population at large, we agreed with Statistics Lebanon to use the Probability Proportional to Size (PPS) sampling technique. PPS is a sampling methodology that is used in surveys where the probability of selecting a sampling unit (e.g., administrative district, city, village, zone, etc.) is proportional to the size of its population. The PPS sampling technique uses clusters, or cluster sampling, that requires fewer units to select the sample compared to other methodologies. One additional advantage of using PPS for random sampling is that it controls selection bias.⁹ We believe that PPS is more appropriate for this particular survey than other probability sampling techniques such as the Simple Random Sampling and Stratified Sampling techniques. We excluded all non-probability sampling techniques such as Quota Sampling, Convenience, Haphazard or Accidental Sampling, and Line-Intercept Sampling.

Cluster sampling is generally implemented as multi-stage sampling. The latter is an advanced form of cluster sampling in which two or more levels of units, in this case households, are embedded one in the other. In the first stage, Statistics Lebanon selects the predefined clusters that will be used to select the sample from. In the second stage, the firm randomly selects a sample of households from each cluster, rather than using all households contained in all selected clusters.

In following stages, the firm selects additional samples of households from each of the selected clusters, and so on. Statistics Lebanon then surveys all individuals selected at the last step of this procedure. This technique is basically the process of taking random sub-samples of preceding random samples.

Lebanon is composed of 841,000 households, divided into 1,230 populated districts. In turn, these districts are formed of 10,560 statistical clusters.¹⁰

Statistics Lebanon selects the sample through four stages:

- 1- First, it selects 126 clusters under the PPS sampling technique, which are considered the Primary Sampling Unit (each cluster contains between 100 and 150 households).
- 2- Second, it selects households using systematic sampling, which is 8 to 9 households from each cluster.
- 3- Third, it lists on a Kish Grid all adults over 21 years old who are available at the time of interview.¹¹
- 4- Fourth, it selects an adult at random using the Kish Grid from the obtained list.

The cluster selection process is based on the following procedure:¹²

Location number	Population location size	Cumulative
1	S1	C1=S1
2	S2	C2=S1+S2
3	S3	C3=S1+S2+S3
4	S4	C4=S1+S2+S3+S4
.	.	.
.	.	.
.	.	.
N	SN	CN=S1+...+SN

- a- A list of population locations in the target population is prepared under the Primary Sampling Unit.
- b- The sampling interval $L = CN/k$ is calculated, where 'k' is the number of clusters to be selected.
- c- A random number X_0 is selected from the interval $[0,L]$.
- d- The i^{th} random number $R_i = X_0 + (i-1)*L$ is calculated.
- e- The i^{th} cluster is selected in the sample if R_i belongs to the interval $[C_i, C(i+1)]$.

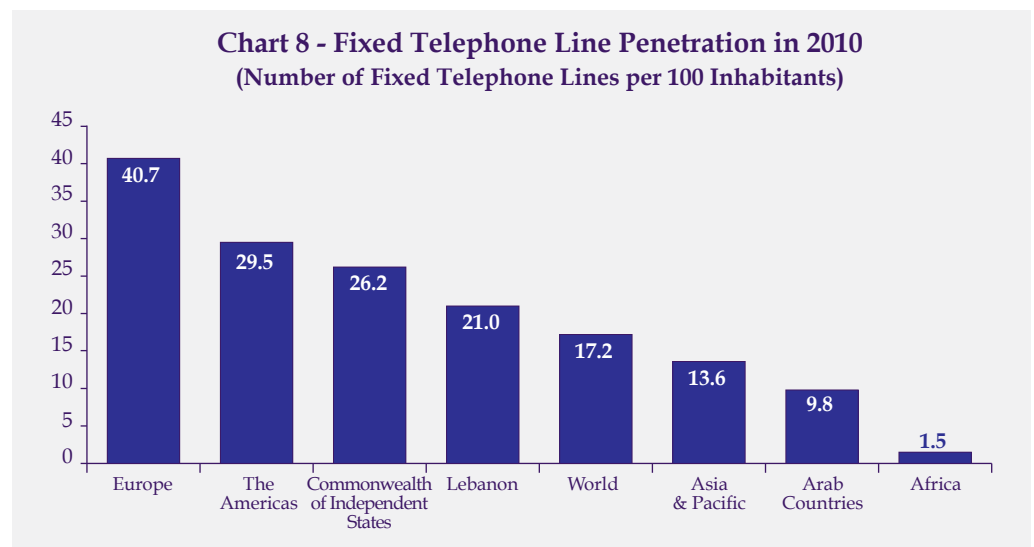
Source: Statistics Lebanon

3 - Data Collection and Survey Methodology

The most common survey methods used for public opinion polls are face-to-face and telephone interviews. Face-to-face surveys are normally conducted using geographic area multi-stage probability sampling, whereby every element in a determined population has equal chances of being selected. Telephone surveys are more prevalent in industrialized countries where fixed telephone line penetration is high, such as the 58.6% rate in Switzerland.¹³ In countries where telephone penetration is relatively low or skewed, whether geographically or across income groups, surveys tend to be conducted face-to-face as telephone surveys could lead to biases.

To ensure a more accurate representation of the population, the survey is conducted through face-to-face interviews

According to the International Telecommunication Union, there were 887,795 fixed telephone lines in Lebanon at end-2010, equivalent to around 21 fixed telephone lines per 100 inhabitants.¹⁴ Fixed telephone line penetration in Lebanon is skewed across regions and income groups. Also, Lebanon is a geographically small country, which makes it easier to reach all regions including rural areas to conduct face-to-face surveys.



Source: International Telecommunication Union

We chose the face-to-face interviewing technique using the door-to-door approach at homes of respondents, because we believe it is the most appropriate method for data collection for this survey and to ensure a more accurate representation of the population.

Advantages of face-to-face interviews

- The rejection rate for telephone interviews is much higher than for face-to-face interviews.
- The attention span of interviewees is much higher during face-to-face interviews than it is over the phone.
- Respondents may be more forthcoming on financial issues when interviewed in person.
- Face-to-face interviews allow for better interaction and for flexibility in time spent for completing the interview.
- Face-to-face interviews allow the polling company to reach exact destinations using maps and sketch maps.
- The Kish Grid can be used in order to choose the right person as per the grid.
- Face-to-face interviews enable the polling company to perform back-checks.
- Face-to-face interviews ensure that urban versus rural ratios are met.
- Face-to-face interviewing provides access to a wide range of respondents, especially those in lower socioeconomic groups where telephone penetration is not as prevalent. Conversely, telephone interviews may result in a less representative sample due to the uneven distribution of telephones across the country.

4 - Survey Frequency

Surveys about consumer confidence in advanced economies and in many emerging markets and developing countries are conducted on a monthly basis to reflect consumer trends more accurately. The issuing organizations have generally determined that a lesser frequency, such as quarterly or semi-annual surveys, cannot capture and track the variations in consumers' mood in a precise way. Further, issuing organizations in advanced economies have chosen a monthly frequency, even though their countries do not experience severe political shocks or go frequently through significant political events. In contrast, the Lebanese economy has historically been and continues to be subjected to political shocks. In turn, the high frequency of political developments has inevitably had a material impact on consumers' sentiment. Therefore, we decided to conduct the survey on a monthly basis in order to factor in and closely track the impact of political and other events on consumer confidence. We deemed that a quarterly frequency would be inappropriate given the turbulent political scene, as it would not be able to identify the factors affecting consumer confidence and accurately reflect the swings in their sentiment. Also, monthly surveys would track trends in consumer sentiment better than quarterly or longer frequencies, even in the case of long-term political stability in Lebanon.

The survey is conducted monthly to better track consumer trends

A survey in the latter part of the month reflects more accurately consumers' mood

5 - Fieldwork

The fieldwork is conducted in the last 10 days of each month. We decided to have the survey conducted during the latter part of the month in order to better reflect consumer sentiment. Indeed, if the survey were to be conducted at the beginning of each month, the results might be distorted given that consumers would have just received their salary, which might boost their sentiment temporarily. A survey in the latter part of the month reflects more accurately consumers' mood after having spent a substantial part of their monthly income and, therefore, minimizes or eliminates altogether the related distortion.

Seven teams composed of around 30 trained interviewers carry out the fieldwork. A team leader directs each group of four or five interviewers. Further, an area coordinator controls the team leaders' fieldwork in their specified geographic zone. All the field teams are equipped with radio transceivers and GIS linked to satellite. An operations room inside Statistics Lebanon's office is always in direct contact with the field teams and their leaders.

E - INDEX CALCULATION METHOD

The Byblos Bank/AUB Consumer Confidence Index is based on the same methodology adopted by the University of Michigan's Survey Research Center for its Index of Consumer Sentiment.

1 - Computation of the Consumer Confidence Index

Respondents are asked to provide one of three answers to each of the five questions. The options are "positive" (favorable), "negative" (unfavorable) and "neutral" (same). For each of the questions, the relative value is computed by calculating the difference between the percentages of positive and negative responses, while neutral responses are eliminated. The "diffusion index" for each question is then calculated by adding one hundred (100) to each of the relative values to normalize the scale. The Byblos Bank/AUB CCI is then compiled by calculating the arithmetic average of the five diffusion indices. The methodology consists of two computations:

- A- Diffusion Index of each question = $((\text{Number of optimistic or positive answers to the question} - \text{Number of pessimistic or negative answers to the question}) / (\text{Total number of positive and negative answers to the question})) * 100 + 100$
- B- Byblos Bank/AUB CCI Value = $((\text{Diffusion Index of Q1}) + (\text{Diffusion Index of Q2}) + (\text{Diffusion Index of Q3}) + (\text{Diffusion Index of Q4}) + (\text{Diffusion Index of Q5})) / 5$

2 - Base Period

We chose 2009 as the reference year for the index due to the fact that it was a normal year by Lebanese standards and compared to the other years with available data. Lebanon did not go through domestic political shocks, did not experience internal security incidents, and did not face cross-border clashes during the year. Moreover, the level of political discourse was relatively calm, while economic activity was normal, did not face disruptions, and grew at a significant rate. We chose January 2009 as the base month for the index, given that its value is close to the annual average value of the full year. Therefore, we set the Byblos Bank/AUB CCI at 100 for the base month of January 2009. The index readings for the other months were benchmarked against the base month. As such, an index value of 100 in any month indicates consumers showing the same level of confidence as in the base month of January 2009. An index value of 105, for instance, indicates an increase in consumer confidence of 5% relative to the base month and an index value of 95 indicates a 5% decrease in confidence compared to the base month of January 2009.

*January 2009 serves as the
base month*

3 - Computation of the Sub-Indices

The Byblos Bank/AUB CCI comprises two sub-indices: the Byblos Bank/AUB Present Situation Index and the Byblos Bank/AUB Expectations Index. The Present Situation Index, which represents consumers' opinion about current economic conditions, is compiled by calculating the arithmetic average of the Diffusion Indices of questions 1 and 5. The Expectations Index, which represents consumers' outlook about the future of the economy, is compiled by calculating the arithmetic average of the relative values of the other three questions. We also developed other sub-indices by gender, age, occupation, income, administrative district, and religious affiliation. We benchmarked the sub-indices against the base month of January 2009.

F - INDEX TESTING AND VALIDATION

The fieldwork started in May 2007. Statistics Lebanon conducted the first two waves in May and June 2007 as test runs to refine all data collection processes, to check the quality of the sampling, and to evaluate the firm's field procedures. The data collected in the third wave of July 2007 was deemed solid for publication and marks the start of the compilation of the Byblos Bank/AUB Consumer Confidence Index. At the end of each of the first three waves, the whole data collection and processing method was evaluated. Some issues were identified and addressed accordingly.

G - CO-PUBLISHING PARTNER

Byblos Bank decided to issue the Consumer Confidence Index in cooperation with the American University of Beirut

There is an ongoing trend worldwide for institutions to form partnerships or co-sponsorship agreements with other organizations to co-publish research reports about various topics or indicators, especially in the case of groundbreaking or original research. In the case of private sector companies, such agreements are generally with non-profit organizations, educational institutions, or research establishments. The partnerships are usually determined based on a shared vision and complementary skills, abilities and resources, as well as to enhance the credibility and objectivity of the reports and data being issued. For instance, several financial institutions in the developing world have formed partnerships with research bodies or non-governmental organizations (NGOs) to launch consumer confidence indices.

Believing in the value-added of a partnership with an academic institution for this project, Byblos Bank decided to issue the index in cooperation with the American University of Beirut (AUB) through the Olayan School of Business (OSB). AUB is a leading academic institution of higher learning in Lebanon and the Arab world, and has a long-established tradition of academic excellence. Also, the Olayan School of Business has increasingly focused its efforts and dedicated its resources to research. It is the first business school in Lebanon to receive the accreditation of the Association to Advance Collegiate Schools of Business (AACSB).¹⁵

Byblos Bank and AUB share the same vision about the need to raise the transparency of the Lebanese economy through providing a new generation of indices that would fill the statistical gap in the country. Both institutions also believe that this index will provide a new tool to economic and business researchers, policymakers, local and international analysts, rating agencies, multilateral institutions, as well as other stakeholders. AUB, through the Finance, Accounting and Managerial Economics Track (FAME) and the Management, Marketing and Entrepreneurship Track (MME) at OSB, has played an important role in the evolution of the project by providing general input and analysis, and by evaluating the statistical data processing and contributing to the results' analysis. In addition, the teams from the two institutions have joined their complementary skills to collaborate on this project.

The Byblos Bank/AUB Consumer Confidence Index is the:

- First consumer confidence index produced by a banking and financial institution in the Middle East & North Africa
- First cooperation of its kind between the private sector and an academic institution in Lebanon and the Arab world
- First comprehensive national consumer confidence index in Lebanon
- First consumer confidence index to represent the entire Lebanese adult population in terms of geographical region, gender, age, income, occupation, and religious affiliation
- First consumer confidence index to utilize a sample size of 1,200 respondents, which is the largest sample size of any survey that regularly tracks consumer behavior in Lebanon
- First consumer confidence index to use face-to-face interviews for such a large sample
- First consumer confidence index to use sample breakdowns close to the population breakdowns
- First consumer confidence index to provide the longest time series using monthly frequencies
- First consumer confidence index in the Middle East & North Africa to have 26 sub-categories in addition to two sub-indices

III - Analysis of Results

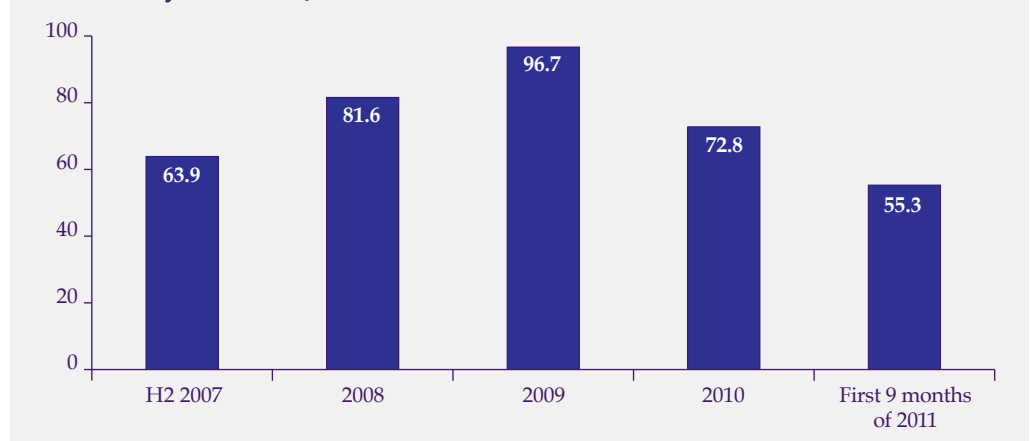
In analyzing the results of any consumer confidence index, it is important to consider the trend of the index over several months instead of just comparing month-to-month changes or variations of the current month relative to the same month of the previous year. Analysis that focuses only on single monthly figures without looking at the developing trend would be incomplete and can be misleading. Therefore, our analysis focuses on trends that form a linear progression, as well as event-driven analysis.

A - ANALYSIS ON A CALENDAR BASIS

The CCI results for the July 2007 to September 2011 period show that consumer confidence was highest on average in 2009; followed by 2008 and 2010 that had substantially lower levels of confidence than the reference year; while the lowest readings of consumer confidence were during the second half of 2007 and the first nine months of 2011. Indeed, 2009 had a median index value of 100.2 and an average of 96.7; followed by 2008 that had a median of 79.3 and an average of 81.6; then 2010 that ended with a median of 76.6 and an average of 72.8; the second half of 2007 that had a median of 63.5 and average of 63.9; and finally the first nine months of 2011 with a median of 55.6 and an average of 55.3, leaving this period with the lowest readings of the index.

Consumer confidence was highest on average in 2009...

Chart 9 - Byblos Bank/AUB Consumer Confidence Index on a Calendar Basis*



...and lowest in the first nine months of 2011

* monthly average for the period

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

1 - The Second Half of 2007

The second half of 2007, which marks the start of the index compilation, was mired by a three-month military confrontation between the Lebanese Army and terrorist groups in the North; by the assassination of a member of Parliament and a Lebanese Army General; by the paralysis of government institutions; by the continuing sit-in that froze activity in downtown Beirut; and by the start of a vacuum at the Presidency of the Republic due to the end of the president's mandate in November and the inability of Parliament

to elect a replacement within the constitutional deadline. The CCI values varied between 59 and 69 and averaged nearly 64 during the six-month period. Further, tensions between the two main political camps in the country were elevated and political polarization was high, which combined to show a near systematic monthly decline in the level of confidence during the second half of the year.

2 - The Year 2008

2008 was an atypical year...

The following year saw both strong negative shocks and powerful positive events, which make 2008 an atypical year. Indeed, the first four months of 2008 saw the continuation of the political trends that prevailed in 2007 until political tensions boiled over into military confrontations in early May across Beirut and in several areas of the country, threatening a descent into prolonged civil strife. The index averaged 54.5 per month in the January-to-April period, a normal consequence of the increasing political confrontation and rhetoric. Consumer confidence was reeling under the weight of prevailing uncertainties that were carried over from the preceding year and that intensified in the first four months of 2008.

...that saw both strong negative shocks and powerful positive events

The severe deterioration of domestic security conditions in early May was countered by Arab and international mediation that produced the Doha Accord on May 21st. The Accord restored political stability and security conditions, put an end to the 18-month political deadlock, paved the way for the election of a President and the formation of a national unity Cabinet, re-activated state institutions from their months-long paralysis, and ended the downtown sit-in. As a result, the CCI jumped 102.6% month-on-month to 133.6 in May 2008, its highest value since the start of the index's calculation, as Lebanese residents regained confidence in the future economic and political situation of the country. Since the field survey of the CCI is compiled over the last 10 days of each month, the results of the May survey reflected the radical change in Lebanese consumers' sentiment and outlook, given that the Doha agreement had already been announced and its on-the-ground implementation had started.

