Realignment of Financial Frameworks in the Kingdom of Bahrain: Broadening Horizons of Economic Growth through Strategic Initiatives

Ghassan Ossman,
Dean, College of Administrative and Financial Sciences and Graduate Studies,
AMA International University Bahrain, Kingdom of Bahrain.
Email: gossman@amaiu.edu.bh, ossman2012@gmail.com

Abstract

This research determines the relationship between the different financial frameworks and economic growth in the Kingdom of Bahrain, and identifies variables that predict economic growth therein. Bahrain’s Gross Domestic Product expanded 0.10% in 2014 over the previous quarter with an average 0.31% from 2011-14, with 2.8% in 2012, a low record of -6.6% in 2011. Productivity has the highest record of 7.6% in annual change for 2006 and low record of 1% in 2003. Record shows 72.30 total labor force participation rate in 2011, the highest value over the past 21 years and 65.60, the lowest value in 2004. Data shows a decrease from 2109.10 BHD Million in 2013 to 1796.60 BHD Million for 2014 in Gross Fixed Capital Formation which averaged 1752.92 BHD Million from 2002-13, reaching high record of 3122.60 BHD Million in 2008 and a low record of 606.10 BHD Million in 2002. Statistical analyses reveal that correlation coefficient between productivity and economic growth presents no significant relationship; correlation coefficient between labor force participation and economic growth shows no significant relationship; capital formation has correlation coefficient which is not significant at both 1% and 5% significance level; inflation rates and economic growth indicate significant relationship; and economic growth over the last ten years does not significantly differ in the long term. The Kingdom will be able to maintain its rising level of economic growth over the long term, attributed by the utilization of strategic initiatives through realignment of the financial frameworks.

Key words: Economic Growth, Productivity, Labor Force Participation, Capital Formation, Inflation Rate.
1. Introduction

Economic growth refers to the increase in market value of all produced goods and services by an economy, over time. It is the increase in production capacity, measured in terms of percent rate of increase in real gross domestic product. Gross National Product per capita is used to compare one country’s economic growth to another, taking into consideration differences in population between countries. The global economy shows promising and slightly more robust for year 2014, although emerging market jitters face potential monetary tightening in the United States. Outlook for the global economy displays consistent signs of improvement in advanced economies, even with the persistence of risks. Current configuration reveals supportive economic growth in the Kingdom of Bahrain with possibility of reversals in view of the existence of a multitude of risks. The global economy near term outlook is characterized by growth in optimism about advanced economies and mounting anxiety about emergence of economies with current accounts deficits. Implications in Bahrain economy include a mixed global outlook which is more supportive of oil prices, with expectations of significant volatility. Prospect for greater controls on capital by emerging markets is likely to reduce potentials for global investment flows and foreign direct investment.

1.1. Background Information

The economy of the Kingdom of Bahrain shows strong performance this year (2014), with growth expected at 5.3% for the year 2013. Gross Domestic Product is expected at 4.2% in year 2014 and by 4.0% in year 2015 (Bahrain Economic quarterly, 2013). The oil sector and production in the country have returned to normal with gradual output gains in Bahrain field and the economy expects double digit growth in the oil sector. Impending recovery in the West will translate into pressures in interest rates with negative effects for funding cost and local lenders.

1.2 Statement of the Problem

This study determined the relationship between the financial frameworks and economic growth in the Kingdom of Bahrain and identified variables that predict economic growth in the country. The study sought answers to the questions:

1. What is the status of the economic growth in the Kingdom of Bahrain in terms of productivity, labor force participation, capital formation, and inflation rates?
2. What is the level of economic growth in the Kingdom of Bahrain?
3. Is there significant relationship between productivity, labor force participation, capital formation, and inflation rates and economic growth?
4. Which of the following variables singly or in combination predict economic growth in the Kingdom of Bahrain?
4.1 Productivity
4.2 Labor Force Participation
4.3 Capital Formation
4.4 Inflation Rates

5. Is there significant difference in the level of economic growth in the Kingdom of Bahrain over the past ten years and in the long term?

Null Hypotheses

**Ho1:** There is no significant relationship between productivity, labor force participation, capital formation, and inflation rates and economic growth in the Kingdom of Bahrain.

**Ho2:** The following variables singly or in combination do not predict economic growth in the kingdom of Bahrain;

1. Productivity
2. Labor Force Participation
3. Capital Formation
4. Inflation Rates

**Ho3:** There is no significant difference in the level of economic growth in the Kingdom of Bahrain over the past ten years and in the long term.

1.3 Scope and Limitations of the Study

The study established the relationship between productivity, labor force participation, capital formation, and inflation rates and economic growth. It identified financial frameworks that predicted economic growth in the Kingdom of Bahrain. It focused on the variables of productivity, labor force participation, capital formation, and inflation rates. Documentary analysis was used to establish significant relationship between financial frameworks and economic growth. The research used historical data for economic growth of Bahrain from year 2002 to 2014.

