مجلس التنمية الاقتصادية
البحرين
BAHRAIN
ECONOMIC DEVELOPMENT BOARD

WHITE PAPER

Drivers of Economic Growth

2000-2011

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EXECUTIVE SUMMARY

The first decade of the 21st century proved highly successful for the Bahraini economy. The nation's GDP grew rapidly with an average annual increase of 5% in 2000-2011. This went hand in hand with clear improvements in Bahraini employment which rose by some 46% over the period while real exports more than doubled.

A closer look at the performance of individual sectors highlights, however, that key elements of the success may not be repeatable and that some gains came at a cost. For instance, much of the growth during the decades was due to the rapid expansion before 2008 of sectors relying on low-cost, low-productivity labor. As a result, the impressive GDP growth coincided with a decline in productivity during the period under review. To tackle this challenge, important labor market reforms were launched. In another challenge, the onset of the global crisis triggered a significant countercyclical response by the government. As a result, after 2008, government investment outpaced private investment. This coincided with a drop in the productivity of capital use.

At the sectoral level, economic growth was above all led by finance and manufacturing, which have progressively curbed the erstwhile dominance of the oil sector. Nonetheless, the oil sector remains important both in its own right and through the fiscal multiplier effect as the national treasury still relies primarily on oil as its source of revenues.

While overall labor productivity in Bahrain registered a decline during the first decade of the century, some sectors registered important gains. Total factor productivity in financial services recorded a cyclical improvement towards the end of the decade; while our analysis suggests that increases in total factor productivity of the trade sector are more permanent.

A review of the performance of individual sectors in 2001-2011 points to a number of "emerging champions" – sectors that managed to achieve sustained high growth through the period. In particular, tourism, services and telecommunications experienced a substantial relative increase in their GDP contribution. By contrast, the role of trade and real estate as growth drivers diminished toward the end of the decade. This suggests that future growth prospects will be at least in part linked to efforts to diversify away from non- tradable low value add sectors to open sectors that generate high skilled employment.

In terms of the key national income components, growth in 2000-2011 was above all led by consumption and investment. Although cyclical improvements in net exports had the largest impact on growth acceleration when they occurred, their impact over the period as a whole was more modest. Going forward, however, this component will likely have to increase in importance if companies are to achieve economies of scale and expand. Expanding beyond the confines the national market into the regional and global space remains the most logical growth opportunity for many sectors.

Bahrain's growth performance in comparison to other emerging economies was characterized by relatively low volatility, albeit around fairly middling trend growth rates. This highlights Bahrain's relative resilience to the global economic shocks that occurred during the decade. However, the country's success in pushing up the trend growth rate over the decade highlights the central role economic, regulatory, and institutional reform played in spurring growth. Further gains in trend growth are likely to require more efforts along the same lines. The experience of the past decade suggests that potential focus areas with a likely significant impact include:

- The expansion of diversification initiatives; to further boost the contribution of the non-oil sector to growth and foster a knowledge-based economy
- Sector-specific strategic development initiatives and investment in high value-add area; to promote the growth of high potential activities
- The development of export-oriented sectors to expand the market faced by companies, drive improvement in the GDP contribution of net exports, and reduce reliance on oil as the main source of current account surpluses
- Boost the efficiency of government expenditure with a view to improving outcomes while ensuring fiscal sustainability
- Support the transition of small and medium-sized businesses to larger companies while fostering innovation and job creation

DRIVERS OF BAHRAIN'S ECONOMIC GROWTH 2000-2011

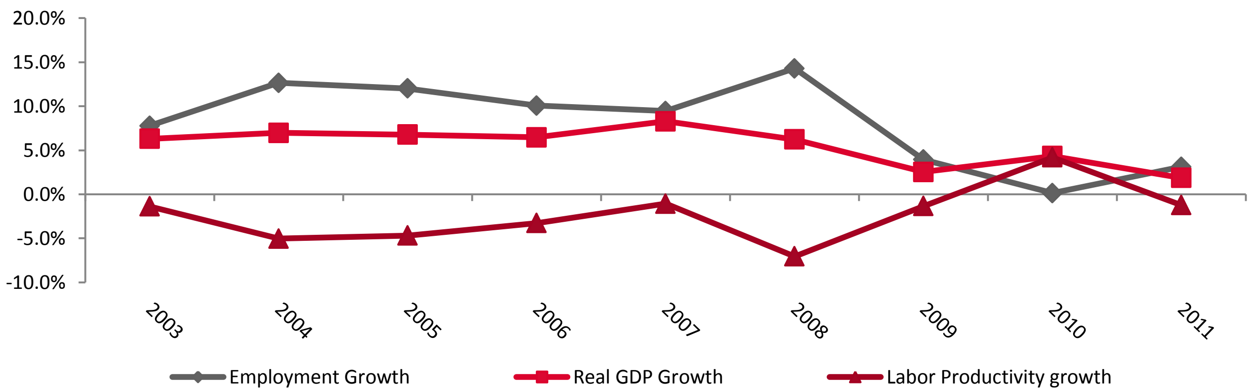
There are a multitude of economic growth concepts, models and measurements, but almost all of them ultimately stem from the definition of growth as the increase in the productive capacity of the economy as measured by real GDP growth. This article examines the key contributors to real GDP growth in Bahrain in 2000-2011. This period stands out as unique in terms of the dramatic growth acceleration seen in connection with the pre-2008 boom and the slowdown during the global economic downturn in 2009 and thereafter.