The Doha Accord's jolt to confidence in May gave way to more normal readings of the index in the following four months, with a rise in confidence in July from the formation of a national unity Cabinet after six weeks of deliberations. In fact, the drastic jump in confidence in May was not expected to remain at its elevated level, given that it was an exceptional one-time "positive shock" event that turned around the outlook from serious fears of civil strife into stability.

The fourth quarter of 2008 saw a bounce in confidence, as the index averaged 106 and reached 111.5 in October. First, domestic fears of contagion from the global financial crisis, which were rising in the second half of September and in early October, receded and made way for higher confidence. Second, the resilience of the Lebanese economy to the escalating global crisis received

widespread coverage in the local, regional and international media. More importantly, the Lebanese banking sector emerged unscathed from the spread of the crisis to the MENA region, and turned out to be one of the most liquid and well-managed systems, at a time when liquidity was at a premium worldwide and governments and Central Banks around most of the developed world and in many emerging economies were scrambling to rescue their financial sectors. The boost also reflects the government's decision in September to increase the minimum wage and the monthly salaries of the private and public sectors, with the decision entering into force in October.¹⁶ The two developments generated positive sentiment among the Lebanese working population, as the CCI reached its second highest reading in October since inception.

3 - The Reference Year

The start of 2009 picked up where 2008 ended, as political calm kept confidence at a solid level, despite a slight drop in February and March. The index averaged 97.5 in the first half of the year. But the index reached lower levels of 83.3 in February 2009 and 85.6 in March 2009, which could reflect the prevailing uncertainty at the time about the impact of the financial crisis on the Lebanese Diaspora and the increasing anticipation of the return of many unemployed expatriates to Lebanon. The index picked up again in April 2009 before reaching a high reading of 110.8 in May 2009, one month prior to the parliamentary elections. Indeed, the main political event of the year was the June parliamentary elections with what it entailed in terms of mobilization and expectations. The index's rise reveals that Lebanese consumers anticipated an orderly election process, with elections taking place in a stable climate and without disruption. They also expected in general a positive outcome from the elections, as the supporters of each of the two main political coalitions anticipated their side to win a parliamentary majority. Also, the necessary political spending during an election cycle of this magnitude could have played a role in raising confidence, given the large amounts that were reportedly disbursed by both sides on organization, advertising, get-out-the vote campaigns, and other election-related issues.

The CCI averaged 89.6 in the third quarter of the year, down from an average of 105.3 in the second quarter. It posted a slight decline in July, probably from the inevitable disappointment of a segment of the population with the election's results. But it slid more significantly in August and September, as the formation of a coalition Cabinet stalled due to recurring complications. The slide becomes more relevant in light of the record tourism season, which reflects the strong impact of political developments on confidence levels and the anxiety of citizens in the face of renewed political uncertainty. The fourth quarter of the year saw a pick up in confidence, with the index averaging 102.2 and peaking at 109.6 in December. The main driver of confidence during the quarter was the formation of the national unity Cabinet in November 2009 after four months of back-and-forth between the parliamentary majority

*Political calm kept confidence
at a solid level in 2009...*

*...with the main political
event being the June
parliamentary elections*

and the minority. The announcement of the Cabinet's line up on November 9 led consumers to breathe a sigh of relief, and carried confidence forward into the end-of-year holiday season.

4 - The Year 2010

Following the positive momentum generated in the fourth quarter of 2009 from the government's formation, consumer confidence readjusted to its more normal trend as it averaged 92 in the first quarter of 2010 and retreated to a monthly average of 81 in the second quarter of 2010. Just like the main political event of the first half of 2009 was the parliamentary elections, the main political event of the first half of 2010 was the municipal elections scheduled to take place throughout May and June of that year. The level of confidence reached a low of 71.8 in April ahead of the elections, but picked up again in May and June to average 85.4 over the two electoral months. Similarly to the parliamentary elections, the municipal elections took place in a stable climate and without disruption. This helped support confidence, but the level of anticipation was lesser than that of the parliamentary elections, which explains the more subdued CCI readings during the period.

The level of confidence started to drop systematically when political tensions resurfaced in the second half of 2010

The third quarter of the year saw a significant drop in the CCI, as it averaged 67 during the three months and declined abruptly in August and September to levels not seen since the first quarter of 2008. The drop was triggered by the escalation of political tensions related mainly to the Special Tribunal for Lebanon (STL),¹⁷ as the systematic rise in political rhetoric that began in late July alarmed citizens and affected confidence. It was amplified by two security shocks that took place within three weeks of each other, as the Lebanese Army faced off briefly with Israeli soldiers on the Lebanese-Israeli border on August 3 and, more significantly, severe clashes erupted on August 24 between armed factions in the Bourj Abi Haidar area of Beirut and lasted several days. The fourth quarter of the year was not any better, as confidence levels continued to deteriorate. The CCI averaged 51.5 during the quarter and reached a record low of 47.7 in December, as the rise in political rhetoric escalated into political confrontation and paralyzed the Cabinet's decision-making process. The year ended very differently than the way it started, with the level of consumer confidence in December at less than half its level a year earlier. Indeed, the border skirmish, the Beirut armed clashes, and the renewed domestic political confrontation reminded consumers of the underlying security risks and volatile political climate.

5 - The First Nine Months of 2011

The CCI averaged 54.6 in the first quarter of 2011, with a low of 47.5 in March. The first month of 2011 was a microcosm of political events that affect consumer confidence in Lebanon. The collapse of the Hariri Cabinet of national unity on January 12, the ensuing street protests, the threat of a power vacuum, and the sudden rise in political uncertainties combined to severely affect the outlook and, therefore, appeared to further impact

*Consumer sentiment
dropped to an all-time low
in August 2011*

confidence. But the designation of MP Najib Mikati as Prime Minister on January 25 helped the level of confidence to recover somewhat, with the CCI improving to 60.7 in January from its low in the preceding month. However, the confidence level deteriorated again in February with the delays in the Cabinet's formation, especially in view of expectations that the Cabinet's one-sided composition would speed its birth. These delays resulted in a transitional period of extended power vacuum and government paralysis. The index declined further in March to reach an all-time low of 47.5 by then, as this time the start of street protests in Syria worsened the prevailing level of uncertainties and clearly took its toll on confidence. The protests in Syria were highly unexpected, therefore creating an external shock with domestic implications, and added a new dimension to consumers' anxieties. Consumer confidence improved somewhat in the second quarter, as the CCI averaged 57, driven by a jump to 67.4 in June upon the formation of the Cabinet after a nearly five-month delay.

But the level of confidence in the third quarter readjusted downward, as the positive impact of the government's formation was brief and gave way to renewed consumer skepticism in light of domestic and regional uncertainties. Indeed, the index averaged 54.2 per month during the third quarter and reached yet again a new all-time low of 46.4 in August on consumer fears of potential domestic repercussions from the issuance by the Special Tribunal for Lebanon of four arrest warrants at the end of June and the renewed political rhetoric about this issue, as well as from the unabated turmoil in Syria.

Table 2 - Results of the Byblos Bank/AUB Consumer Confidence Index, Byblos Bank/AUB Present Situation Index and Byblos Bank/AUB Expectations Index

	2007			2008			2009			2010			2011		
	CCI*	PSI**	EI***	CCI*	PSI**	EI***	CCI*	PSI**	EI***	CCI*	PSI**	EI***	CCI*	PSI**	EI***
January				49.8	37.6	57.9	100.0	83.0	111.3	94.7	72.0	109.9	60.7	34.2	78.3
February				51.1	43.8	56.0	83.3	70.0	92.1	95.8	79.6	106.7	55.6	43.5	63.6
March				51.1	46.4	54.2	85.6	68.3	97.2	85.4	73.5	93.3	47.5	41.5	51.5
April				65.9	67.6	64.7	102.3	73.2	121.7	71.8	63.0	77.9	52.5	46.1	56.7
May				133.6	76.6	171.5	110.8	83.3	129.3	86.6	79.3	91.5	51.5	47.5	54.2
June				71.3	63.9	76.2	102.8	69.0	125.4	84.2	70.4	93.5	67.4	50.3	78.9
July	68.7	53.4	78.8	81.0	59.4	95.4	100.5	78.0	115.3	81.4	83.4	80.2	58.1	49.3	64.0
August	67.0	56.3	74.3	78.8	75.9	80.8	86.2	79.1	90.9	67.0	64.7	68.7	46.4	46.5	46.4
September	61.6	50.8	68.9	79.7	76.9	81.4	82.1	74.6	87.2	52.5	57.3	49.4	58.0	49.5	63.6
October	63.2	41.8	77.4	111.5	89.6	126.0	96.3	79.9	107.3	57.1	49.7	62.2			
November	63.8	46.1	75.7	105.0	83.6	119.2	100.6	77.7	115.9	49.7	44.4	53.3			
December	58.8	42.7	69.5	101.1	90.4	108.0	109.6	77.7	130.8	47.7	41.2	52.0			

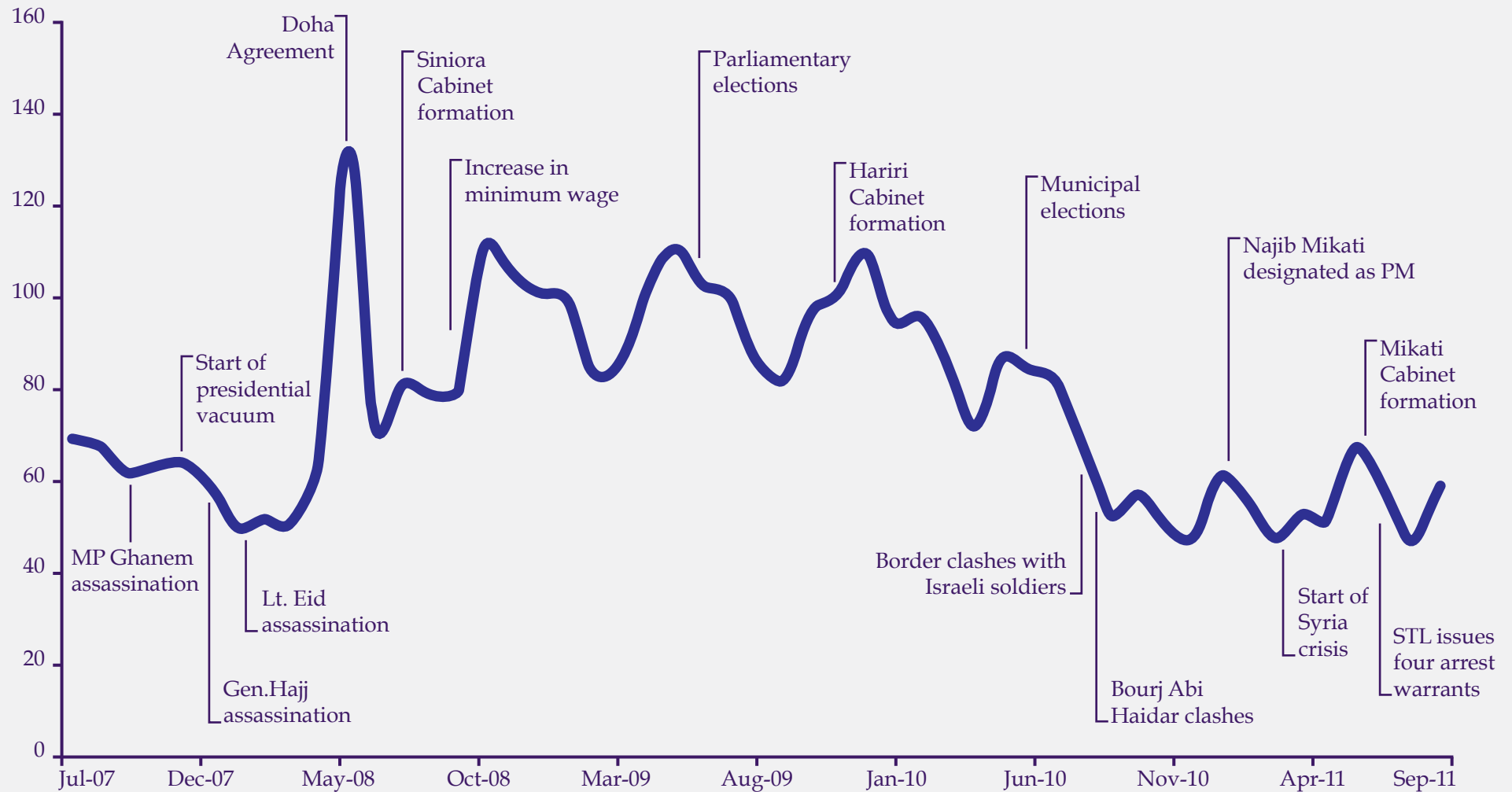
* CCI: Byblos Bank/AUB Consumer Confidence Index

** PSI: Byblos Bank/AUB Present Situation Index

*** EI: Byblos Bank/AUB Expectations Index

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Chart 10 - Evolution of the Byblos Bank/AUB Consumer Confidence Index (July 2007-September 2011)



Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

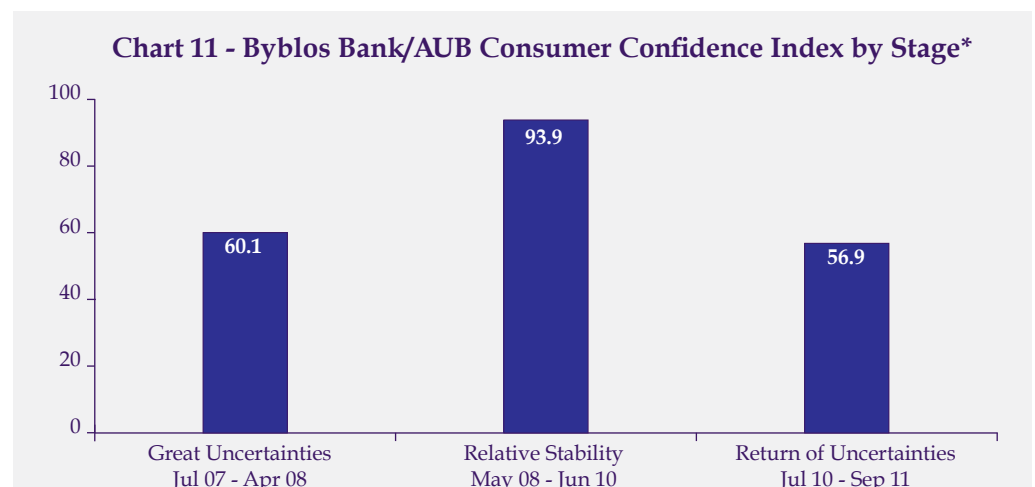
B - TIMELINE ANALYSIS

Based on the above trends, we have discerned three distinctive periods in the history of the Byblos Bank/AUB Consumer Confidence Index: a period of Great Uncertainties, one of Relative Stability, and a third of Return of Uncertainties. The first period starts in July 2007 and ends in April 2008, with the CCI averaging 60.1 during this timeframe. It was a “high risk” period dominated by political and security uncertainties that included a protracted military confrontation between the Lebanese Armed Forces and militants in the North, the assassination of three political and military figures, the paralysis of government institutions, a vacuum at the Presidency of the Republic, and the escalation of the domestic political confrontation.

The second period extended from May 2008 to June 2010 and is characterized by a significantly higher level of confidence, as the CCI averaged 94 during the 26-month span. This timeframe was a “low risk” period that saw several positive political events that helped revive consumer confidence such as the Doha Accord, the election of a president, the re-activation of state institutions, orderly parliamentary and municipal elections, the formation of two Cabinets of national unity, overall stable security conditions, as well as the increase in the minimum wage.

The third period, which stretches from July 2010 to September 2011, saw the return of uncertainties and an increase in political risks with the escalation of the political rhetoric, border clashes with Israel, domestic clashes among armed factions, the collapse of the Cabinet, a vacuum at the Cabinet level, the start of street protests in Syria, and the release by the Special Tribunal of Lebanon of indictments related to the assassination of Prime Minister Rafic Hariri. The CCI averaged 57 during the 15-month period, constituting its lowest reading throughout the three periods.

Consumer sentiment went through three stages between July 2007 and September 2011



* monthly average for the period

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

C - ANALYSIS OF PRESENT SITUATION & EXPECTATIONS INDICES

The Byblos Bank/AUB Consumer Confidence Index, the Byblos Bank/AUB Present Situation Index, and the Byblos Bank/AUB Expectations Index appear, in general, to move in the same direction over the July 2007-September 2011 period. Yet, the Byblos Bank/AUB Expectations Index displays a wider span of variation than the Byblos Bank/AUB Present Situation Index, reflecting a higher sensitivity to events. Similar to the overall index, the fluctuation of the two sub-indices is mostly affected by political developments, but with clear differentiations.

The Expectations Index displays a wider span of variation than the Present Situation Index

1 - The Byblos Bank/AUB Present Situation Index

The PSI results over the July 2007 to September 2011 period show that consumers considered that current conditions were at their best on average in 2009; followed by 2008 and 2010 that showed similar levels of confidence in the present situation but that were substantially lower than in 2009; while the lowest readings were during the second half of 2007 and the first nine months of 2011. Indeed, 2009 had a median of 77.7 and an average of 76.1; followed by 2008 with a median of 71.7 and an average of 67.7; 2010 that ended with a median of 67.6 and an average of 64.9; the second half of 2007 that had a median and an average of 48.5; and finally the first nine months of 2011 with a median of 46.5 and an average of 45.4. In fact, the median for the PSI was 64.7 and the average reading was 62.8 during the 51-month period.

The fourth quarters of 2008 and 2009 showed the highest levels of confidence in current conditions

In particular, the fourth quarter of 2008 and the fourth quarter of 2009 showed the highest levels of confidence in current conditions on a quarterly basis, with averages of 88 and 78.4, respectively. The PSI recorded a peak of 90.4 in December 2008 and another peak of 89.6 in October 2008. In contrast, the PSI fell to a 51-month low of 34.2 in January 2011, with the second lowest reading at 37.6 in January 2008. The peaks and troughs were the result of positive and negative political shocks, respectively.

The highest six-month moving average value of the PSI over the covered period was 83.2 in January 2009, followed by 82.2 in February 2009, possibly due to the positively perceived events in the preceding months that included the Cabinet formation in July 2008 and the increase in the minimum wage in October 2008. In contrast, the lowest six-month moving averages of the PSI were 41.8 in April 2011 and 42.3 in May 2011, reflecting the declining consumer mood from the end of 2010 and through the first half of 2011.