Other factors that influence economic growth and that are not mentioned in the statement of the problem are not included in the study. The study is constrained by the limitations of statistical bias. Sufficient care was taken to validate data collected from the secondary sources and other limitations encountered in the study.

1.4 Significance of the Study

Findings of the study will benefit the policy makers of the Kingdom, government agencies, financial institutions, and employers in the provision of knowledge on the different factors that will contribute to the efficient utilization of production inputs and financial models that will lead into sustainable growth of the economy.
2. Review of Literature and Studies

The measure of productivity in an economy is in terms of the dollar value of goods and services which in turn contributes to the economic growth of the country (Willis, 2014). Gross National Product is the measure of economic growth which measures productivity in terms of total dollars paid for all the goods and services that is influenced by inflation. The process of economic development refers to investments in an economy to anticipate economic growth. Economic development can include business activities in the different industries for commerce, research, and innovation. The process is aimed at providing support for start up businesses, business growth or location to geographical areas.

The article of Black (2014) considers economic growth as the amount of production in an economy over a certain period of time. It is a sure sign of the nation’s overall health which means more jobs and more consumption that will need increased production of goods and services. Economic growth tends to come and go in cycles. Other measures of economic growth include creation of more jobs which means creation and spread of wealth. Non creation of jobs can lead to a depressed economic state. All of the business and production activities help create an overall healthy economy.

Larmore (2014) discussed different economic growth models to explain the effects of non-economic variables on the growth of an economy aimed at acquiring better understanding why economies of nations grow faster than others. Critical non-economic variables include population growth, innovation, flow of invention, and the rate of capital accumulation of individuals within the society. Classical growth emphasizes improved capital which contributes to increased and stability in economic growth. Agriculture plays a significant role in economic growth of nations. The theory argues that economic growth will end with increase in population and decrease in resources. Agriculture plays a key role in economic growth, with a focus on urban industry. The model of neoclassical growth consists of several equations that show how investment, labor-time, output, and capital goods, affect one another. This theory is based on assumption that nations use efficiently their resources, and returns diminish as labor increases. The model illustrates the importance of technology as a factor of growth, and as technology improves, capital increases, country investment increases, and then economic growth is achieved. The endogenous growth theory adds the concept of human capital and mathematical explanations designed for technological advancement. The unified growth theory explains qualitatively the long-term similarities of economic growth process in economies in the different stages of development. The model uncovers variables that are responsible to bring economies from stagnation to growth, which contribute to global differences in economic development. This theory explains how income per capita diverged in the past two centuries.
Investment, natural resources, capital, and labor are all considered as determinants of (Garnett, 2014). Economic growth is attained when these determinants increase as a result of population growth, increase in innovation, investments, and improvements in education. Increased production of goods at a faster rate is the result of skilled workforce. With increased capital, land and entrepreneurs in specific markets salaries will rise and standard of living of the people is improved. Population growth, immigration from other countries, and increased rates of workforce participation result in increasing the quantity of labor. Formal education and training improve the quality of labor. Economic growth through labor is attained in several ways. A high employment level means that companies have the necessary manpower to produce, service, and sell the goods and services that the population demands. Furthermore, the income levels for the entire region or country increase if a high proportion of citizens are employed. This means that consumer demand will remain steady or increase.

Myanmar is actively re-engaging with the global economy after decades of isolation (Toshihiro et al, 2014). For successful re-engagement, Myanmar needed to implement comprehensive economic reforms based on shared vision of long-term economic development for successful re-engagement. This is characterized by sustainable, human centered, high and balanced economic growth. The paper proposed five growth strategies, namely; Agriculture Plus Plus, strategy for export-oriented; strategy of foreign direct investment driven; two-polar growth strategy; and a development strategy of domestic economic corridors. The strategies serve as guides to transform development agendas into implementable policies, projects, and programs.

Claus (2004) developed an analytical framework to discuss the link between financial systems and economic growth. Findings of the study reveal that financial systems help overcome information asymmetry between borrowers and lenders. If they do not function effectively, a negative effect will result in the growth of an economy. Analysis conducted show the importance of the maintenance of solid legal foundations, and so there is a need to reform tax policy on investment as it affects operations of financial systems, and an in-depth review of the financial system must be conducted in terms of financial regulation and supervision.

The article Romanov (2011) focused on the opportunities offered by the Kingdom of Bahrain during economic downturn. RSA Company experienced growth despite the dire economic situation in 2008. A number of opportunities offered by the country are engineering, marine insurance, risk management, and construction.

Business organizations must meet standards of technology of present consumers, Rafique (2014). Enterprises that invest in consumerized, modern technologies experience a 56% increase in productivity of employees and a 46% increase in satisfaction of customers.
The study of Wamboy et al (2014) focused on foreign aid dependency in Africa that remains controversial among policymakers. The Euro zone implements austerity programs that provide the bulk of foreign aid to developing countries. This research investigated the quantity or quality of foreign aid that can support economic growth of the least developed countries in Africa. The study assessed the issues within the framework of a country’s legal origin. Findings of the study suggest that both quantity and quality of aid is essential and growth-enhancing effects of aid are present in British colonies regardless of model specification and sample.

The relationship between Foreign Direct Investment and economic growth is one of the well-studied areas in development economics (Tasos, 2014). Under the framework of growth theories, it is more plausible to include foreign direct investment as one of the determinants of long-run economic growth. This paper investigates the relationship between economic growth, foreign direct investment and exports for the economy of the United States. To achieve this objective, Johansen maximum likelihood procedure is used. Results of the procedure applied, reveal the presence of one co-integrating vector. Results of Bai-Perron test reveal two structural breaks. Block exogeneity Wald test indicate causality running from exports to gross domestic product and foreign direct investment, and also from gross domestic product to foreign direct investment.

The study of Dan (2014) explains the role of exports in the reduction of import shortages as the main cause of the statistically significant correlation between economic growth and export promotion which impeded growth of output in semi-industrialized countries. Export promotion policies play an important role in these countries that cannot secure sufficient foreign investment. The research study developed a simultaneous equation model to address the bias between gross domestic product and export growth rates. The model was extended to incorporate the contribution of government consumption to output growth.

The paper of Peng et al (2014) presents two competing views of Beijing Consensus and Washington Consensus, on the experience of China’s growth over the past three decades. China’s economic growth is interpreted as innovations function in the state sector by the Beijing Consensus, including controls for finance, ownership of firms by the state, and political controls in favor of economic growth. The Washington Consensus views China’s experience much the same as growth experiences that is, as a result of financial liberalization, private entrepreneurship, and political opening. This study argues that China’s growth experience fits better with the Washington Consensus view.

Bamfieidt and Elert (2014) defined high growth firms using applied growth indicators of employment and sales, based on value added growth and productivity. Results of the study indicate that employment in high growth firms are not the same firms in terms of
productivity, and their economic contributions differ significantly. Economic policy that promotes fast growth in employment comes at the cost of reduced growth in productivity. New firms are likely to be high growth firms, irrespective of definition. The study suggests that economic policy must focus on conditions of new firm formation and early growth of companies.

De Silva and Sumarto (2014) explored the nexus between inequality, poverty and economic growth in Indonesia between years 2002 and 2012, utilizing pro-poor growth concepts and indices to analyze whether economic growth in this period benefited the poor. Regression-based decompositions of poverty into redistribution and growth components suggest that around forty percent of inequality in total household expenditure in Indonesia was caused by variations in expenditure by education characteristics which persisted, with the control of other factors. Findings of the study revealed that economic growth in this period benefited households on top of expenditure distribution, and an effect saw the poor receive proportionately fewer benefits than the non-poor. If reducing poverty is one of the Indonesian government's principal objectives, then policies designed to spur growth need to take into account possible impacts of growth on inequality.

The paper of Grassa and Gazdar (2014) compared the effects of Islamic and conventional financial development on the economic growth for five GCC countries (Bahrain, Kuwait, Qatar, Saudi Arabia and UAE). Using generalized least squares, OLS and panel data frameworks, this paper employs different measures of financial development for the period (1996-2011). Empirical results of the study strongly support the hypothesis that Islamic finance leads to growth in the five GCC countries. There is no significant relationship observed between conventional financial development and growth. The findings of this paper suggest the importance to accelerate the financial reforms for Islamic finance that were launched in the region since the last decade and to enhance the efficiency of these countries’ Islamic financial systems in order to stimulate savings and investments and, long-term economic growth. This paper is the first study to examine empirically the effect of Islamic finance on economic growth in GCC region. This study compares the different effects of Islamic finance and conventional finance on economic growth on a context of countries having the most developed Islamic financial system in the world.

Supply chain analysis of the Kingdom of Bahrain revel increases in oil revenues which lead to rise in investment and increase in the volume of capital stock in the economy (Al Sadiq, 2000). Increase in financial resources resulted in the inflow of foreign labor comprising more than 50% of the labor force. Decomposition of the growth of the gross domestic product into labor force growth and labor productivity indicate that employment growth provides a significant contribution to overall economic growth. Productivity shift was
toward social overhead sectors that reflect top priority of government’s capital expenditure. Manufacturing result in negative productivity change effect that reflects increased importance of labor intensive industries. Application of Solow’s measure to the economy of Bahrain reveal that sources of growth pattern is explained by the contribution of factor inputs to gross domestic product growth. Major source of economic growth in developing countries is growth of factor inputs and total factor productivity growth is less important.