2 - The Byblos Bank/AUB Expectations Index

The results of the Byblos Bank/AUB Expectations Index for the July 2007 to September 2011 period show that consumers' outlook was highest on average in 2009; followed by 2008 and 2010; while the lowest readings were during the second half of 2007 and the first nine months of 2011. Indeed, 2009 had a median of 113.3 and an average of 110.4; followed by 2008 with a median of 81.1 and an average of 91; 2010 that ended with a median of 79 and an average of 78.2; the second half of 2007 that had a median of 75 and an average of 74.1; and finally the first nine months of 2011 with a median of 63.6 and an average of 61.9. In particular, the second quarter of 2009 showed the highest level of confidence in future conditions with an average of 125.4, followed by the fourth quarters of 2008 and 2009 with a monthly average of 118 for each.

The median for the EI was 78.9 and the average reading was 85.4 during the 51-month period. The EI recorded a peak of 171.5 in May 2008, in line with the overall CCI. In fact, the Doha Accord changed drastically consumers' outlook towards the country's economic prospects and their future financial situation. But the instant euphoria about the future gave way to more normal levels of optimism about the future, with the EI averaging 83.4 over the following four months. Expectations jumped again to higher levels, with the EI reaching 126 in October of the same year, as the implementation of the raise in the minimum wage improved the outlook for consumers. This trend carried over for the rest of the year, as the EI maintained an average of around 118 in the fourth quarter of 2008 and the momentum continued into 2009. Consumers' improved outlook was sustained by political stability, optimism about the outcome of the parliamentary elections, and the orderly proceedings of the voting, as the EI averaged 123 for the months of April, May, June and July 2009, the closest four-month average reading to the peak.

The second quarter of 2009 showed the highest level of confidence in future conditions, followed by the fourth quarters of 2008 and 2009

The protracted delays in the formation of a national unity Cabinet led to a more subdued outlook in August and September, but the breakthrough in November restored consumers' expectations to higher levels, as the EI averaged 118 in the fourth quarter of 2009 and reached 130.8 in December, its second highest reading after that of May 2008. Indeed, consumers had high expectations from the formation of the Cabinet of national unity, given that they believed the formula would herald a functioning government that would produce tangible results, such as job creation and improved living standards. This trend continued into the early part of 2010 but consumers' outlook started to deteriorate in the second half of 2010, as the confrontation within the Cabinet paralyzed decision making and the issue of the STL raised political tensions in the country, while the summer security incidents increased the anxiety level about worsening security conditions. Indeed, the EI reached 49.4 in September 2010, its lowest level up till that date and the second lowest overall reading in the 51-month period, and reflected

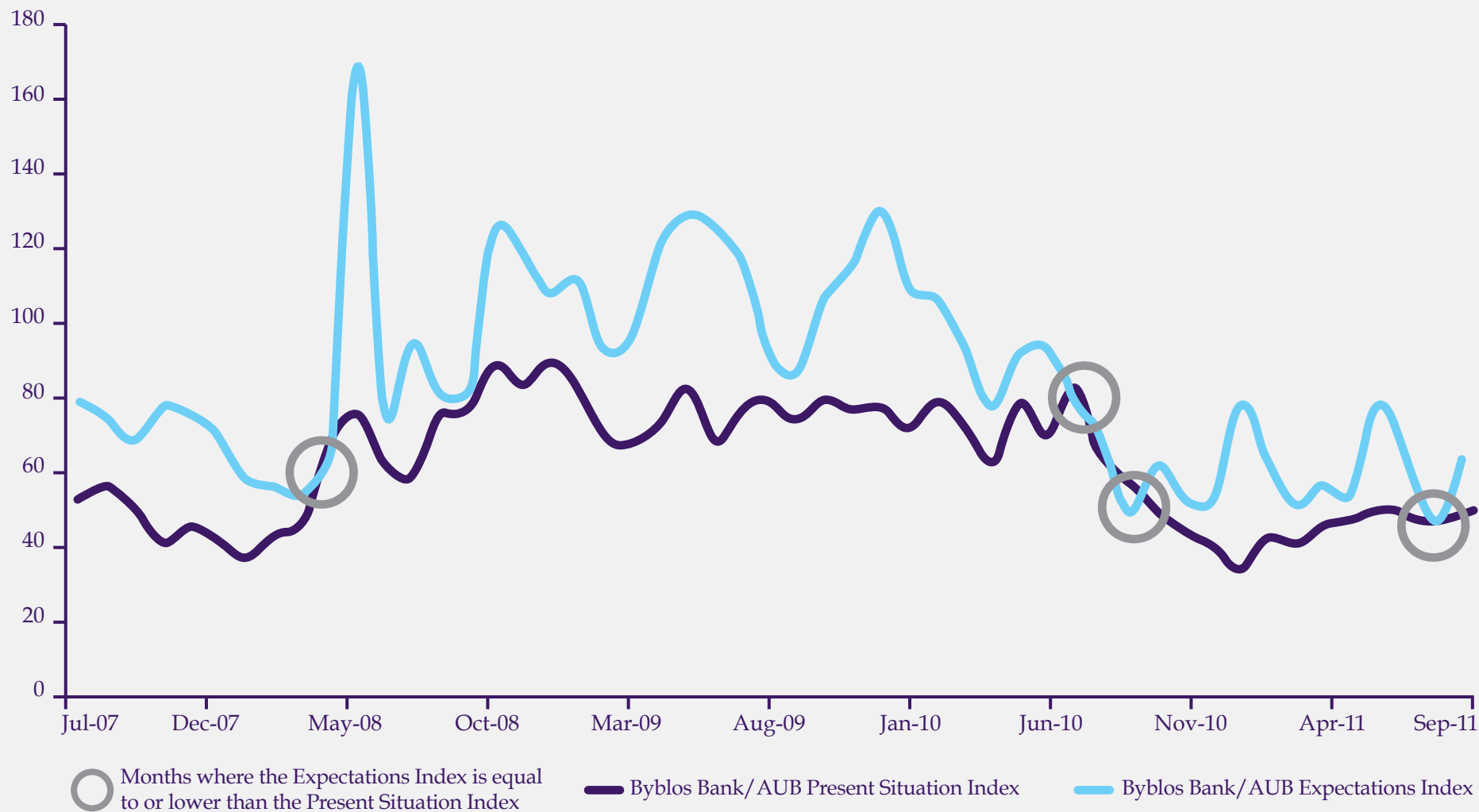
growing concerns following the shootings on the southern border between the Lebanese Army and Israeli soldiers, as well as the domestic clashes between armed factions in the Bourj Abi Haidar neighborhood of Beirut.

The collapse of the Hariri government in mid-January 2011 dimmed the outlook, but the designation of MP Najib Mikati as Prime Minister later during the month raised consumers' expectations with the EI improving from an average of 55.8 in the fourth quarter of 2010 to 78.3 in January 2011. But the delays in assembling a government raised consumers' concerns about the future, while the start of street protests in Syria generated more anxiety about the future given the new dimension of uncertainties it generated. The formation of a new Cabinet in mid-June raised consumers' hopes as reflected by the rise in the EI in June to 78.9 from an average of 54.1 during the preceding three months. But given the operating environment, consumers' expectations reverted to more subdued levels. Indeed, the EI fell to 46.4 in August 2011, its lowest level in the 51-month time series, reflecting growing consumers' concerns about future economic conditions and political stability in the country given the escalation of tensions in Syria, uncertainty about the government's approach to the STL, and the persisting economic slowdown. The outlook was further aggravated by the short-lived optimism from the Cabinet's formation, as the positive impact it created was brief and gave way to renewed consumer skepticism.

The Expectations Index reached its lowest level in August 2011, reflecting growing consumers' concerns about future economic conditions and political stability

In parallel, the highest six-month moving average value of the EI since the survey began was 113.5 in July 2009, followed by 113.3 in August 2009, in line to some extent with the overall index. The lowest six-month moving averages of the EI were in August 2011 at 58.6 and in April 2011 at 59.2, due to the worsening of consumers' mood as of the fourth quarter of 2010 and through the first eight months of 2011.

Chart 12 - Evolution of the Byblos Bank/AUB Present Situation Index and the Byblos Bank/AUB Expectations Index (July 2007-September 2011)



Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

D - GENERAL TRENDS

- The Byblos Bank/AUB CCI values show that in only 10 out of the 51 months under study, or in 20% of monthly readings, the index had a value above the base month. In particular, the fourth quarter of 2008 and the second quarter of 2009 showed the highest levels of confidence, with averages of 105.8 and 105.3, respectively. In fact, the index values have remained mostly below 100, as the median for the CCI was 71.8 and the average reading was 76.4 during the 51-month period. The Byblos Bank/AUB CCI recorded a peak of 133.6 in May 2008 and another peak of 111.5 in October 2008. In contrast, it fell to a 51-month low of 46.4 in August 2011, with the second lowest reading at 47.5 in March 2011. The peaks and troughs were the result of positive and negative political shocks, respectively.
- Consumer confidence in Lebanon is very sensitive to political developments. The results of the index for the 51 months under coverage show that political events have a disproportionately high impact on Lebanese consumers. This is especially the case when compared to external or domestic economic developments. Economic events have had little or no impact on the level of confidence during the covered period. There were no major or substantial economic events that were similar in scope to the main political developments that triggered a positive or negative consumer reaction. The raise in the minimum wage in September 2008 was about the only locally-generated economic event that significantly raised the level of confidence, and this bump was short-lived. We took a number of exogenous factors with monthly available data that could be linked to consumer confidence. They include the inflation rate in Lebanon, the growth in private sector lending, the monthly change in BdL's coincident indicator, the lending rates in Lebanese pounds and in U.S. dollars, the growth in the number of incoming tourists to Lebanon, and the growth of remittance inflows to Lebanon. We conducted preliminary correlation analyses between these factors on the one hand, and the Byblos Bank/AUB CCI, the Byblos Bank/AUB PSI and the Byblos Bank/AUB EI on the other hand. We found that the level of correlation was weak between each of the CCI, PSI and EI on one hand, and each of the factors on the other.
- The index's results for the covered period show significant fluctuations compared to the movement of similar indices in advanced economies over the same period of time. This is due to the large number of significant political events in Lebanon since the start of the index calculation.
- We found the correlation level between the PSI and the EI to be 76% over the July 2007-September 2011 period, indicating that there is a strong link between consumers' perception of the future and their current confidence levels. During political shocks, the change of the EI is a lot more significant than that of the PSI, while the jump in both the PSI and EI is short-lived in case of a perceived positive political development. However, the drop in the PSI and EI is, in general, longer lasting in case of a negative shock.

Consumer confidence in Lebanon is significantly affected by positive or negative political events

There is a strong link between consumers' perception of the future and their present confidence levels

Consumers need to see concrete results that improve their economic conditions in order to maintain their level of optimism

- Lebanese consumers are generally skeptical about the immediate concrete impact of an event or of a government decision. Consumers need to feel concretely the impact of any announced economic policy or political decision in order for their confidence level to remain elevated beyond the immediate rise. Also, consumers look for positive signals for their outlook to improve. They react positively at the time of the event, but they have low expectations, as they have been used to be eventually disappointed. They do not get overly optimistic when a positive shock takes place, but their confidence level declines quickly as a result of a negative shock. The more visible example of this trend is in January 2011 following the collapse of the Hariri Cabinet and the designation of MP Najib Mikati as Prime Minister, as the PSI regressed from 41.2 in December 2010 to 34.2 in January 2011, but the EI jumped from 52 in December to 78.3 in January. This shows that consumers’ hopes for the future have increased, but that they do not expect their current conditions to improve.
- Lebanese consumers are more optimistic about future conditions over the near term in general than they are about their current situation. There are only four instances between July 2007 and September 2011 when Lebanese consumers were more, or equally, pessimistic about the future than they were about present circumstances:
 - The first case was in April 2008, where the PSI was 67.6 and the EI reading was 64.7. During this period, consumer confidence was reeling under the weight of prevailing uncertainties that were carried over from the preceding year and that intensified in the first four months of 2008. The CCI averaged 54.5 per month in the January-to-April period, a normal consequence of the increasing political confrontation and rhetoric, of the paralysis of government institutions, and of the prevailing uncertainties. Still, the PSI averaged 49 and the EI averaged 58.2 during the four-month period. Despite the improvement of overall sentiment in April, it seems that the accumulation of negative events and a lack of solution to the prevailing conditions pushed consumers to take a bleaker view of the future than about the present.
 - The second instance was in July 2010, as the PSI reached 83.4 compared to 80.2 for the EI. The drop seems to be triggered by the sudden escalation of political tensions related mainly to the STL, as the systematic rise in political rhetoric that began in July alarmed citizens about future developments and affected their outlook.
 - The third case was in September 2010, when the PSI reached 57.3 relative to 49.4 for the EI. This was caused by two security shocks that took place within three weeks of each other, as the Lebanese Army faced off briefly with Israeli soldiers on the Lebanese-Israeli border on August 3 and, more seriously, severe clashes erupted on August 24 between armed factions in the Bourj Abi Haidar area of Beirut and lasted several days. The deterioration in the security situation clearly raised consumers’ concerns about what the future may hold.

There are only four instances between July 2007 and September 2011 when Lebanese consumers were more pessimistic about the future than they were about current circumstances

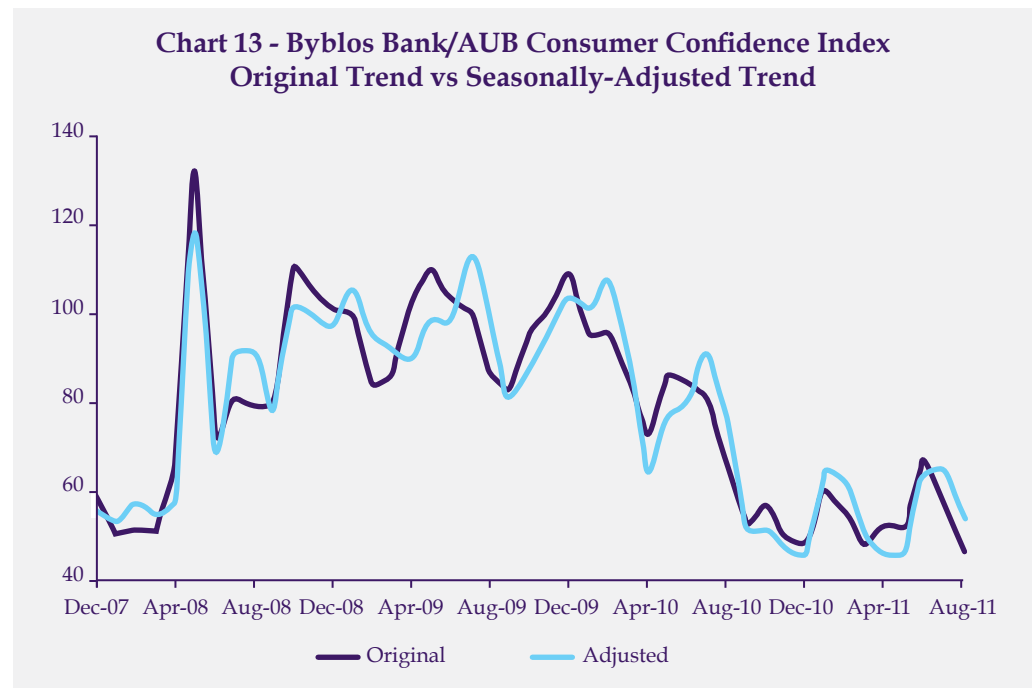
If consumers' expectations were at similar levels as their perception of their current conditions, overall consumer confidence would be much lower

- The fourth time was in August 2011, when the PSI and the EI had near identical values of 46.5 and 46.4, respectively. This reflects an equally-low level of confidence both in current circumstances and future conditions. This is not surprising, as consumers feared potential domestic repercussions from the issuance by the STL of four arrest warrants earlier in the summer and the renewed political rhetoric about this issue, as well as from the unrelenting crisis in Syria.
- In general, if consumers' expectations were at similar levels as their perception of their current conditions, overall consumer confidence would be much lower.
- Although the level of confidence was low during the July 2007-April 2008 period, it can be argued that confidence could have been even lower was it not for the spillovers of the boom in the economies of the Gulf Cooperation Council (GCC) at the time. Indeed, a wide open job market in the GCC, the inflow of deposits and expatriates' remittances, and the start of the real estate sector expansion in Lebanon, all contributed to containing the decline in consumer confidence at the time.
- More generally, we believe that the continuing inflow of remittances to Lebanon has contributed to alleviate the impact of negative shocks on confidence throughout the covered period. Also, the peg of the currency to the U.S. dollar, in place since 1993, has helped maintain the inflation rate at manageable levels. In turn, this may have contributed to contain a further decline in consumer confidence.
- Using a six-month moving average to smooth out the data, the Byblos Bank/AUB CCI recorded its highest value of 98 in August 2009, followed closely by 97.7 in March 2009, possibly due to the positively perceived events in the preceding months, including the build up to the parliamentary elections in June 2009 and the increase in the minimum wage in October 2008, respectively. The lowest six-month moving average values were recorded in April 2011 at 52.3 and in May 2011 at 52.6, indicating the deterioration in consumer outlook as of the fourth quarter of 2010 as well as the delay in the formation of the government following the collapse of the Hariri Cabinet in January 2011.