2.1 Theoretical Framework

Figure 1: Theoretical Framework of the Study, “The Contributors To Growth”, Peter Mersi (2005)

The diagram in Figure 1 presents the contributors to economic growth. As shown, growth in GDP per capita is driven by increases in labor utilization, how many hours of work or by increases in labor productivity, how much is produced per hour worked.

Labor utilization is determined by the proportion of the population of working age, the participation rate of that population, the unemployment rate of those participating and the average hours worked by workers. Labor productivity is determined by the amount of capital available for each worker to use and what economists call “multi-factor productivity”.

Multi-factor productivity is viewed as what it measures, and can be thought of as the way in which labor and capital are combined and used.

2.2 Conceptual Framework of the Study

Figure 2: Research Paradigm, “Cause and Effect Relationship of Independent and Dependent Variables”

3. Methodology

3.1 Research Methodology

The data obtained were collected, tabulated, analyzed and interpreted using percentage in the presentation of items regarding the changes of variables over a period of time. Arithmetic
mean was used as a measure of the central tendency of raw data to describe the nature of observations that were collected. Correlation analysis measured the degree of relationship between productivity, labor force participation, capital formation, inflation rates and economic growth. Multiple Regression Analysis assessed the relationship between independent variables and economic growth. It was also used to identify the variables that predict economic growth in the Kingdom of Bahrain. T-test was used to test the significant differences in the level of economic growth in the Kingdom of Bahrain, for the past twelve years and for the long term.

3.2 Research Design

Descriptive method was utilized in the study. Documentary analysis was used to determine the significant relationship between financial frameworks variables and economic growth in the Kingdom of Bahrain, the level of economic growth, and the significant difference in the level of economic growth in the Kingdom of Bahrain over the past ten years and in the long term.

3.3 Research Instruments and Techniques

3.3.1 Documentary Analysis

The researcher reviewed annual reports, brochures, and government manuals and standards. Other possible documents were sourced out while the study is in progress. This provided supplementary explanations to some issues that were raised by this study.

3.3.2 Statistical Treatment of Data

1. Correlation.

This statistical tool was used to measure the degree of relationship between the variables of financial frameworks and economic growth in the Kingdom of Bahrain. The formula is:

\[ r = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{[N \sum x^2 - (\sum x)^2][N \sum y^2 - (\sum y)^2]}} \]

Where:

- \( N \) = number of pairs of scores
- \( \sum x \) = sum of x scores
- \( \sum y \) = sum of y scores
- \( \sum xy \) = sum of products of paired scores
- \( \sum x^2 \) = sum of squared x scores
- \( \sum y^2 \) = sum of squared y scores

X and Y are the deviation scores of the two variables under study.
2. T-test.

This formula was used to test the significant difference in the level of economic growth in the Kingdom of Bahrain over the past ten years and in the long term. The following formula was applied:

\[
t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_p^2}{n_1} + \frac{s_p^2}{n_2}}}
\]

Where:
- \( T \) = the difference between the means of two economic periods
- \( \bar{x}_1 \) = the mean of the first set of values
- \( \bar{x}_2 \) = the mean of the second set of values
- \( \Sigma \) = summation
- \( s_1^2 \) = sample variance for first set of values
- \( s_2^2 \) = sample variance for second set of values
- \( n_1 \) = total number of values in the first set
- \( n_2 \) = total number of values in the second set

3. Regression Analysis

This statistical tool was used to predict a dependent variable using one or more independent variables. In this study, it was used to measure how strongly each of the variables of financial frameworks predict economic growth in the Kingdom of Bahrain.

The formula is:

\[
Y = b_1X_1 + b_2X_2 + ... + A
\]

Where:
- \( Y \) = dependent variable
- \( X_1, X_2 \) = independent variables
- \( b_1, b_2 \) = coefficients or multipliers that describe the size of the effect the independent variables are having on your dependent variable \( Y \)
- \( A \) = value \( Y \) is predicted to have when all the independent variables are equal to zero

4. Results and Discussions

4.1 Status of Economic Growth in the Kingdom of Bahrain:

Bahrain’s Gross Domestic Product expanded 0.10% in 2014 over the previous quarter. The average is 0.31% from year 2011 until 2014, with a high percent of 2.8 in 2012 and a low record of -6.6% in 2011. The Gross Domestic Product (GDP) in Bahrain expanded 0.10
percent in the first quarter of 2014 over the previous quarter. Central Informatics Organization, 2014). Table 1 presents the data for Bahrain Annual Growth Rate.

Figure 3: Bahrain Gross Domestic Product Annual Growth Rate

![Bahrain GDP Annual Growth Rate](image)

Source: Central Informatics Organization (2014)

Gulf Daily News (2014) reports Bahrain's economic growth rate to reach 5.6% in year 2014, caused by the expected normalization of Bahrain’s oil production from offshore oilfield, and a planned onshore expansion in Bahrain field production. Rapid economic growth achieved by the country during the onset of the new millennium, was driven by construction, boom in property, high oil prices, growing government spending, high demand for private social and personal services, specifically private health and education. The figure indicates Bahrain’s pioneering position in economic diversification for a long period of time, with every business sector experiencing a growing share of the gross domestic product between years 2000 and 2012. The country’s economy continued to grow, despite challenges resulting from the global crisis. The resilience of the nation economy has gone with a track record of sustainability and macroeconomic stability. Projections in maintaining Bahrain’s economic growth rate of 3.7% in year 2013 to 2015 are due to recovery in the service industry and moderate expansion in the production of oil. The hospitality industry and social and personal services were recorded to be the fastest growing sectors in the country which led to major contributions in economic growth.

4.2 Bahrain Productivity

Productivity in the Kingdom of Bahrain has the highest record of 7.6% in percentage annual change for the year 2006 and a low record of 1% in year 2003. Bahrain has stagnated in terms of labor productivity, while other GCC countries have been continuously improving (MacDonald, 2010). The country has the lowest labor productivity largely due to workforce structure and the fact that it has a higher percentage of low-paid foreign workers compared to other countries. Higher cost of structure for employment was cited as essential in improving
productivity. There is a need for organizations to identify problems and solutions to improve productivity. Employers have to set up task force of productive and positive employees and develop them into high-level employees. Productivity growth in the area of manufacturing must be at the centre of sustainable economic growth in the Kingdom of Bahrain where much of the country’s economic growth over the past decade came from the rapid expansion financial services, construction, real estate, retail, and services (Trade Arabia News Service, 2013). The growing young population and investments in human capital will be one of the nation’s key competitive advantages in the next future period. The kingdom can build on an established record of reforms in education and the development of capital markets and investment climate which can be critical to enable the country to capitalize fully on growth potential. The quality of economic growth will be measured by providing the citizens with greater well-being and opportunities.

As presented in Figure 4, the rise in productivity level is seen in year 2005 to 2006, and a rising trend from year 2009 to 2014, present a description of the nation’s strategic initiatives for accumulation of physical and human capital to increase national productivity over the long term. A record of cyclical improvement towards year 2006, registered financial services permanent total factor productivity gains. Data analysis and productivity performance review of industrial sector from year 2009 to 2014, show increases in productivity in the trade sector and achievement of sustained productivity specifically in tourism, services, and telecommunications. Achievement of high productivity contributed to sustained relative increase in the GDP of the kingdom.

Gulf Daily News (2014) reports that a greater percentage of Bahrain's economic growth over the past decade came from the rapid expansion and productivity of the financial services, retail, construction and real estate. The emphasis of development is projected to shift to tradable sectors and value-added manufacturing and giving emphasis on the importance of sustained investment through utilization of financial frameworks as a driver of future economic growth.

Figure 4: Percent Annual Change in Bahrain Productivity

Financial monetary policy framework was designed and implemented in the kingdom to support the free market economy, eliminating restrictions on movements of capital, foreign trade, foreign exchange and the national economic objectives which resulted in raising
productivity level towards sustainability. Instruments of monetary policy through utilization of foreign exchange facility were made available to the banking industry in order to influence banking rates offered to clients. Findings of the study show contributions of financial frameworks in support of monetary policies as successful for enhancing productivity that maintains financial stability of the country. Increased productivity in the private sector stimulated Bahrain’s economic growth in the last five years and is projected to achieve sustainable growth in the future period. The country aspires to capture strategic initiatives for increased productivity and emerging opportunities to drive economic growth in the long term.

To ensure safety, stability and realign financial models of the country’s financial system, the Central Bank of Bahrain installed comprehensive prudential framework specifically designed to the needs of Islamic insurance and Islamic banking. Requirements of the regulatory framework cover various areas of licensing, business conduct, risk management, capital adequacy, disclosure and reporting and financial crime of the industry for Islamic finance. Continual enhancement of financial frameworks to support future development of industries was initiated, as economic trends were projected to continue growing. Weaknesses of the financial system were identified to build a framework that strengthens productivity for industries to capitalize on economic growth opportunities. Strategic initiatives to develop local insurance industry attracted new market entrants and achieved global competitiveness in the financial industry. Frameworks for banking remunerations and audit functions based on international standards which boost the insurance industry were adapted, focusing also on human capital and education initiatives.

Bahrain Economic Development Board (2014) reports that analysis of labor, as factor of production and efficiency of total factor productivity show a rapid increase of 70% growth of workforce and increase in total factor productivity which contributed to sizeable real GDP of 6.2% increase in the Kingdom of Bahrain.