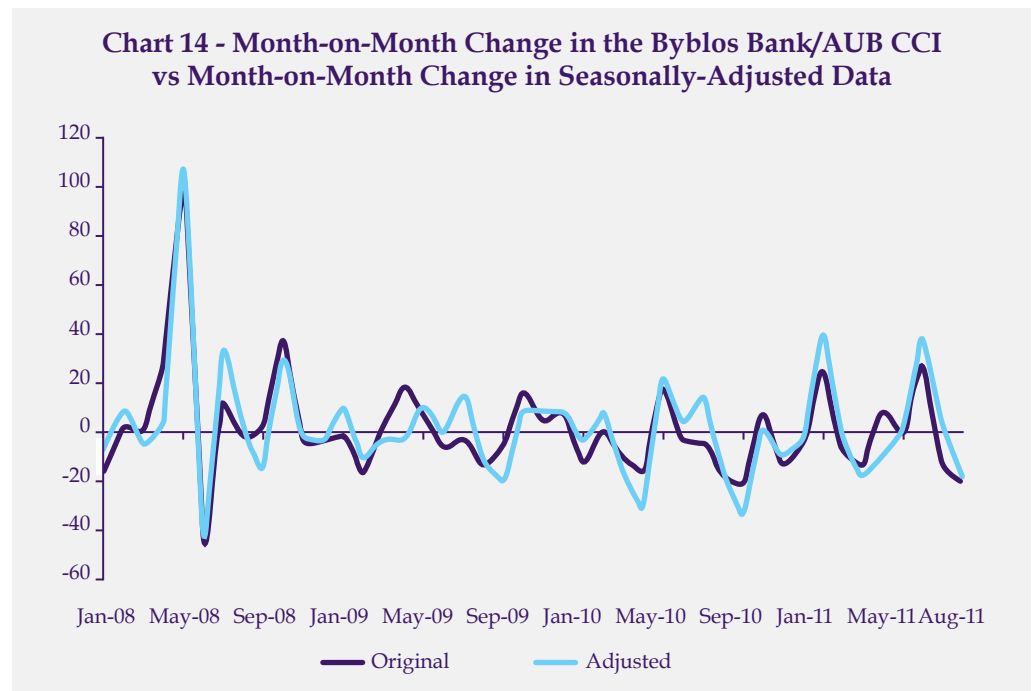
E - SEASONALLY-ADJUSTED SERIES

Seasonality is defined as a cyclical pattern in time-series data that more or less repeats itself each year.¹⁸ Also, seasonal adjustment is a statistical procedure that is used to differentiate seasonal fluctuations from changes in trend growth.¹⁹ Therefore, in a seasonally-adjusted series, the fluctuations account for the real change in the variable and not the change resulting from the effects of seasonality. We adjusted the results of the Byblos Bank/AUB CCI by using the ratio-to-moving average method,²⁰ with the objective to remove possible periodic seasonal fluctuations in the series. These fluctuations could be a result of events such as holidays and the beginning or the end of the school year. Chart 13 shows little difference between the original Byblos Bank/AUB CCI and the seasonally-adjusted CCI. Also, the peaks and lows of the adjusted CCI are in line with the original trend. Further, Chart 14 shows that the month-to-month change in the original Byblos Bank/AUB CCI data and the month-to-month change in the seasonally-adjusted data display similar trends. Therefore, we assume that the Byblos Bank/AUB CCI shows little seasonality, in line with seasonally-adjusted consumer sentiment indices in the United States. The results of the Conference Board’s Consumer Confidence Index are seasonally-adjusted, while those of the University of Michigan’s Index of Consumer Sentiment are not. However, the seasonal adjustment has little effect, because neither index exhibits much seasonality.²¹

The index results show little seasonality



Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

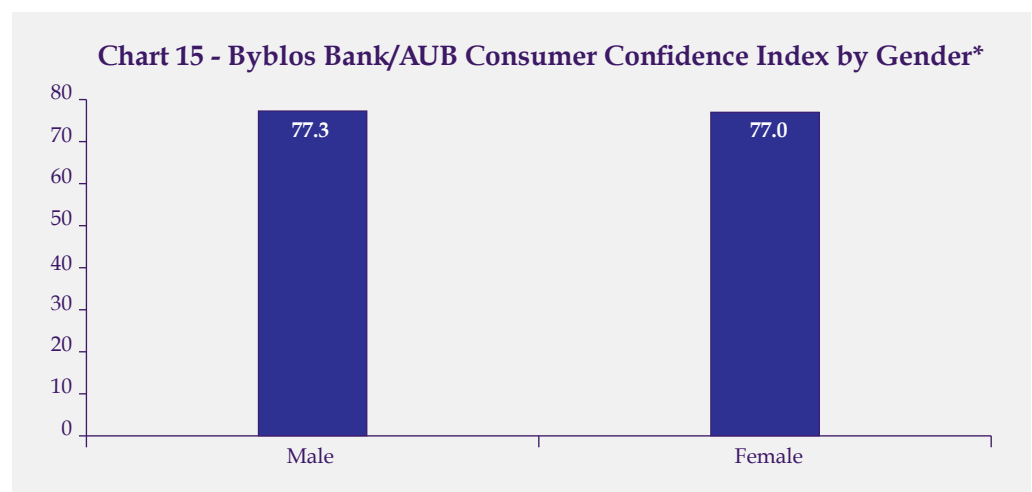


Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

F - CONSUMER CONFIDENCE BY CATEGORY

1 - Consumer Confidence by Gender

The average confidence level of male consumers was 77.3, almost identical to that of female consumers at 77 during the covered period.



* monthly average over the 51 months from July 2007 till September 2011
 Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Highest Confidence by Gender Also, it appears that male and female consumers almost held equally the highest and lowest levels of consumer confidence over the covered period.

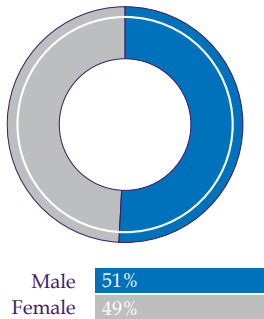


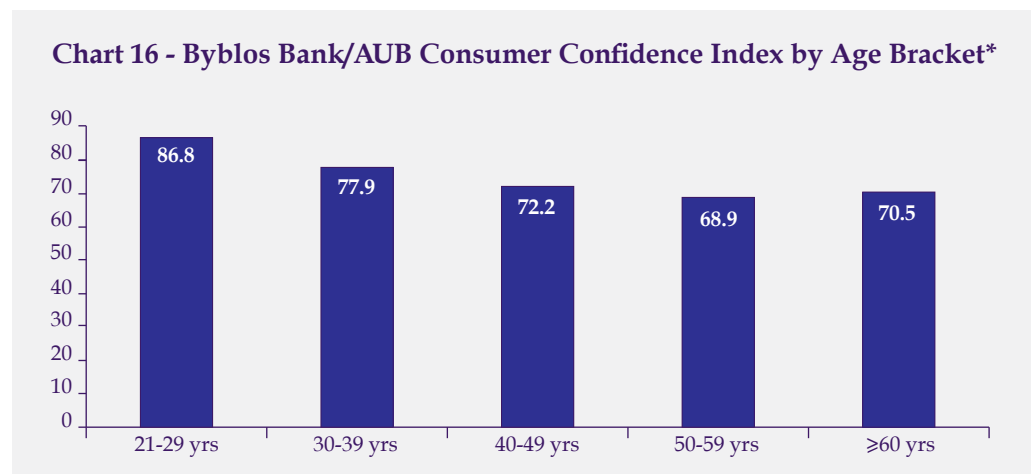
Table 3 - Frequency of Holding the Highest Consumer Confidence Level by Gender (July 2007-September 2011)

Rank	Gender	Frequency of Occurrence	Percentage of Total
1	Male	26 / 51	51.0%
2	Female	25 / 51	49.0%
	Total	51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

2 - Consumer Confidence by Age

Citizens who are younger than 40 years displayed the highest level of confidence, on average, during the 51-month period. The confidence level was most elevated for consumers in the 21 to 29 years age bracket, as the index average for this category stood at 86.8 during the covered period. Consumers who are between 30 and 39 years old had the second highest level of confidence with an index average of 77.9 during the covered period; followed by those between 40 and 49 years of age with an index average of 72.2; citizens aged 60 years and older had the second lowest confidence level with an index average of 70.5; while those in the 50 to 59 years bracket had the lowest level of confidence as the index for this segment averaged 68.9 during the covered period.



* monthly average over the 51 months from July 2007 till September 2011

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

We identified the age groups with the highest consumer confidence reading for each of the 51 months from July 2007 to September 2011. Consumers between 21 and 29 years old held the highest level of consumer confidence in 39 out of 51 months, representing a 76.5% frequency of occurrence. They were distantly followed by consumers aged 60 years and older with six instances out of 51 times, or an 11.7% occurrence.

Table 4 - Frequency of Holding the Highest Consumer Confidence Level by Age (July 2007-September 2011)

Rank	Age	Frequency of Occurrence	Percentage of Total
1	21-29 yrs	39 / 51	76.5%
2	≥60 yrs	6 / 51	11.7%
3	30-39 yrs	4 / 51	7.8%
4	40-49 yrs	1 / 51	2.0%
4	50-59 yrs	1 / 51	2.0%
Total		51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Conversely, consumers aged 60 years and older posted the lowest level of consumer confidence in 20 out of 51 months, which represents a 39.2% frequency of occurrence. They were closely followed by consumers in the 50 to 59 years bracket with 18 instances out of 51 observations, or a 35.3% frequency of occurrence; and consumers between 40 and 49 years old with 11 out of 51 months, which represents a 21.5% frequency of occurrence.

Table 5 - Frequency of Holding the Lowest Consumer Confidence Level by Age (July 2007-September 2011)

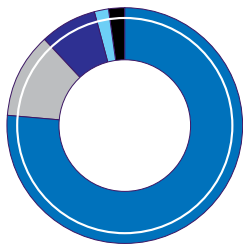
Rank	Age	Frequency of Occurrence	Percentage of Total
1	≥60 yrs	20 / 51	39.2%
2	50-59 yrs	18 / 51	35.3%
3	40-49 yrs	11 / 51	21.5%
4	21-29 yrs	1 / 51	2.0%
4	30-39 yrs	1 / 51	2.0%
Total		51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

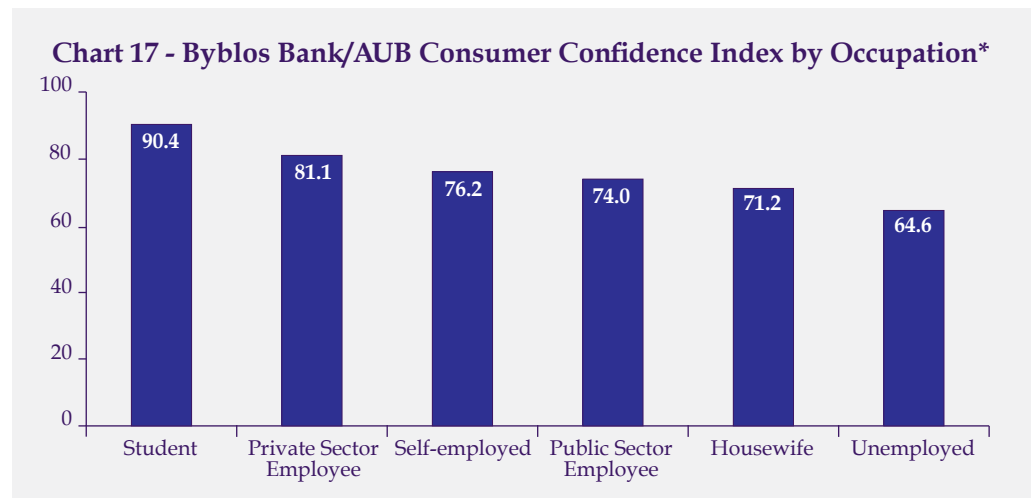
3 - Consumer Confidence by Occupation

Students displayed the highest level of confidence, on average, during the 51-month period, as the index average for this category stood at 90.4 during the covered period. Private sector employees had the second highest level of confidence with an index average of 81.1 during the covered period; followed by those who are self-employed with an index average of 76.2; and public sector employees with an index average of 74. Housewives had the second lowest confidence level with an index average of 71.2; while unemployed Lebanese had the lowest level of confidence as the index for this segment averaged 64.6 during the covered period.

Highest Confidence by Age



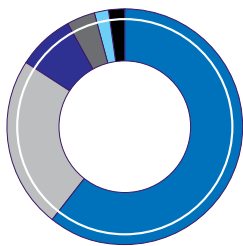
21-29 yrs	76.5%
≥60 yrs	11.7%
30-39 yrs	7.8%
40-49 yrs	2.0%
50-59 yrs	2.0%



* monthly average over the 51 months from July 2007 till September 2011

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Highest Confidence by Occupation



Student	60.8%
Private Sector Employee	23.5%
Public Sector Employee	7.8%
Unemployed	3.9%
Self-employed	2.0%
Housewife	2.0%

In parallel, students had the highest consumer confidence levels in 31 times out of 51 months, representing a 60.8% frequency of occurrence, followed by private sector employees with 12 instances out of 51 times, or a 23.5% frequency of occurrence.

A remarkable trend is that the student sub-category and the youth in the 21 to 29 years age bracket appear to be the most frequently optimistic about economic prospects. The trend may be explained by the fact that, although students and the young do not have high disposable income, they are confident about their job prospects and earning potential. This could be due, in part, to the young Lebanese factoring-in the option of emigrating from the country, and the widely-held belief among this segment of the population that the prospects of finding a job opportunity abroad are high.

Table 6 - Frequency of Holding the Highest Consumer Confidence Level by Occupation (July 2007-September 2011)

Rank	Occupation	Frequency of Occurrence	Percentage of Total
1	Student	31 / 51	60.8%
2	Private Sector Employee	12 / 51	23.5%
3	Public Sector Employee	4 / 51	7.8%
4	Unemployed	2 / 51	3.9%
5	Self-employed	1 / 51	2.0%
5	Housewife	1 / 51	2.0%
Total		51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Conversely, the unemployed segment of the population posted the lowest level of consumer confidence in 27 out of 51 months, which represents a 52.9% frequency of occurrence. Also, public sector employees displayed the lowest level of confidence during 13 instances out of 51 times, which reflects a 25.5% frequency of occurrence.

Table 7 - Frequency of Holding the Lowest Consumer Confidence Level by Occupation (July 2007-September 2011)

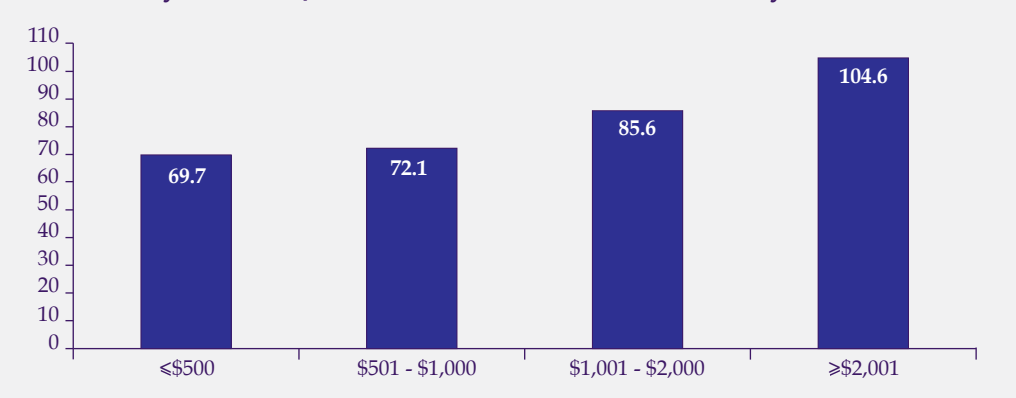
Rank	Occupation	Frequency of Occurrence	Percentage of Total
1	Unemployed	27 / 51	52.9%
2	Public Sector Employee	13 / 51	25.5%
3	Housewife	5 / 51	9.8%
4	Student	3 / 51	5.9%
5	Self-employed	2 / 51	3.9%
6	Private Sector Employee	1 / 51	2.0%
Total		51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

4 - Consumer Confidence by Income

Consumers with household income above \$2,000 per month displayed the highest level of confidence, on average, during the 51-month period, as the index for this income bracket averaged 104.6 between July 2007 and September 2011. Consumers with a monthly household income in the \$1,001 to \$2,000 bracket had the second highest level of confidence with an index average of 85.6 during the covered period; followed by those earning between \$501 and \$1,000 per month with an index average of 72.1; while consumers with household income of \$500 or less per month had the lowest confidence level as the index for this segment averaged 69.7 in the 51-month timeframe.

Chart 18 - Byblos Bank/AUB Consumer Confidence Index by Income Bracket*



* monthly average index over the 51 months from July 2007 till September 2011.
Income refers to the monthly household income.

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Consumers with a household income above \$2,000 per month had the highest level of consumer confidence during 46 out of 51 months, which represents a 90.2% frequency of occurrence. They were distantly followed by those with a monthly household income in the \$1,001 to \$2,000 bracket with four instances out of 51 times, which is equivalent to a 7.8% occurrence. Also, consumers with household income between \$501 and \$1,000 per month posted only once the highest level of confidence, while those earning \$500 or less per month never held the highest level of consumer confidence during the covered period.

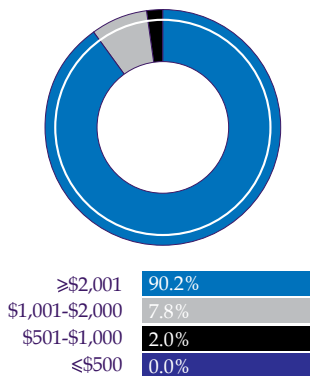
Table 8 - Frequency of Holding the Highest Consumer Confidence Level by Income (July 2007-September 2011)

Rank	Income*	Frequency of Occurrence	Percentage of Total
1	≥\$2,001	46 / 51	90.2%
2	\$1,001-\$2,000	4 / 51	7.8%
3	\$501-\$1,000	1 / 51	2.0%
4	≤\$500	0 / 51	0.0%
Total		51 / 51	100.0%

* monthly household income

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Highest Confidence by Income



In parallel, it appears that low income earners represent the profile of the least confidence consumers. Consumers with household income of \$500 or less per month posted the lowest level of consumer confidence in 31 out of 51 times, representing a 60.8% frequency of occurrence. They were followed by consumers with household income between \$501 and \$1,000 per month with 14 instances out of 51 times, or a 27.5% occurrence.

Table 9 - Frequency of Holding the Lowest Consumer Confidence Level by Income (July 2007-September 2011)

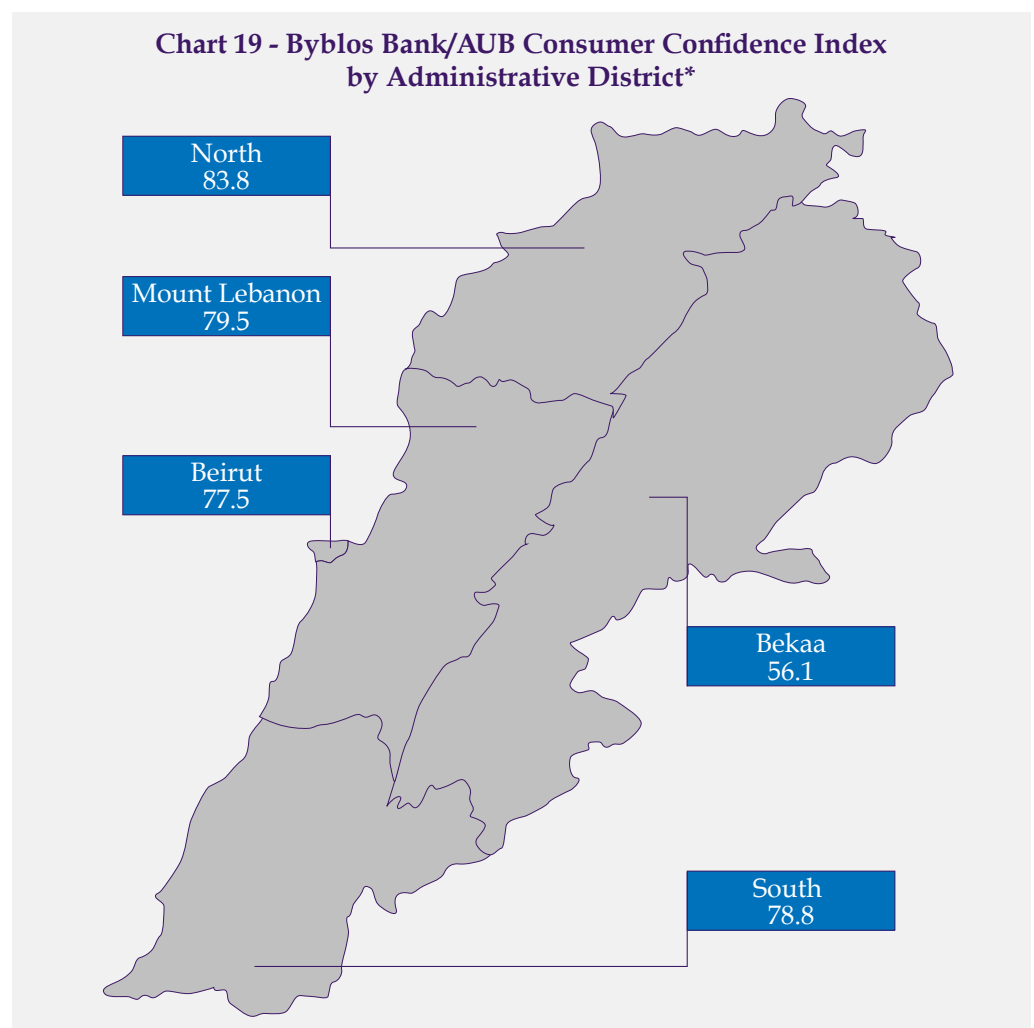
Rank	Income*	Frequency of Occurrence	Percentage of Total
1	≤\$500	31 / 51	60.8%
2	\$501-\$1,000	14 / 51	27.5%
3	\$1,001-\$2,000	4 / 51	7.8%
4	≥\$2,001	2 / 51	3.9%
Total		51 / 51	100.0%

* monthly household income

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

5 - Consumer Confidence by Administrative District

Consumers in Northern Lebanon held the highest level of consumer confidence during the 51-month period, as the index average for this region stood at 83.8 during the covered period. Consumers in Mount Lebanon had the second highest level of confidence with an index average of 79.5 between July 2007 and September 2011; followed by those in the South with an index average of 78.8. Beirut residents had the second lowest level of consumer confidence with an index average of 77.5, while consumers in the Bekaa had the lowest level of confidence as the index for this region averaged 56.1 during the covered period.



* monthly average over the 51 months from July 2007 till September 2011

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

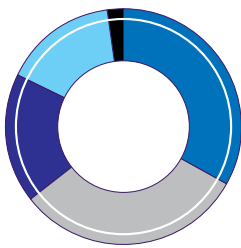
Consumers in the North had the highest level of confidence in 17 out of 51 months, which represents a 33.3% frequency of occurrence. They were closely followed by consumers in the South with 16 instances out of 51 times, or a 31.4% frequency of occurrence. Consumers in Beirut and Mount Lebanon posted the most elevated level of consumer confidence nine and eight times, respectively, out of 51 months; while consumers in the Bekaa had the highest confidence level once during the covered period.

Table 10 - Frequency of Holding the Highest Consumer Confidence Level by Administrative District (July 2007-September 2011)

Rank	Administrative District	Frequency of Occurrence	Percentage of Total
1	North	17 / 51	33.3%
2	South	16 / 51	31.4%
3	Beirut	9 / 51	17.6%
4	Mount Lebanon	8 / 51	15.7%
5	Bekaa	1 / 51	2.0%
	Total	51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Highest Confidence by Administrative District



North	33.3%
South	31.4%
Beirut	17.6%
Mount Lebanon	15.7%
Bekaa	2.0%

Conversely, the Bekaa region posted the lowest level of consumer confidence 34 times out of 51 months, or during two-thirds of the covered period. The other administrative districts came distantly behind, as Beirut had a 13.7% frequency, followed by the South with a 10% frequency; while the North had a frequency of 6% and Mount Lebanon posted a 4% frequency.

Table 11 - Frequency of Holding the Lowest Consumer Confidence Level by Administrative District (July 2007-September 2011)

Rank	Administrative District	Frequency of Occurrence	Percentage of Total
1	Bekaa	34 / 51	66.7%
2	Beirut	7 / 51	13.7%
3	South	5 / 51	9.8%
4	North	3 / 51	5.9%
5	Mount Lebanon	2 / 51	3.9%
	Total	51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Consumer Confidence Variation by Administrative District

Second Half of 2007

During the second half of 2007, the Bekaa administrative district consistently showed the lowest level of consumer confidence in Lebanon, while Beirut displayed the highest level of confidence during most of the covered period. In parallel, Mount Lebanon was consistent with the overall Byblos Bank/AUB CCI trend most of the time. South Lebanon alternated from showing the highest level to the second lowest level of consumer confidence.

2008

During 2008, and particularly in periods of extremely low levels of consumer confidence nationwide, consumers in the Bekaa showed the lowest level of confidence in the country; while Northerners posted the highest degree of consumer confidence. Mount Lebanon and Beirut appeared to be representative of the national mood. South Lebanon started the year with the lowest level of consumer confidence and ended it with the highest level.

2009

During 2009, the North displayed the highest level of confidence 50% of the time, and it had the highest level of confidence during the periods of lowest national confidence. The South started the year with the highest confidence level, but it displayed the lowest confidence in May, June, August and November 2009. The Bekaa continued registering the lowest levels of confidence most of the time. Mount Lebanon and Beirut were consistent with the national trend most of the time.

2010

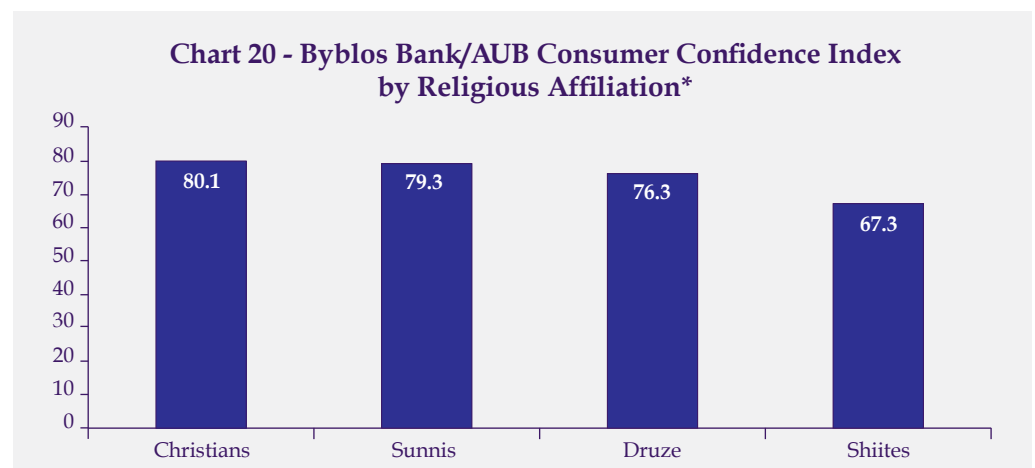
Throughout most of 2010, the Bekaa continued to be the region with the lowest confidence level. The South and Mount Lebanon alternated for the top positions, with Mount Lebanon registering the lowest confidence level in the month of August 2010 only. In parallel, Beirut and North Lebanon were consistent with the national trend most of the time. During the last four months of the year, when national consumer mood declined significantly, the South consistently registered the highest levels of confidence.

First Nine Months of 2011

Overall, consumer confidence was very low in the first nine months of 2011, with the Bekaa displaying the lowest mood four out of nine times, Beirut registering the lowest levels of confidence three times, and the North holding the lowest level of consumer confidence twice. The South registered the highest level of confidence in most of the covered period, followed by Beirut. In fact, Beirut alternated in registering the highest and lowest level of confidence between May and August. In general, Mount Lebanon was representative of the national mood during the first nine months of the year.

6 - Consumer Confidence by Religious Affiliation

Christian consumers had the highest level of confidence during the 51-month period, as the related index averaged 80.1 during the covered period. Sunni consumers had the second highest confidence level with an index average of 79.3 between July 2007 and September 2011; followed by Druze consumers with an index average of 76.3, and Shiite consumers with an index average of 67.3.



* monthly average over the 51 months from July 2007 till September 2011

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Also, Christian consumers had the highest level of confidence in 15 out of 51 months, which represents a 29.4% frequency of occurrence. They were closely followed by Druze consumers with 14 observations, equivalent to a frequency of 27.5% and the Sunni consumers with 13 instances, representing a 25.5% frequency. The Shiite consumer posted the highest level of confidence in nine out of 51 months for a frequency rate of 17.6%.

Table 12 - Frequency of Holding the Highest Consumer Confidence Level by Religious Affiliation (July 2007-September 2011)

Rank	Religious affiliation	Frequency of Occurrence	Percentage of Total
1	Christians	15 / 51	29.4%
2	Druze	14 / 51	27.5%
3	Sunnis	13 / 51	25.5%
4	Shiites	9 / 51	17.6%
	Total	51 / 51	100.0%

Highest Confidence by Religious Affiliation



Christians	29.4%
Druze	27.5%
Sunnis	25.5%
Shiites	17.6%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Conversely, Shiite consumers posted the lowest level of consumer confidence in 29 out of 51 months, or during 57% of the covered period. The other three religious affiliations followed distantly, as the Druze posted the lowest level of consumer confidence 11 times for a 21.6% frequency, the confidence level of Sunni consumers was the lowest nine times for a 17.6% frequency, and the Christians posted the lowest level of consumer confidence twice for a 4% frequency rate.

Table 13 - Frequency of Holding the Lowest Consumer Confidence Level by Religious Affiliation (July 2007-September 2011)

Rank	Religious affiliation	Frequency of Occurrence	Percentage of Total
1	Shiites	29 / 51	56.9%
2	Druze	11 / 51	21.6%
3	Sunnis	9 / 51	17.6%
4	Christians	2 / 51	3.9%
	Total	51 / 51	100.0%

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Consumer Confidence Variation by Religious Affiliation

Second Half of 2007

During the second half of 2007, the Shiite community showed the lowest level of consumer confidence among the various religious affiliations. The Shiite consumers started with the highest level of confidence in July 2007 and registered the lowest readings from August until November 2007. Druze consumers displayed the highest confidence level in October 2007, but posted the lowest level in December 2007. Sunni consumers held the

lowest level of confidence in July 2007, while they displayed the highest confidence level in August and November. In parallel, Christian consumers were in line with the national trend most of the time.

2008

The Sunni consumers displayed the highest level of consumer confidence during most of 2008, and were followed by Christian consumers. During periods of low consumer confidence, the Sunnis registered the highest values among all religious affiliations. In parallel, the Shiites registered the lowest level of consumer confidence in every month of the year, except in April when the Druze posted the lowest reading and in December when the Sunnis had the worst mood. The Christians were generally representative of the national trend.

2009

Each of the four religious affiliations posted the highest level of consumer confidence in at least one month during 2009, but Druze consumers held it most frequently with five months in total. In parallel, Shiite consumers displayed the lowest level of consumer confidence during most of the year. The level of confidence of Christian consumers was mostly in line with the national level during the 2009, followed by that of the Sunnis and the Druze.

2010

During 2010, Druze consumers posted the highest level of consumer confidence during five months, while the Shiite and Christian consumers had the highest degree of confidence for three months each. Also, Druze consumers started the year with the highest level of confidence and ended it with the lowest level. In parallel, the Shiite and Sunni consumers, and to a lesser extent the Druze consumers, alternated in registering the lowest consumer confidence levels. The confidence levels of Christians and Sunnis were consistent with the national trend during most of 2010.

First nine months of 2011

Shiite consumers held the highest confidence levels more frequently than any other religious affiliation during the first nine months of 2011, as they posted the highest confidence levels in January, June, August and September. In parallel, Druze consumers had the lowest confidence level during most of the nine-month period, but they registered the highest readings in May and July 2011. Further, Christian consumers displayed the highest level of confidence among the four religious affiliations in March and April, after posting the lowest level in January. The confidence level of Christian and Sunni consumers was consistent with the national trend during the first nine months of 2011.

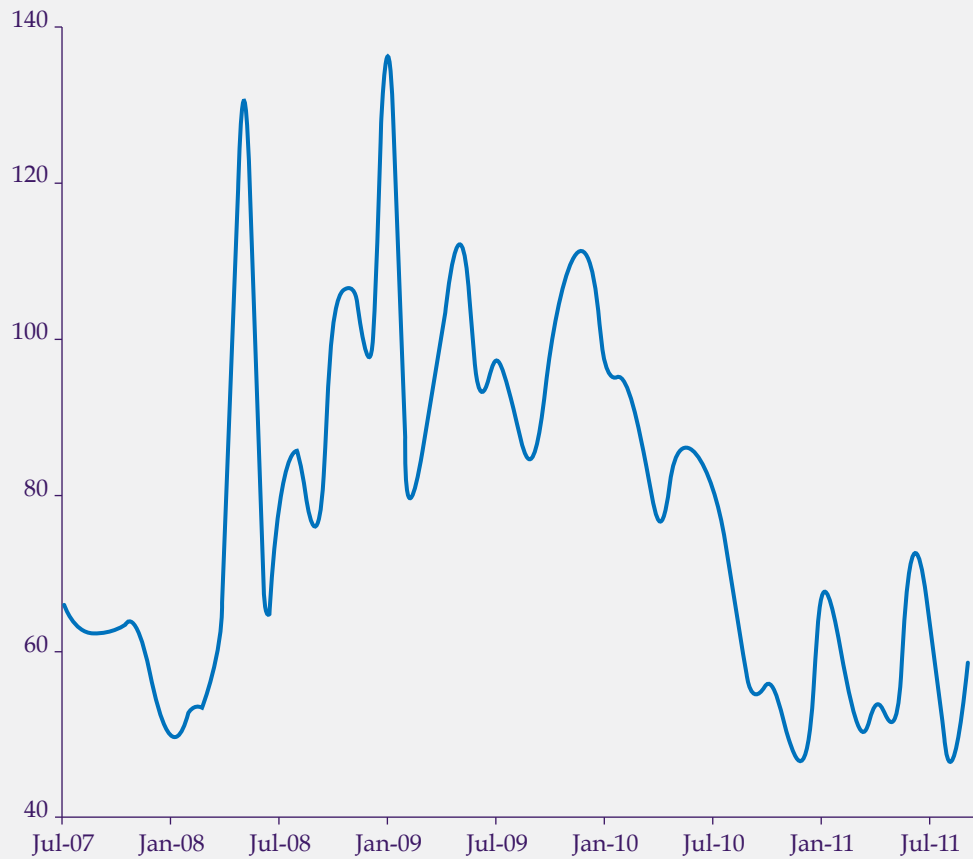
APPENDICES

APPENDIX I: BYBLOS BANK/AUB CONSUMER CONFIDENCE BY GENDER

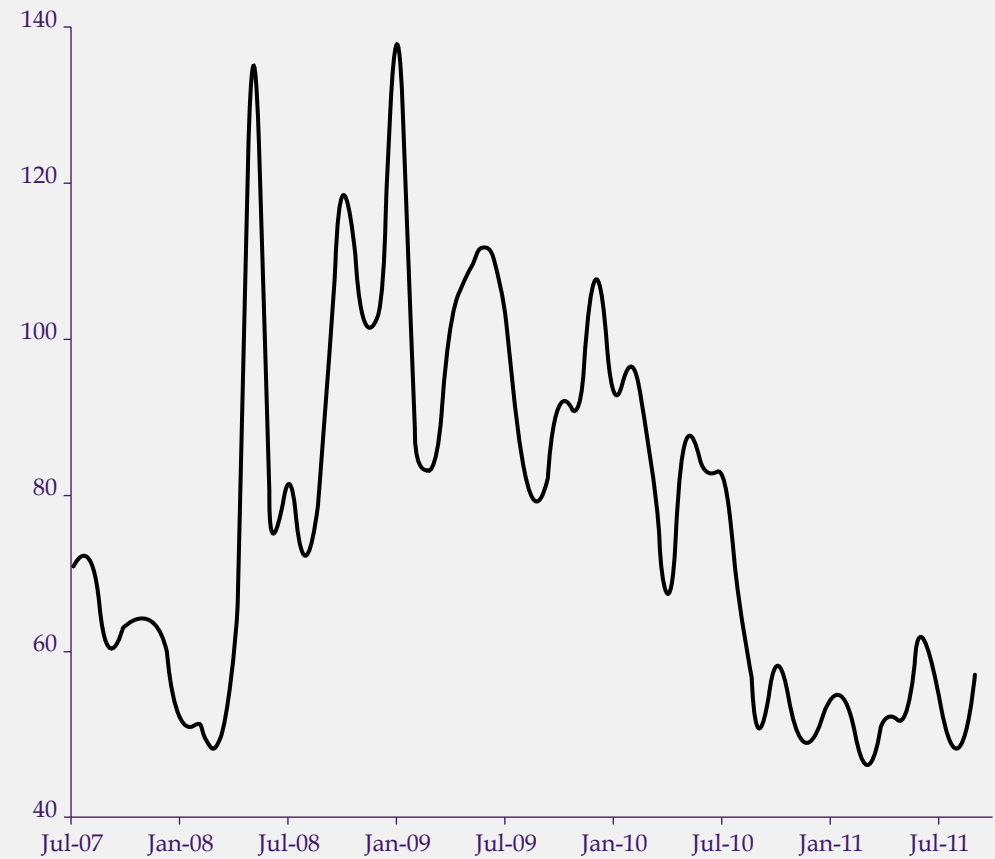
Month	Male	Female
Jul-07	66.3	71.1
Aug-07	62.5	71.7
Sep-07	62.5	60.8
Oct-07	62.5	63.7
Nov-07	63.4	64.2
Dec-07	55.2	62.4
Jan-08	48.6	51.0
Feb-08	51.7	50.6
Mar-08	54.3	47.9
Apr-08	70.8	60.9
May-08	130.9	136.2
Jun-08	66.4	76.1
Jul-08	80.0	81.9
Aug-08	85.3	72.4
Sep-08	76.2	89.8
Oct-08	103.9	119.1
Nov-08	106.7	103.3
Dec-08	98.5	103.6
Jan-09	135.7	138.8
Feb-09	80.3	86.2
Mar-09	87.0	84.2
Apr-09	101.2	103.4
May-09	112.5	109.2
Jun-09	93.4	112.3
Jul-09	97.6	103.2
Aug-09	89.4	82.9
Sep-09	84.7	79.5
Oct-09	100.2	92.5
Nov-09	109.1	92.2
Dec-09	110.7	108.5
Jan-10	96.1	93.5
Feb-10	94.7	97.1
Mar-10	85.6	85.3
Apr-10	76.3	67.4
May-10	85.9	87.4
Jun-10	84.9	83.6
Jul-10	80.6	82.2
Aug-10	67.8	66.4
Sep-10	54.5	50.5
Oct-10	55.6	58.8
Nov-10	48.8	50.6
Dec-10	46.5	48.8
Jan-11	67.2	54.2
Feb-11	59.0	52.2
Mar-11	49.7	45.4
Apr-11	53.0	51.9
May-11	51.4	51.7
Jun-11	72.7	62.2
Jul-11	62.3	53.9
Aug-11	45.1	47.7
Sep-11	58.5	57.4