4.3 Labor Force Participation

Record shows 72.30% labor force participation rate in 2011, the highest value over the past twenty one years and 65.60%, the lowest value in 2004. (International Labor Organization, 2014) Labor force participation rate refers to the economically active proportion of the population ages fifteen to sixty four. It includes all people supplying labor for goods and services production in a specified period. The first quarter of 2014 recorded an increase from 569999 in the 4th quarter to 571485 in the 1st quarter in terms of number of employed persons in the Kingdom of Bahrain. The average is 432019.78 from 2004 until 2014, reaching a high record of 571485 in the 1st quarter and low of 255073 in the 1st quarter of 2004.
The emergence of Bahraini workforce and the need for training based on analysis of employment growth predictions were highlighted in Bahraini workforce projections, by twenty nine percent from year 2010 to 2020. Bahrain working age population expands faster than younger or older population (Bahrain News Agency, 2014). Working age Bahrainis participation in the workforce is expected to increase over the next future period. The overall rate of workforce growth will likely be 4.5 % in the long term. Projections present a challenge for demographic change where generations of workers will be better educated and trained. As the economy will provide around 8000 jobs each year, there is the opportunity to expand output by growth of existing business organizations and the formation of new industries that will require new skills. Non-Bahraini workforce in the country doubled in years 2003 to 2009. Guest workers account for three quarters of the total employment and non-Bahrainis comprised for over half of the total population.

Economic growth initiatives created in the Kingdom of Bahrain helped to reduce unemployment as indicated by the rising level of labor force participation, shown in Figure 5. Programmes on placement, employment services, and national programme on training were established, tailored to meet employment demand and the development of a targeted model to get the unemployed citizens into work. Realignment of the current occupational system includes strengthening and restructuring of the current financial and labor market policies. The government and its social partners worked together to develop strategic initiatives and a model of success that focused on employability and social framework. The new model aimed to support labor market reforms and skills formation based on macroeconomic policies, sectoral investments, and industry restructuring for global competitiveness. A demand-driven and cost effective vocational education training programme replaced the nation’s framework of fragmented qualifications. The new framework is designed to lead to skills evaluated based on a recognized model on qualifications.
International Labor Organization (2003) stressed the need for strategic initiative that will move the Kingdom of Bahrain into a growth path which is knowledge-based and skill intensive. The strategy is projected to improve education and skills of Bahrainis which will increase the level of labor force participation in contrast to international competitiveness that focuses on low-cost foreign labor.

Broadening horizons for economic growth led to development of a framework for youth employability which seeks improvement on the ability of young citizens to find jobs through government programmes on education and skills development, career guidance, and entrepreneurship. Realignment of financial frameworks established advancements in innovations and improvement in access to capital for industries and business venture capital. The economy obtained increased levels of growth and position in the global value chain by capturing strategic initiatives and emerging opportunities. Expansion of knowledge-based societies, shown by the increasing trend of labor force participation, indicated in Figure 5.

### 4.4 Bahrain Gross Fixed Capital Formation

Data shows a decrease from 2109.10 BHD million in 2013 to 1796.60BHD million for year 2014 in Gross Fixed Capital Formation in Bahrain. Gross Fixed Capital Formation averaged 1752.92 BHD million from 2002 to 2013, reaching high record of 3122.60 BHD Million in 2008 and a low record of 606.10 BHD Million in year 2002. The gross fixed capital formation (% of GDP) in the Kingdom of Bahrain was last measured at 19.50 percent in year 2012. It includes construction of roads, railways, schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings, land improvements, plant, machinery, and equipment purchases.

#### Figure 6: Gross fixed capital formation (% of GDP)


### 4.5 Bahrain Inflation Rate

Data reveals an inflation rate of 3.1% in June 2014 with an average of 2.25% in year 2008 until year 2014. Inflation rate reached a high record of 5.22% in 2009 and a low record of -2.06% in year 2011, (Central Informatics Organization, 2014). The rate of price change in Bahrain’s economy is measured by the annual growth rate of the GDP implicit deflator. Figure 7 presents the annual percent inflation rates for the period 2000 to year 2010.
The Kingdom of Bahrain is projected to have the lowest inflation rate in the GCC region in year 2012 at 1%, as the economy heads for moderate growth of 2.4 %, (Daily Tribune, 2010). Inflation in the country remained low in the GCC region, caused by the continuing decline in house rentals and price pressures are expected to remain subdued in the current year. Recent wage increases are expected to support domestic demand which can result in rising pressure on consumer prices.