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Male Consumer Confidence Sub-Index



Female Consumer Confidence Sub-Index

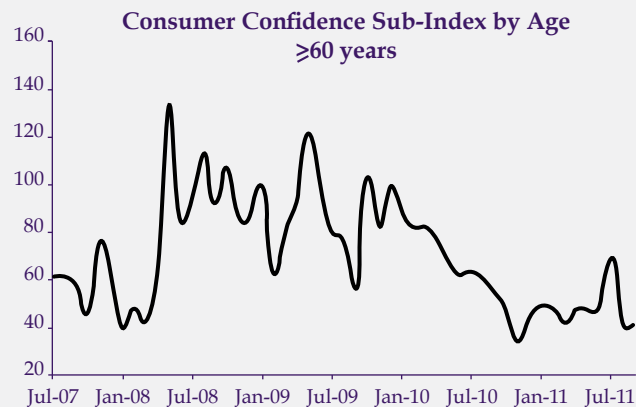
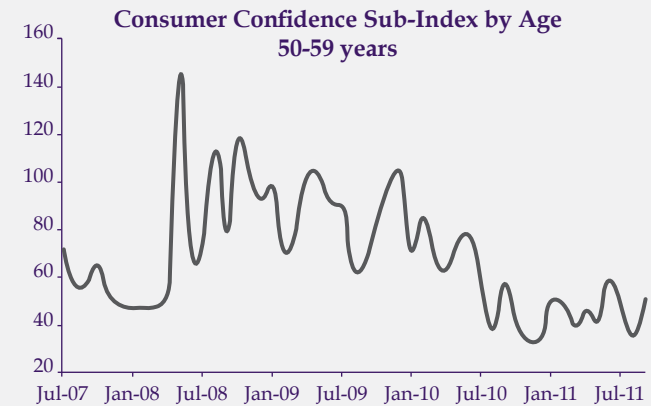
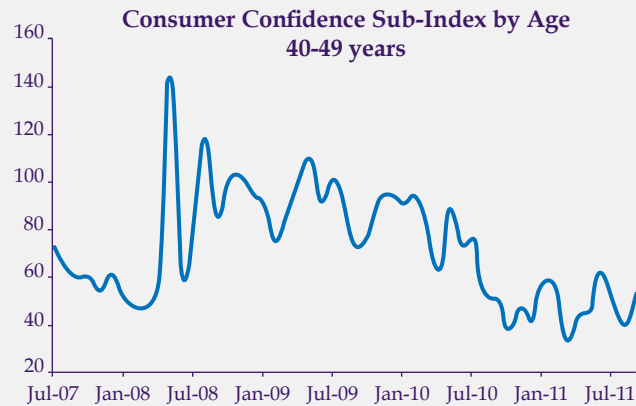
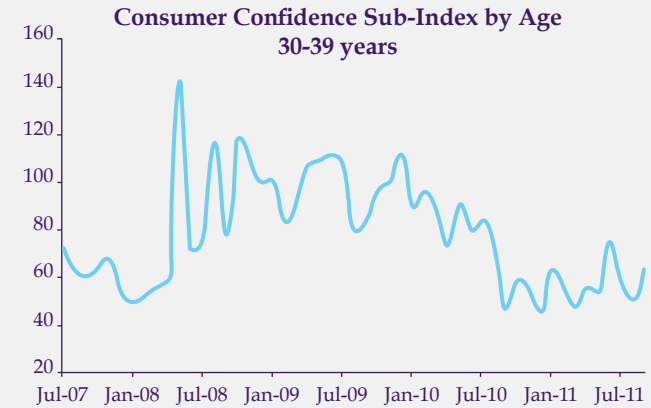
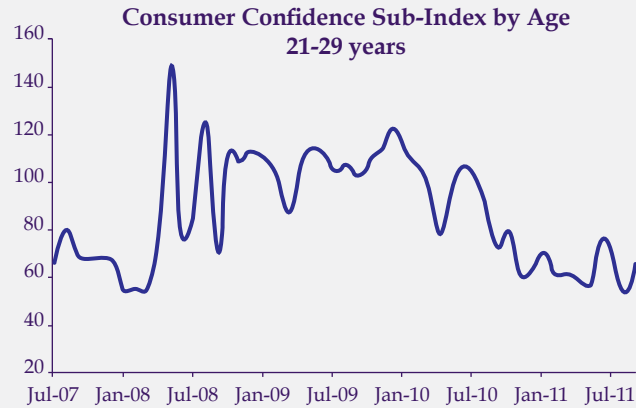


Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX II: BYBLOS BANK/AUB CONSUMER CONFIDENCE BY AGE

Month	21-29 yrs	30-39 yrs	40-49 yrs	50-59 yrs	≥60 yrs
Jul-07	65.6	70.3	72.6	71.5	61.2
Aug-07	80.3	63.3	65.1	56.2	61.2
Sep-07	68.6	59.5	59.7	57.9	57.6
Oct-07	68.0	65.1	60.8	64.7	46.1
Nov-07	67.2	68.0	53.8	51.9	75.5
Dec-07	66.7	52.9	61.3	48.2	61.5
Jan-08	54.8	48.9	51.2	46.7	39.3
Feb-08	54.7	52.0	48.3	47.1	48.8
Mar-08	55.2	55.6	46.7	47.4	42.4
Apr-08	81.3	60.4	62.2	53.4	64.3
May-08	149.2	141.9	144.2	143.3	132.5
Jun-08	76.9	71.0	61.0	67.0	84.9
Jul-08	88.2	75.9	76.5	75.0	93.2
Aug-08	123.8	113.9	117.9	112.7	113.7
Sep-08	69.7	80.5	85.6	78.3	92.0
Oct-08	111.7	117.4	100.4	118.9	107.0
Nov-08	109.7	109.2	102.4	101.8	84.4
Dec-08	113.5	99.6	95.3	93.1	88.2
Jan-09	108.5	100.2	90.6	96.9	98.6
Feb-09	102.1	82.6	75.6	70.3	61.3
Mar-09	87.4	89.4	84.9	79.5	78.6
Apr-09	101.7	105.8	100.2	104.4	94.6
May-09	113.8	108.5	110.1	103.3	121.5
Jun-09	111.3	110.5	91.1	91.8	99.8
Jul-09	104.2	107.5	101.3	89.9	80.3
Aug-09	106.5	79.4	88.8	62.3	77.7
Sep-09	102.1	82.9	72.8	68.4	56.3
Oct-09	108.6	97.3	78.1	86.5	103.0
Nov-09	113.3	99.7	93.4	98.2	82.1
Dec-09	122.2	111.8	94.5	104.4	100.0
Jan-10	114.8	90.0	90.8	71.7	87.1
Feb-10	107.0	95.7	93.9	84.9	81.6
Mar-10	99.6	86.4	79.3	68.3	81.6
Apr-10	78.5	73.7	63.1	63.4	76.9
May-10	94.5	89.7	87.5	76.2	67.0
Jun-10	106.6	80.1	72.5	77.5	61.4
Jul-10	100.9	82.3	75.5	54.7	62.6
Aug-10	91.1	71.4	52.2	39.2	58.5
Sep-10	72.2	48.4	51.1	56.8	54.2
Oct-10	79.8	59.0	38.8	40.7	44.1
Nov-10	60.7	54.0	47.3	33.4	34.1
Dec-10	62.0	45.7	43.3	33.1	43.4
Jan-11	71.0	62.6	57.7	50.4	47.7
Feb-11	61.0	54.8	57.0	48.0	48.7
Mar-11	61.5	47.9	33.7	39.2	41.9
Apr-11	59.0	55.9	43.6	46.7	47.8
May-11	57.1	54.2	47.3	42.9	46.7
Jun-11	75.7	73.2	61.4	59.0	49.2
Jul-11	67.3	56.1	48.1	49.7	68.9
Aug-11	52.7	50.7	40.4	35.2	40.6
Sep-11	65.4	62.2	52.9	50.5	41.8

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon



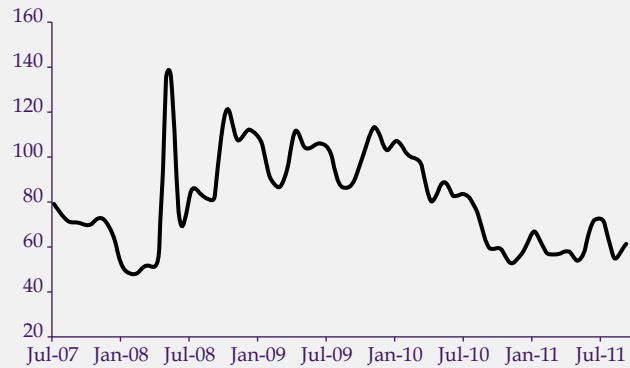
Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX III: BYBLOS BANK/AUB CONSUMER CONFIDENCE BY OCCUPATION

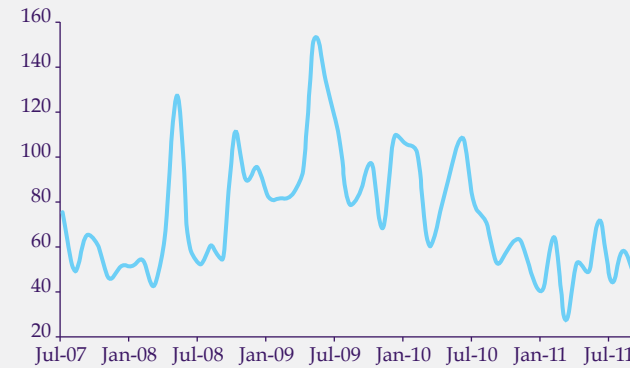
Month	Private Sector	Public Sector	Self-employed	Student	Housewife	Unemployed
	Employee	Employee				
Jul-07	79.4	75.6	65.9	54.1	69.3	59.2
Aug-07	72.2	49.2	69.3	77.2	63.9	53.6
Sep-07	70.9	65.0	63.8	53.8	56.4	38.7
Oct-07	69.8	61.0	64.7	68.6	56.1	50.6
Nov-07	73.0	46.2	65.7	60.8	57.4	58.9
Dec-07	67.0	50.8	59.6	50.7	54.3	55.1
Jan-08	51.0	51.4	47.5	65.0	49.7	43.4
Feb-08	47.9	53.9	52.0	53.6	49.6	54.7
Mar-08	51.8	43.3	52.5	56.5	53.2	41.9
Apr-08	52.9	67.2	73.9	81.2	63.3	52.4
May-08	139.4	127.9	134.6	140.0	127.8	127.1
Jun-08	70.1	61.5	67.6	78.0	82.1	73.4
Jul-08	85.5	52.2	85.9	110.8	73.7	48.6
Aug-08	82.9	60.9	84.0	113.5	69.0	66.9
Sep-08	81.7	55.1	80.3	66.4	80.3	91.9
Oct-08	120.7	110.7	112.0	97.8	101.8	115.3
Nov-08	107.7	89.7	106.4	119.5	101.9	98.7
Dec-08	112.3	95.7	94.4	104.9	100.4	97.4
Jan-09	107.8	81.9	99.9	103.7	97.1	88.1
Feb-09	89.6	81.7	80.5	138.8	79.7	62.7
Mar-09	87.7	82.8	89.2	86.0	76.6	76.3
Apr-09	111.1	93.5	98.9	123.8	105.3	74.6
May-09	103.9	152.7	111.5	126.7	114.2	100.6
Jun-09	105.8	133.4	88.7	144.8	112.7	77.6
Jul-09	103.8	113.9	98.1	143.7	100.6	70.5
Aug-09	88.0	79.7	87.6	128.3	80.8	66.3
Sep-09	87.5	84.0	84.4	102.5	69.2	61.5
Oct-09	100.3	97.1	94.9	121.4	85.6	85.7
Nov-09	113.6	68.3	100.2	116.2	90.2	80.1
Dec-09	103.5	109.2	117.0	125.2	97.8	86.9
Jan-10	107.1	105.6	92.3	119.6	86.6	65.2
Feb-10	100.4	102.6	95.3	108.4	91.3	83.3
Mar-10	97.8	61.2	86.0	80.2	79.0	73.5
Apr-10	80.5	75.0	72.2	80.0	59.3	69.1
May-10	88.7	95.9	86.7	83.8	86.3	75.1
Jun-10	82.8	108.4	86.8	103.0	79.3	70.6
Jul-10	83.6	79.4	84.1	108.4	73.9	48.3
Aug-10	75.9	71.6	63.4	99.0	57.5	49.6
Sep-10	60.1	53.1	53.5	75.6	41.2	39.4
Oct-10	59.5	59.4	51.4	98.5	54.5	55.2
Nov-10	52.9	63.2	47.5	70.9	47.6	33.6
Dec-10	57.5	48.2	43.5	68.2	43.4	35.4
Jan-11	66.7	40.9	63.9	79.5	49.1	41.6
Feb-11	57.9	64.3	57.7	59.9	43.3	52.7
Mar-11	56.9	27.4	49.8	67.7	30.2	39.2
Apr-11	58.1	53.4	48.6	54.8	53.2	47.3
May-11	54.2	49.1	54.5	69.2	35.6	38.5
Jun-11	70.0	72.5	70.5	77.7	59.8	50.4
Jul-11	72.0	44.2	52.4	64.2	47.8	66.3
Aug-11	55.3	58.5	40.6	60.2	36.8	42.1
Sep-11	61.3	46.9	57.2	69.6	53.5	59.3

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

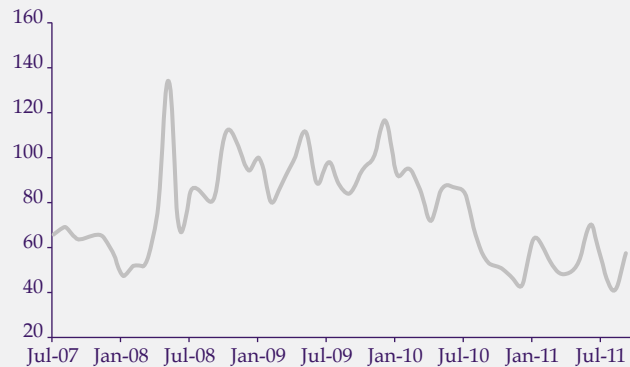
Private Sector Employee Consumer Confidence Sub-Index



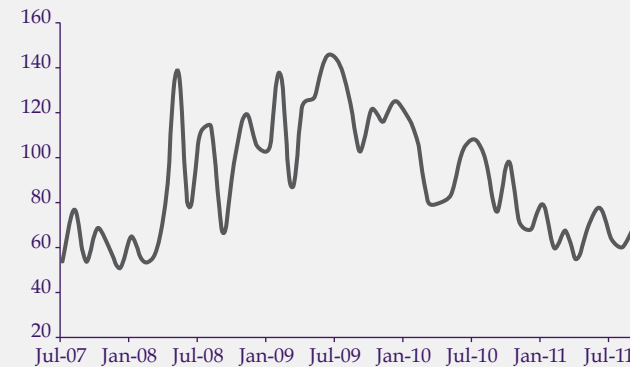
Public Sector Employee Consumer Confidence Sub-Index



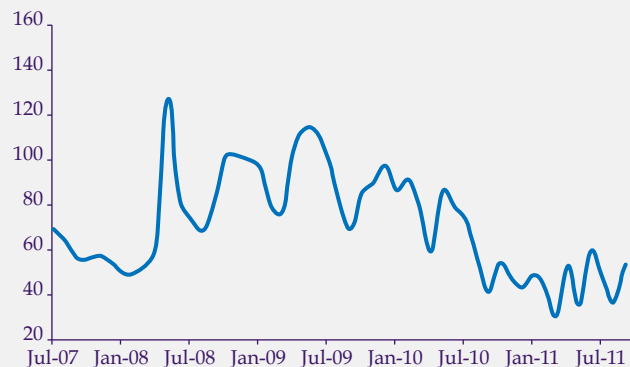
Self-employed Consumer Confidence Sub-Index



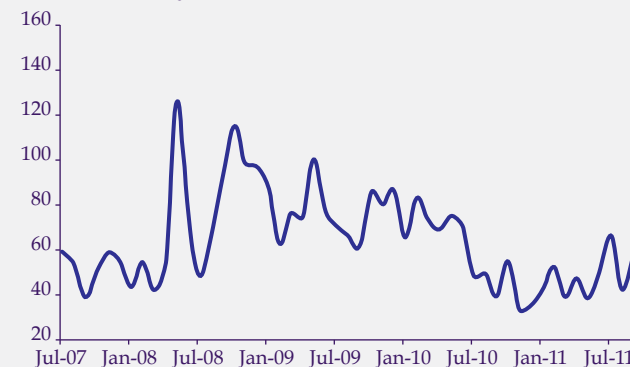
Student Consumer Confidence Sub-Index



Housewife Consumer Confidence Sub-Index



Unemployed Consumer Confidence Sub-Index



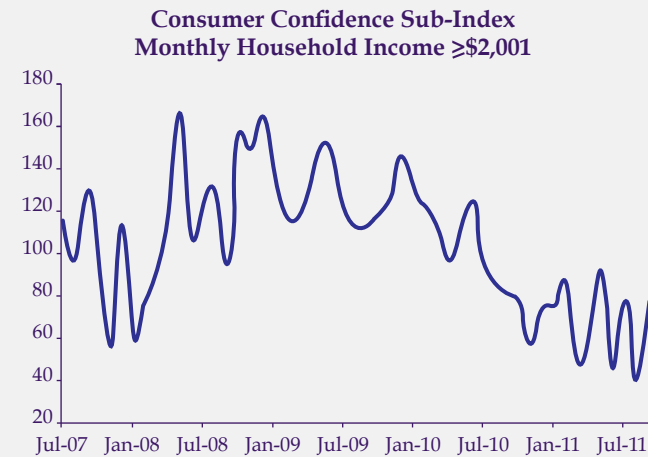
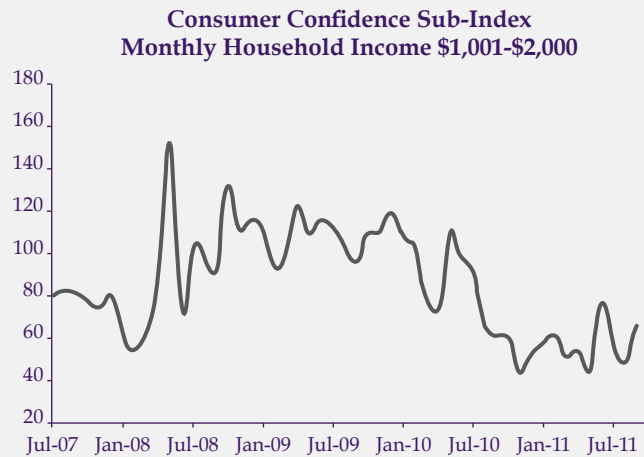
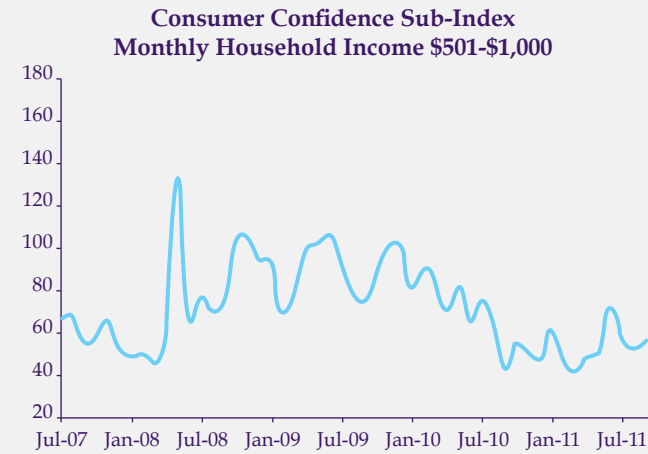
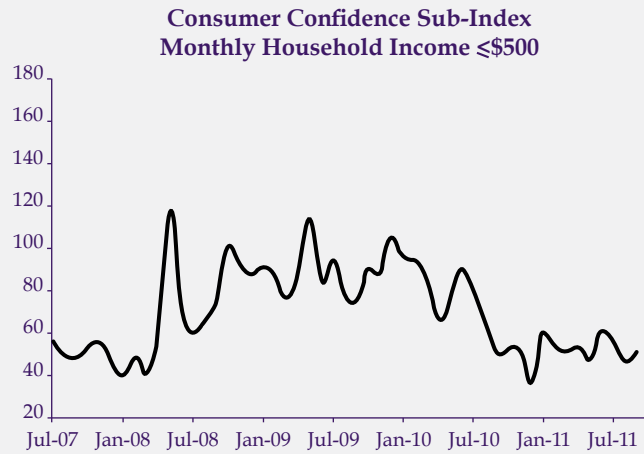
Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX IV: BYBLOS BANK/AUB CONSUMER CONFIDENCE BY INCOME*

Month	≤\$500	\$501-\$1,000	\$1,001-\$2,000	≥\$2,001
Jul-07	56.1	65.7	79.8	113.9
Aug-07	49.7	67.4	81.9	95.5
Sep-07	48.6	55.3	80.4	129.1
Oct-07	53.1	57.3	77.5	104.9
Nov-07	55.7	65.7	73.6	56.3
Dec-07	47.3	52.6	78.9	111.0
Jan-08	40.4	49.1	61.1	59.9
Feb-08	48.4	49.4	54.3	75.6
Mar-08	41.2	46.1	63.3	94.4
Apr-08	58.4	56.0	83.2	117.4
May-08	117.3	131.4	151.0	165.2
Jun-08	72.1	66.1	73.2	106.1
Jul-08	59.7	76.9	103.8	123.4
Aug-08	65.2	70.0	99.2	130.6
Sep-08	73.3	75.7	90.8	94.2
Oct-08	100.1	103.5	131.1	155.3
Nov-08	92.9	103.7	110.9	147.0
Dec-08	87.5	94.5	115.6	163.1
Jan-09	90.7	94.1	110.8	141.8
Feb-09	87.7	70.4	92.5	115.7
Mar-09	76.0	80.3	101.2	114.7
Apr-09	86.6	99.3	121.6	126.7
May-09	113.5	102.1	109.1	151.0
Jun-09	84.7	105.4	114.6	144.8
Jul-09	93.9	95.6	112.1	118.7
Aug-09	77.1	79.9	102.0	111.9
Sep-09	74.8	74.7	95.3	112.9
Oct-09	89.2	90.4	108.7	118.1
Nov-09	88.5	99.9	109.0	124.5
Dec-09	104.3	101.5	118.9	144.7
Jan-10	96.0	82.1	107.6	127.9
Feb-10	93.7	89.6	101.9	120.6
Mar-10	86.3	84.7	78.1	109.0
Apr-10	66.8	70.8	73.2	96.3
May-10	73.4	81.3	109.3	110.8
Jun-10	89.6	66.1	96.9	123.8
Jul-10	78.3	74.4	92.4	96.2
Aug-10	65.2	65.6	66.2	85.0
Sep-10	51.0	43.8	60.6	81.0
Oct-10	53.0	54.5	61.1	75.5
Nov-10	51.6	50.6	43.8	56.9
Dec-10	37.0	47.5	52.7	74.4
Jan-11	59.8	60.9	57.1	75.1
Feb-11	53.2	48.3	61.8	86.8
Mar-11	51.1	42.7	51.4	49.2
Apr-11	53.2	48.3	54.5	65.8
May-11	48.0	50.6	44.8	90.8
Jun-11	61.1	70.3	77.3	46.3
Jul-11	55.5	56.7	57.6	77.1
Aug-11	46.7	52.5	48.4	40.7
Sep-11	50.8	55.9	65.8	75.5

* monthly household income

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon



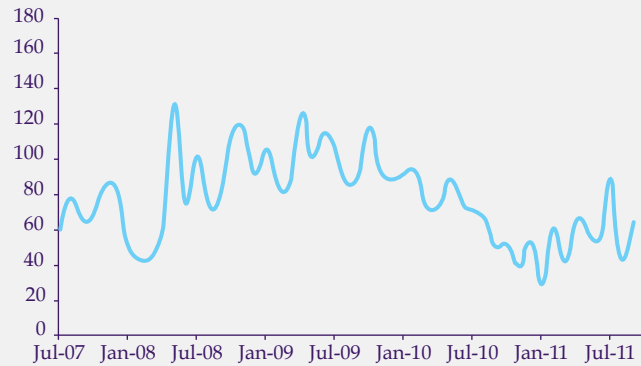
Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX V: BYBLOS BANK/AUB CONSUMER CONFIDENCE BY ADMINISTRATIVE DISTRICT

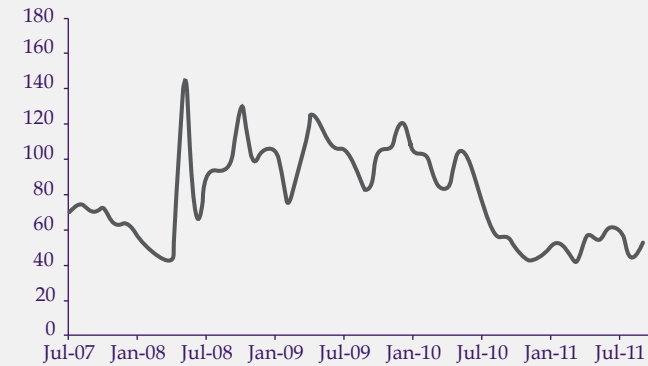
Month	Beirut	Mount Lebanon	North	Bekaa	South
Jul-07	61.5	69.9	73.1	41.6	93.2
Aug-07	78.7	74.4	76.4	34.6	58.8
Sep-07	64.3	70.7	68.2	31.5	59.0
Oct-07	70.0	71.7	58.4	29.9	75.5
Nov-07	85.7	62.1	78.2	34.7	57.3
Dec-07	78.0	63.6	45.8	40.4	65.0
Jan-08	49.0	54.3	58.6	39.6	38.0
Feb-08	42.9	49.7	77.9	20.8	56.8
Mar-08	42.6	45.5	83.8	22.5	57.3
Apr-08	61.0	42.6	102.2	85.0	58.7
May-08	130.7	147.1	167.6	82.9	108.9
Jun-08	74.5	67.2	77.9	64.7	75.9
Jul-08	102.3	93.3	81.1	24.6	87.7
Aug-08	72.4	94.0	116.9	14.8	61.7
Sep-08	78.0	98.0	110.7	14.8	60.5
Oct-08	115.2	131.7	134.4	31.0	109.7
Nov-08	118.7	99.1	144.5	43.0	115.6
Dec-08	91.4	106.0	96.5	73.6	131.6
Jan-09	106.3	104.5	97.3	64.7	121.9
Feb-09	82.7	74.7	90.6	70.0	107.7
Mar-09	86.8	94.9	99.3	43.2	86.2
Apr-09	126.8	125.9	91.2	63.3	76.5
May-09	100.3	116.9	130.4	95.8	95.3
Jun-09	114.6	105.5	121.4	86.2	77.4
Jul-09	103.9	106.0	102.0	89.4	92.4
Aug-09	86.1	93.1	94.8	85.1	83.9
Sep-09	88.1	82.4	92.6	66.2	77.6
Oct-09	118.9	104.4	96.4	74.6	77.6
Nov-09	90.3	106.4	117.6	96.0	78.4
Dec-09	88.8	121.9	110.9	101.5	105.6
Jan-10	90.3	104.5	103.1	66.2	93.2
Feb-10	94.9	102.3	93.8	80.3	99.8
Mar-10	74.8	86.7	83.7	80.7	99.6
Apr-10	75.4	83.7	60.8	56.6	70.3
May-10	90.5	105.3	88.8	54.5	67.4
Jun-10	74.8	93.5	91.5	70.5	75.2
Jul-10	71.9	77.0	76.5	77.2	111.6
Aug-10	66.7	56.5	71.6	93.2	60.5
Sep-10	49.2	56.5	59.6	27.7	61.2
Oct-10	52.7	49.7	38.6	70.5	90.6
Nov-10	38.9	43.1	52.5	54.0	67.8
Dec-10	54.7	44.9	47.7	39.4	55.7
Jan-11	28.6	51.5	78.9	56.9	92.4
Feb-11	61.4	50.6	67.3	36.5	65.5
Mar-11	39.6	41.5	60.5	33.5	66.4
Apr-11	66.0	57.8	42.8	47.8	44.4
May-11	59.2	54.5	42.3	50.7	50.2
Jun-11	54.7	60.8	60.6	81.4	90.5
Jul-11	89.4	58.6	47.9	23.9	75.9
Aug-11	41.8	44.1	47.0	43.3	58.7
Sep-11	64.5	53.4	59.7	48.5	70.0

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

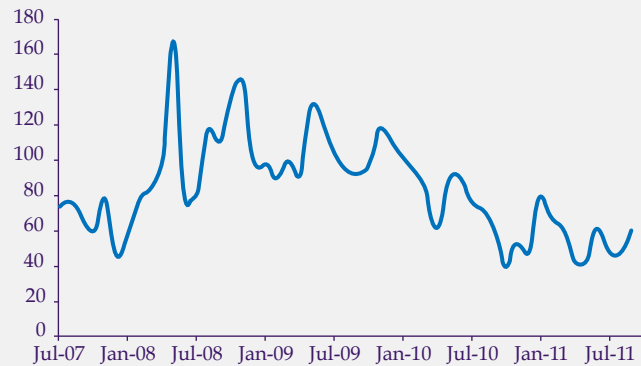
Beirut Consumer Confidence Sub-Index



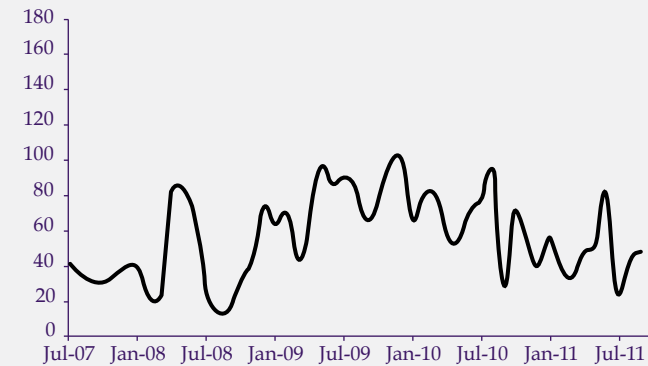
Mount Lebanon Consumer Confidence Sub-Index



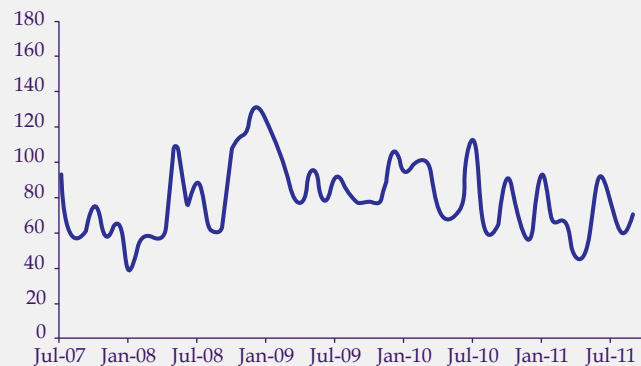
North Lebanon Consumer Confidence Sub-Index



Bekaa Consumer Confidence Sub-Index



South Lebanon Consumer Confidence Sub-Index



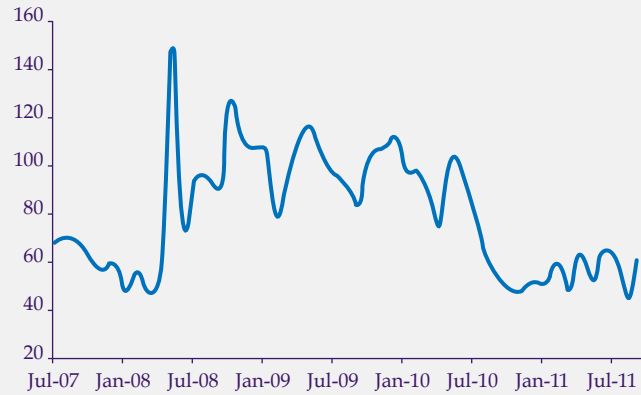
Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX VI: BYBLOS BANK/AUB CONSUMER CONFIDENCE BY RELIGIOUS AFFILIATION

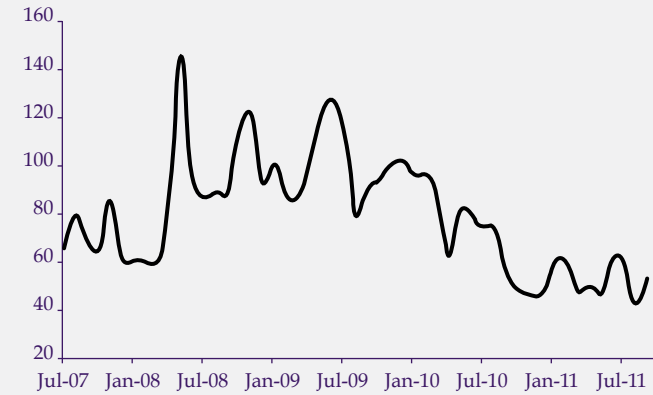
Month	Christians	Sunnis	Shiites	Druze
Jul-07	69.1	64.7	71.1	70.6
Aug-07	71.1	79.5	50.4	60.0
Sep-07	68.1	67.0	47.6	55.7
Oct-07	62.9	65.1	59.2	70.3
Nov-07	58.4	86.2	45.1	81.4
Dec-07	60.8	60.4	55.9	52.6
Jan-08	49.6	60.7	36.3	59.1
Feb-08	56.7	59.9	35.2	44.2
Mar-08	46.7	60.4	46.4	58.5
Apr-08	55.0	81.6	75.1	47.1
May-08	150.0	145.8	98.8	119.5
Jun-08	74.0	93.1	50.1	55.3
Jul-08	95.2	87.1	56.5	65.3
Aug-08	95.4	88.3	38.2	88.9
Sep-08	92.4	88.4	49.8	96.0
Oct-08	126.7	115.5	79.3	121.6
Nov-08	110.1	121.8	82.2	97.4
Dec-08	107.1	93.3	101.1	94.1
Jan-09	107.7	101.5	83.2	102.1
Feb-09	81.0	86.2	88.5	70.6
Mar-09	98.3	88.1	63.8	78.8
Apr-09	112.6	98.9	68.7	158.4
May-09	115.6	121.7	92.4	111.0
Jun-09	103.2	127.5	78.9	104.3
Jul-09	97.1	112.4	88.0	119.9
Aug-09	91.3	78.9	81.9	93.5
Sep-09	84.5	91.1	71.1	76.5
Oct-09	105.2	94.3	81.7	99.3
Nov-09	106.8	100.7	87.6	106.9
Dec-09	111.5	102.4	102.9	140.2
Jan-10	100.2	95.9	80.1	108.0
Feb-10	97.0	96.0	93.5	97.3
Mar-10	84.9	85.0	85.5	89.8
Apr-10	77.4	61.9	66.8	88.6
May-10	103.9	82.3	61.2	86.7
Jun-10	94.5	79.4	74.9	73.6
Jul-10	78.8	74.1	93.8	76.9
Aug-10	63.2	74.1	71.9	52.5
Sep-10	54.6	54.2	46.1	55.7
Oct-10	50.4	47.8	79.5	52.8
Nov-10	48.1	46.3	55.9	49.5
Dec-10	51.9	46.7	47.9	28.2
Jan-11	52.6	59.0	79.0	52.9
Feb-11	59.5	61.6	50.3	33.7
Mar-11	49.1	47.2	48.4	38.5
Apr-11	62.8	49.3	40.6	43.0
May-11	55.5	46.0	47.7	58.5
Jun-11	65.2	62.2	81.2	52.5
Jul-11	61.6	56.8	47.6	75.9
Aug-11	47.2	42.4	52.8	34.8
Sep-11	61.0	54.2	62.1	40.4