Bahrain’s economic growth strengthened in the first quarter of year 2013 despite a low forecast, with major contributions from the mining industry dominated by oil. Tourism strengthened in the service sector after year 2011 coupled with production increase in the oilfield caused increases in economic growth figures. Recovery in rental costs results in slightly higher inflation rate in year 2013. Realignment of policy frameworks were based on the effects of higher inflation, the need for higher minimum wages, increased benefits for unemployment and massive infrastructure projects in the long term. Increase in average inflation in year 2011 caused realignment of policy frameworks with the fastest pace of price increase recorded in tobacco category and alcoholic beverages, followed by household maintenance goods, household equipment, and furnishings. As shown in Figure 7, declining inflation rates after year 2008 was due to initiatives to ease prices on non-alcoholic beverages, food, housing, electricity, water, and gas. Projections for long term, show stability in inflation rate despite of price increase in the global business environment. Qatar National Bank Report (2014) states that overall inflation rate of 4.1% in year 2012, in the GCC region continued to rise and prices increased in line with ongoing global food crisis, which began in 2007.
4.6 Significant Relationship Between Financial Frameworks and Economic Growth:

Table 1: Significant Relationship between Financial frameworks and Economic Growth in the Kingdom of Bahrain

<table>
<thead>
<tr>
<th>Economic Growth Indicators</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N years</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>5.4692</td>
<td>4.97785</td>
<td>13</td>
<td>.451</td>
<td>.122</td>
</tr>
<tr>
<td>Labor Force Participation</td>
<td>68.6000</td>
<td>2.20832</td>
<td>13</td>
<td>-.210</td>
<td>.491</td>
</tr>
<tr>
<td>Capital Formation</td>
<td>8.5077</td>
<td>5.56798</td>
<td>13</td>
<td>-.444</td>
<td>.129</td>
</tr>
<tr>
<td>Inflation Rates</td>
<td>4.0846</td>
<td>1.66075</td>
<td>13</td>
<td>-.718**</td>
<td>.006</td>
</tr>
</tbody>
</table>

**Correlations significant at the 0.01 level (2-tailed)**

Table 1 shows correlation coefficients for measuring the strength of linear relationships between the independent variables and economic growth. The correlation coefficient between productivity and economic growth is 0.451 and the ρ value of 0.122 for two-tailed test of significance, greater than 0.01, reveals no significant relationship. The null hypothesis is accepted. The two variables are not significantly correlated.

Correlation coefficient of labor force participation and economic growth is -0.210 and the ρ value for two-tailed test of significance of 0.491, show no significant relationship between labor force participation and economic growth. The null hypothesis is accepted, the two variables are not significantly correlated. The correlation coefficient of -0.210 between the two variables indicates movement of economic growth in opposite direction of labor participation.

Capital formation has correlation coefficient of -0.444 and ρ value of .129, which is not significant at both 1% and 5% significance level. The null hypothesis is accepted.

Inflation rates and economic growth reveal -0.718** coefficient correlation and ρ value of 0.006, significant at 1% significance level. There is significant relationship between inflation rates and economic growth. The null hypothesis is rejected. The two variables are significantly correlated.

4.7 Variables that Predict Economic Growth

Table 2: Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.786*</td>
<td>.617</td>
<td>.344</td>
<td>.93376</td>
<td>.617</td>
<td>2.258</td>
<td>5</td>
<td>7</td>
<td>.159</td>
<td></td>
</tr>
</tbody>
</table>

The table 2 shows R values for assessing the overall fit of the regression model. Adjusted R value is 0.344 which indicates that the independent variables of productivity, labor force participation, capital formation, and inflation rates account 34.4 percent variance in economic growth.
Table 3: Summary: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>9.385</td>
<td>9.729</td>
<td></td>
<td>.965</td>
<td>.367</td>
</tr>
<tr>
<td>Productivity</td>
<td>.063</td>
<td>.068</td>
<td>.271</td>
<td>.922</td>
<td>.387</td>
</tr>
<tr>
<td>Labor Force Participation</td>
<td>.059</td>
<td>.139</td>
<td>-.114</td>
<td>-.428</td>
<td>.682</td>
</tr>
<tr>
<td>Capital Formation</td>
<td>.021</td>
<td>.090</td>
<td>-.100</td>
<td>-.230</td>
<td>.824</td>
</tr>
<tr>
<td>Inflation Rates</td>
<td>-.402</td>
<td>.199</td>
<td>-.579</td>
<td>-</td>
<td>.083</td>
</tr>
</tbody>
</table>

Table 3 presents the regression coefficients and their significance. As shown in the table, inflation rate is the only predictor of economic growth in the Kingdom of Bahrain, indicated by the ρ value of .083, significant at 1% level of significance. However, the rest of individual independent variable (productivity, labor force participation and capital formation) are not predictors of economic growth because each of their ρ value is higher than 1% of significance level.

Table 4: Significant Difference in the Level of Economic Growth of the Kingdom of Bahrain over the Past Ten Years and in the Long Term

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Economic Growth</td>
<td>3.711</td>
<td>.067</td>
<td>.407</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.430</td>
<td>17.573</td>
<td>.673</td>
</tr>
</tbody>
</table>

Levene’s test for equality of variances tests the null hypothesis that economic growth over the past ten years and economic growth in the long term have equal variances. Test statistic of 0.067 indicates that the two time periods have equal variances (with equal variances assumed), and the null hypothesis is true and accepted. Economic growth over the last ten years does not significantly differ in the long term.

The T-test result, with equal variances not assumed, shows t-statistic of 0.430 with 17.573 degrees of freedom (df). The corresponding two-tailed p value is 0.673, is higher at both 1% and 5% level of significance. The null hypothesis is accepted at both significance levels.
which means that values of economic growth of Bahrain in these time periods are just the same.

5. Conclusions

1. Bahrain’s Gross Domestic Product expanded 0.10% in 2014 over the previous quarter with an average is 0.31% from year 2011 until 2014, with a high percent of 2.8 in 2012 and a low record of -6.6% in 2011. The 5.6% high economic growth rate achieved by the country in the current year, revealed effectiveness of the designed realignment of financial frameworks to attain sustainability of Bahrain’s economic growth.

2. Productivity in the Kingdom of Bahrain has the highest record of 7.6% in percentage annual change for the year 2006 and a low record of 1% in year 2003. Record shows 72.30 total labor force participation rate in 2011, the highest value over the past twenty one years and 65.60, the lowest value in 2004. Rising trend of total factor productivity in the past five years and over the long term, show effectiveness of the government’s strategic initiatives to achieve increased national productivity in the long run.

3. Data shows a decrease from 2109.10 BHD million in 2013 to 1796.60BHD million for year 2014 in Gross Fixed Capital Formation in Bahrain. It averaged 1752.92 BHD million from 2002 to 2013, reaching high record of 3122.60 BHD Million in 2008 and a low record of 606.10 BHD Million in 2002. Rising trend in gross capital formation in the last few years, indicate effectiveness of the strategic initiatives, specifically in the construction industry, through new designed financial frameworks resulting to increased percentage in economic growth.

4. Realignment of policy frameworks based on higher inflation rates in previous years resulted in a decline of inflation rates after 2008. Strategic initiatives to ease prices on consumer goods were effective to reduce inflation rates in the current period. Projections for long term, show stability in inflation rate, despite of price increase in the global business environment.

5. The correlation coefficient between productivity and economic growth is 0.451 and the ρ value of 0.122 for two-tailed test of significance, reveals no significant relationship. The null hypothesis is accepted. The two variables are not significantly correlated. Findings imply that the Kingdom will continue to achieve economic growth in the long run, regardless of the level of total factor productivity in the different industries of the country.

6. The Correlation coefficient of labor force participation and economic show no significant relationship between labor force participation and economic growth. The null hypothesis is accepted, the two variables are not significantly correlated. Findings show that economic growth in the Kingdom is independent of labor force participation in the long term. A change in the level of labor force participation will not influence the level of Bahrain’s economic
growth. Projections show an increasing trend of economic growth in the future period and will continue to achieve sustainability in the long run.

7. Capital formation has correlation coefficient which is not significant at both 1% and 5% significance level. The null hypothesis is accepted. Findings of the study reveal that achievement of economic growth in the kingdom will not be influenced by changes in the level of capital formation. Regardless of the amount of capital formation, the country will achieve projections of increased economic growth.

8. Inflation rates and economic growth reveal significant relationship. The null hypothesis is rejected. The two variables are significantly correlated. Inflation rate is a predictor of economic growth. Findings of the study imply that achievement of economic growth will be influenced by any change in the level of inflation rates. Findings further indicate the significant influence of inflation rate in the use of financial frameworks towards achievement of economic growth.

9. Levene’s test for equality of variances tests the null hypothesis that economic growth over the past ten years and economic growth in the long term have equal variances. Test statistic of 0.067 indicates that the two time periods have equal variances (with equal variances assumed), and the null hypothesis is true and accepted. Economic growth over the last ten years does not significantly differ in the long term. The T-test result, with equal variances not assumed, shows t-statistic of 0.430 with 17.573 degrees of freedom (df). The corresponding two-tailed p value is 0.673, is higher at both 1% and 5% level of significance. The null hypothesis is accepted at both significance levels which means that values of economic growth of Bahrain in these time periods are just the same. Statistical analysis indicates that the country will be able to maintain its rising level of economic growth over the long term, attributed by the utilization of strategic initiatives through realignment of financial frameworks.

5.1 Recommendations

Recommendations of the study include the conduct of further studies that will focus on variables not included in the current investigation, which can result in continued increase in Bahrain’s economic growth. Monitor the changes in the level of Bahrain’s economic growth for potentials of an increased level of economic growth in the long term. Continuous utilization of the new financial frameworks that support monetary policies to achieve economic growth is highly recommended. The country must monitor changes in the level of inflation rates, as it was found to be significantly correlated with the attainment of economic growth. Maintain the rising trend of economic growth and the variables of productivity, labor force participation, and capital formation to attain economic growth sustainability in the future period.
References


Central Informatics Organization (2014)