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

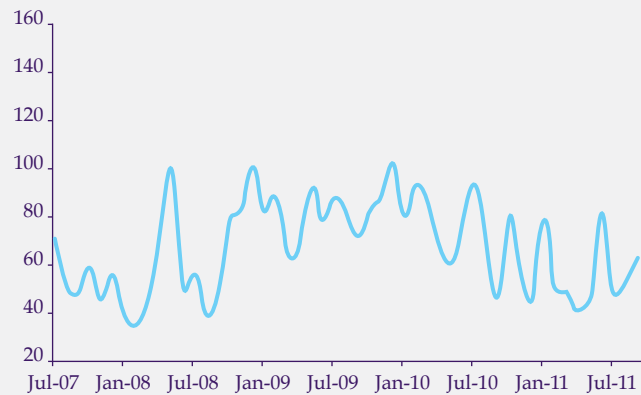
Christians Consumer Confidence Sub-Index



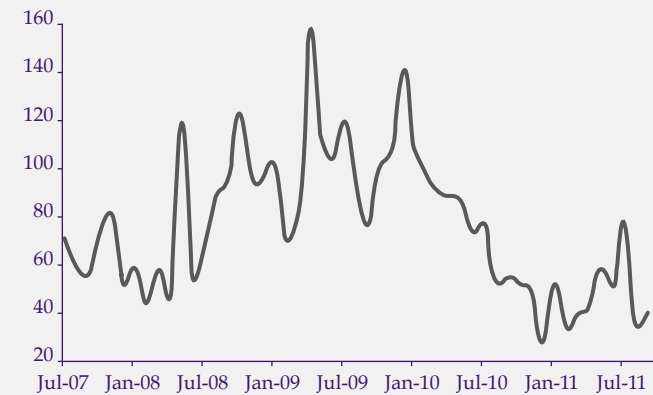
Sunnis Consumer Confidence Sub-Index



Shiites Consumer Confidence Sub-Index



Druze Consumer Confidence Sub-Index



Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX VII: HIGHEST AND LOWEST LEVELS OF CONFIDENCE

Snapshot of Consumers with the Highest Level of Confidence at the End of Each Quarter

	Occupation	Income*	Administrative District	Age Bracket	Gender	Religious Affiliation
September 2007	Private sector employee	≥\$2,001	Mount Lebanon	21-29 yrs	Male	Christians
December 2007	Private sector employee	≥\$2,001	Beirut	21-29 yrs	Female	Christians
March 2008	Student	≥\$2,001	North	30-39 yrs	Male	Sunnis
June 2008	Housewife	≥\$2,001	North	≥60 yrs	Female	Sunnis
September 2008	Unemployed	≥\$2,001	North	≥60 yrs	Female	Druze
December 2008	Private sector employee	≥\$2,001	South	21-29 yrs	Female	Christians
March 2009	Self-employed	≥\$2,001	North	30-39 yrs	Male	Christians
June 2009	Student	≥\$2,001	North	21-29 yrs	Female	Sunnis
September 2009	Student	≥\$2,001	North	21-29 yrs	Male	Sunnis
December 2009	Student	≥\$2,001	Mount Lebanon	21-29 yrs	Male	Druze
March 2010	Private sector employee	≥\$2,001	South	21-29 yrs	Male	Druze
June 2010	Public sector employee	≥\$2,001	Mount Lebanon	21-29 yrs	Male	Christians
September 2010	Student	≥\$2,001	South	21-29 yrs	Male	Druze
December 2010	Student	≥\$2,001	South	21-29 yrs	Female	Christians
March 2011	Student	\$1,001-\$2,000	South	21-29 yrs	Male	Christians
June 2011	Student	\$1,001-\$2,000	South	21-29 yrs	Male	Shiites
September 2011	Student	≥\$2,001	South	21-29 yrs	Male	Shiites

* monthly household income

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

Snapshot of Consumers with the Lowest Level of Confidence at the End of Each Quarter

	Occupation	Income*	Administrative District	Age Bracket	Gender	Religious Affiliation
September 2007	Unemployed	≤\$500	Bekaa	≥60 yrs	Female	Shiites
December 2007	Student	≤\$500	Bekaa	50-59 yrs	Male	Druze
March 2008	Unemployed	≤\$500	Bekaa	≥60 yrs	Female	Shiites
June 2008	Public sector employee	\$501-\$1,000	Bekaa	40-49 yrs	Male	Shiites
September 2008	Public sector employee	≤\$500	Bekaa	21-29 yrs	Male	Shiites
December 2008	Self-employed	≤\$500	Bekaa	≥60 yrs	Male	Sunnis
March 2009	Unemployed	≤\$500	Bekaa	≥60 yrs	Female	Shiites
June 2009	Unemployed	≤\$500	South	40-49 yrs	Male	Shiites
September 2009	Unemployed	\$501-\$1,000	Bekaa	≥60 yrs	Female	Shiites
December 2009	Unemployed	\$501-\$1,000	Beirut	40-49 yrs	Female	Sunnis
March 2010	Public sector employee	\$1,001-\$2,000	Beirut	50-59 yrs	Female	Christians
June 2010	Unemployed	\$501-\$1,000	Bekaa	≥60 yrs	Female	Druze
September 2010	Unemployed	\$501-\$1,000	Bekaa	30-39 yrs	Female	Shiites
December 2010	Unemployed	≤\$500	Bekaa	50-59 yrs	Male	Druze
March 2011	Public sector employee	\$501-\$1,000	Bekaa	40-49 yrs	Female	Druze
June 2011	Unemployed	≥\$2,001	Beirut	≥60 yrs	Female	Druze
September 2011	Public sector employee	≤\$500	Bekaa	≥60 yrs	Female	Druze

* monthly household income

Source: Byblos Research and AUB, based on surveys conducted by Statistics Lebanon

APPENDIX VIII: APPROXIMATE MONTHLY SAMPLE BREAKDOWN

Caza	Region	Christians	Sunnis	Shiites	Druze	Total
Beirut						
East Beirut	Ashrafieh	30				30
	Karm El Zaitoun	10				10
	Parc	20				20
West Beirut	Tarik Jdideh		56			56
	Wata Mosaitbeh		26			26
	Malla		26			26
Sub-Total Beirut		60	108	-	-	168
Mount Lebanon						
Metn	Dekwaneh	30				30
	Antelias	24				24
	Zalka	16				16
	Broummana	26				26
	Mansourieh	30				30
Keserwen/Jbeil	Jbeil	40				40
	Sehaileh/Zouk	34				34
	Jounieh	34				34
Baabda	Kfarshima	28				28
	Hadath	20				20
	Ain El Remmaneh	24				24
	Furn El Chebbak	26				26
Chouf/Aley	Bchamoun				30	30
	Choueifat				70	70
Sub-Total Mount Lebanon		332	-	-	100	432
South						
Saida	Saida			50		50
	Ghazieh			40		40
Sour	Sour			20		20
Marjeyoun	Kleiaa	20				20
Nabatieh	Nabatieh			50		50
Sub-Total South		20	-	160	-	180

(cont'd)

(cont'd)

Caza	Region	Christians	Sunnis	Shiites	Druze	Total
North						
Akkar	Aabdeh		7			7
	Bebnine		15			15
	Halba		20			20
Koura	Kfar Akka	5				5
	Amyoun	4				4
	Barsa Koura	5				5
	Kousba	5				5
	Deddeh	7				7
Zgharta	Anfi	10				10
	Zgharta	10				10
Minieh/Donnieh	Bakhaoun		8			8
	Minieh		21			21
	Sir		12			12
Tripoli	Kalamoun		14			14
	Kobbeh		8			8
	Mina		14			14
	Tripoli		36			36
Becharreh	Becharreh	15				15
Batroun	Batroun	14				14
	Douma	4				4
	Kfarabida	6				6
Sub-Total North		85	155	-	-	240
Bekaa						
Zahle	Zahle	16				16
	Saadnayel		24			24
	Ali Nahri			6		6
Baalbeck	Baalbeck			100		100
	Douris			17		17
	Nabi Chit			17		17
Sub-Total Bekaa		16	24	140	-	180
Grand Total		513	287	340	100	1,200

Source: Statistics Lebanon

APPENDIX IX: SOCIOECONOMIC PROFILES

The Lebanese population is distributed into four major socioeconomic categories as defined by Statistics Lebanon.

Class A - Upper Social Class

Class A represents 5% of the population and is divided into three sub-categories: A1, A2, and A3.

A1 is characterized by the following:

- Monthly family income of at least \$25,000
- Family expenditures of at least \$15,000 on leisure and entertainment in the last six months
- At least one tourism trip in the past 18 months

A2 is characterized by the following:

- Monthly family income of between \$15,000 and \$25,000
- Family expenditures of at least \$6,000 on leisure and entertainment in the last six months
- At least one tourism trip in the past 18 months

A3 is characterized by the following:

- Monthly family income of between \$10,000 and \$15,000
- Family expenditures of at least \$6,000 on leisure and entertainment in the last six months
- At least one tourism trip in the past 24 months

Class B - Middle Social Class

Class B represents 30% of the population and is divided into three sub-categories: B1, B2, and B3.

B1 is characterized by the following:

- Monthly family income of between \$7,500 and \$10,000
- Family expenditures of at least \$4,500 on leisure and entertainment in the last six months
- At least one tourism trip in the past 24 months

B2 is characterized by the following:

- Monthly family income of between \$4,500 and \$7,500
- Family expenditures of at least \$2,500 on leisure and entertainment in the last six months
- Area of residence
- Educational level

B3 is characterized by the following:

- Monthly family income of between \$2,000 and \$4,500
- Family expenditures of at least \$750 on leisure and entertainment in the last six months
- Area of residence
- Educational level

Class C - Lower Social Class

Class C represents 47% of the population and is divided into two sub-categories: C1 and C2.

C1 is characterized by the following:

- Monthly family income of between \$1,000 and \$2,000
- Family expenditures of at least \$750 on leisure and entertainment in the last six months
- Area of residence
- Educational level

C2 is characterized by the following:

- Monthly family income of between \$800 and \$1,000
- Family expenditures of \$500 or less on leisure and entertainment in the last six months
- Area of residence
- Educational level

Class D - Lower Lower Social Class

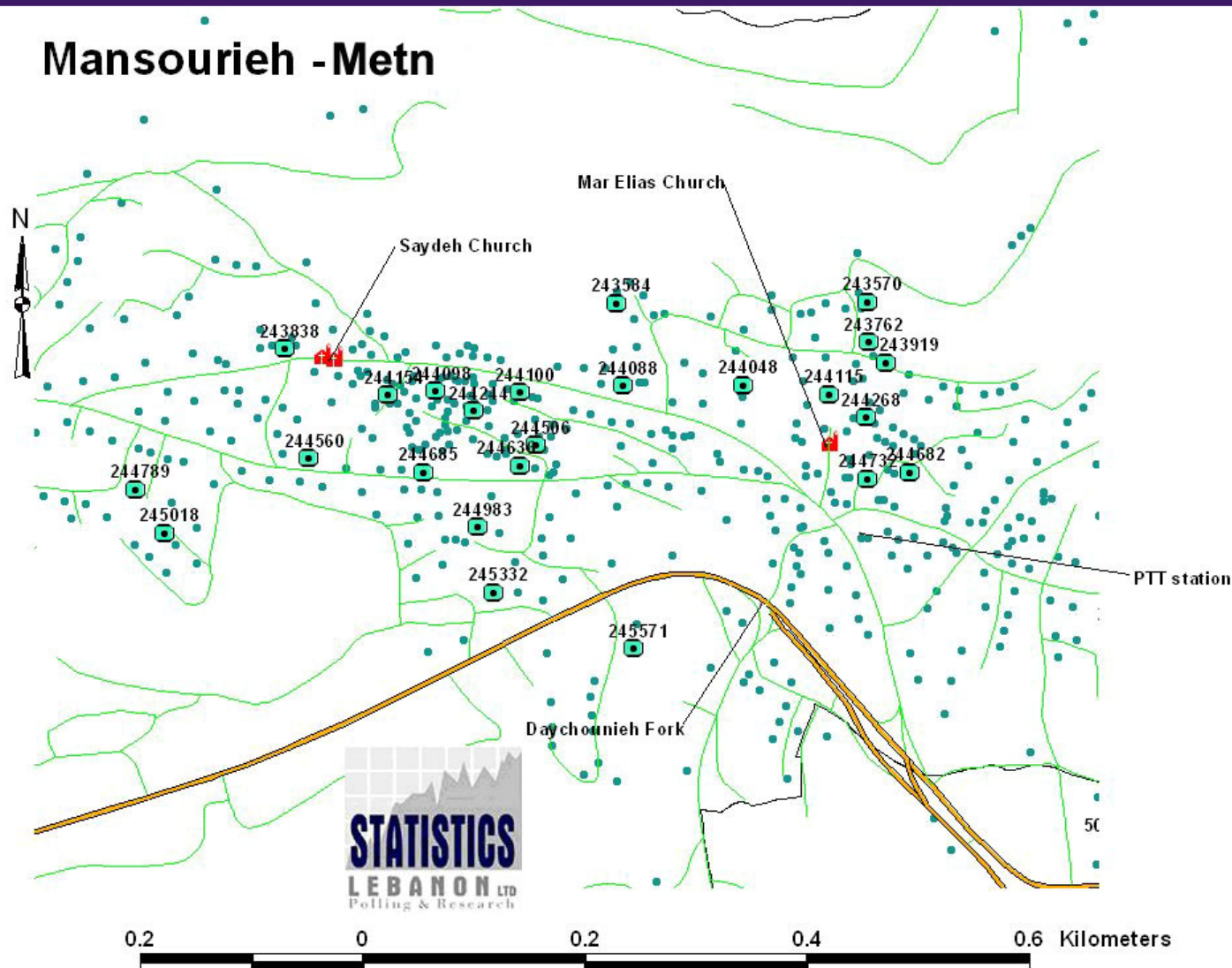
Class D represents 18% of the population.

D is characterized by the following:

- Monthly family income of \$800 or less
- Area of residence
- Educational level

APPENDIX X: SAMPLE MAP

Mansourieh - Metn



ENDNOTES

- 1 - See Piger, J 2003, *Consumer Confidence Surveys: Do They Boost Forecasters' Confidence?*, media release, Federal Reserve Bank of St. Louis, <http://www.stlouisfed.org/publications/re/articles/?id=415>
- 2 - Table 1131, 'Utilization and Number of Selected Media: 2000 to 2008' in the U.S. Census Bureau's Statistical Abstract of the United States.
- 3 - See *Dissemination Standards Bulletin Board (DSBB)*, International Monetary Fund, <http://dsbb.imf.org/>
- 4 - See *Statement by an IMF Mission to Lebanon*, International Monetary Fund, Press Release No. 11/432, November 2011.
- 5 - See Emrys, C 2009, *Economic Indicators*, Encyclopedia of Business in Today's World, California, USA.
- 6 - See International Telecommunication Union's World Telecommunication Indicators Database.
- 7 - See *MasterCard Worldwide Index of Consumer Confidence*, press release, September 2011, MasterCard Worldwide, <http://www.masterintelligence.com/ViewRegionReport.jsp?hidReportTypeId=2&hidRegionId=2&hidUserId=null>
- 8 - Ms. Roula Yazbeck has been operating as a freelance business consultant since 2005 and has undertaken numerous research projects, focusing on both sector and consumer research in Lebanon and the Arab world. Her previous positions covered operational consulting and market research. She worked at Tetra Pak East Med as its Marketing Director in the Levant. Before that, she was Manager at Lebanon Invest's market research department and then an Associate at Delta Capital (private equity fund). Also, she was Project Manager at Middle East Info Search research company. Prior to moving back to Lebanon in 1995, Ms. Yazbeck was an Operational Consultant with Arthur Andersen LLP in California.

Ms. Yazbeck holds a Bachelor degree in Psychology from the American University of Beirut (1988, with High Distinction) and was presented with the 1988 academic award of excellence. She also holds a Postgraduate Diploma in Accounting and Finance from London School of Economics (1991, with Merit) and a Masters in Business Administration from London Business School (1993).
- 9 - See Teck, YW, 'Probability Proportional to Size (PPS) Cluster Sampling: Application in the Military Setting'.

- 10 - Statistics Lebanon keeps a list of all population locations covering the various Lebanese areas and the estimated population size in each location since 1999, which it updates on a yearly basis.
- 11 - The Kish Grid gives a procedure of selection intended to select persons within the household with equal probability. The interviewer lists each adult on one of the lines of the form, where each is identified by his/her relationship to the head of the household. Then the interviewer assigns a serial number to each adult. After, the interviewer consults the selection table that tells him the serial number of the adult to be interviewed.
- 12 - See Cochran, WG 1977, *Sampling Techniques*, Wiley, New York.
- 13 - See International Telecommunication Union's World Telecommunication Indicators Database.
- 14 - See International Telecommunication Union's World Telecommunication Indicators Database.
- 15 - Founded in 1916, the US-based Association to Advance Collegiate Schools of Business (AACSB) International is a global accrediting body for business schools that offers undergraduate, master's and doctoral degrees in business and accounting. According to the AACSB, achieving accreditation is a process of rigorous internal review, evaluation and adjustment, and can take several years to complete. The Olayan School of Business' accreditation process took three years, which is considered a record time relative to other universities. A total of 567 business schools in 33 countries maintain AACSB accreditation, with 103 such schools outside the United States.
- 16 - The Cabinet approved a raise in the minimum wage from LBP300,000 to LBP500,000 and an increase in the monthly salaries of the private and public sectors by LBP200,000, with retroactive effect as of May 2008.
- 17 - The Special Tribunal for Lebanon was established by the United Nations in 2007 to investigate the car bomb assassination on February 14, 2005 of Prime Minister Rafic Hariri and 22 other persons. The STL, which started its operations in March 2009, is also investigating the subsequent assassinations of several political and media figures in the country.
- 18 - See Jaditz, T 1994, 'Seasonality: Economic data and model estimation', *Monthly Labor Review*, vol. 117, no. 12.
- 19 - See Fixler, D, Grimm, B., and Lee A. 2003, 'The Effects of Revisions to Seasonal Factors on Revisions to Seasonally Adjusted Estimates', *Survey of Current Business*, vol. 83, no. 12, pp. 43-50.

20 - The ratio-to-moving average method uses the following steps to develop seasonal estimates for monthly data:

- i. Calculate a centered 12-month moving average for each period.
- ii. Divide each month's actual index value by the 12-month moving average and multiply by 100.
- iii. Calculate the median for each calendar month.
- iv. Multiply each median index by the sum of medians and then divide by 1200 to get the seasonal index.
- v. Divide each month's actual index value by the seasonal index and multiply by 100 to get the seasonally-adjusted series.

21 - See Ludvigson, S, 2004, 'Consumer Confidence and Consumer Spending', *Journal of Economic Perspectives*, vol. 18, no. 2, pp. 29-50.

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