Our analysis will review economic growth in Bahrain through an analysis the key factors of production – labor and capital – as well as the efficiency of capital use and total factor productivity[1]. The relationship between growth and labor productivity will also be examined by tracing trends between the growth in the employment rate and the growth in aggregate output. The paper will further analyze the historical composition of economic growth by economic sector and component of national income. Additionally, it will review the speed and volatility of growth with a view to identifying factors fostering sustainable long-term expansion.

Growth in employment and labor productivity

Bahrain's real GDP growth, having stayed consistently at an average of 5% a year, showed a decelerating trend from 2007 to 2011 (graph below). Growth early in the decade was critically linked to a rapid increase in the workforce as labor accounted for between 30% and 70% of growth with the exception of 2010[2], while total factor productivity and capital were responsible for the remainder.[3] Employment growth peaked at 14.3% in 2008, contributing to the sizeable real GDP increase of 6.2%.

Employment and GDP growth



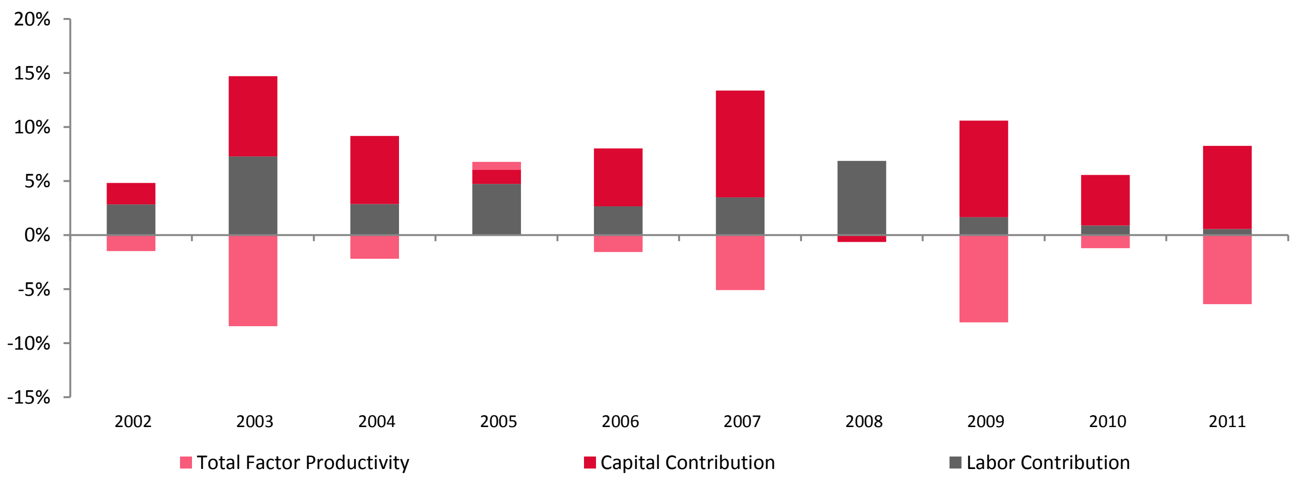
Source: CIO, EDB analysis

[1] A variable that accounts for changes in real output not caused by changes in labor and capital
[2] Employment growth was slow at 0.1% in 2010
[3] EDB analysis using a combination of real wages and employment as labor inputs and depreciation to calculate growth in capital stock

However, as the labor force expanded rapidly, labor productivity growth, calculated as the change in output per worker, has in fact declined for most of the past decade. This was mainly due to the rapid increase in job creation in booming low productivity sectors such as construction as well as services, eg hotels and restaurants. Jobs in these areas have tended to be predominantly held by low-cost expatriate workers while the low wages have permitted a highly labor-intensive mode of production. In recognition of these trends, the authorities launched a series of labor market reforms designed to boost productivity. These included the establishment of the Labor Market Regulatory Authority in 2006 that aimed to establish fairer competition for Bahrainis and foreigners that favors skilled employment as well as Tamkeen in the same year, which aimed to improve the skills and efficiency of the national workforce.

Job creation has become a more urgent priority after the economic slowdown of 2009.At the same time, however, slower employment growth in that period led to a temporary increase in labor productivity to 4.2% in 2010. This was largely the result of the global downturn which forced the economy to shed inefficiencies and innovate in terms of better using its existing resources. It also reflected the disproportionately high impact of the slowdown on low-productivity sectors such as construction. Employment growth in 2010 slowed to a modest 0.1% while labor accounted for one-fifth of aggregate GDP growth. Labor productivity growth in fact turned negative at -1.2% in 2011. Despite these fluctuations in employment growth, unemployment levels in Bahrain have remained relatively low at between 3.5 and 4.7% since 2009.

Input contributions to GDP growth



Source: EDB analysis, CIO

Despite the modest gains in labor productivity during the decade under review, individual sectors recorded increases in total factor productivity. A closer look at the financial corporations and trade sectors during the productivity hike of 2010 reveals an increase of 1.3% in overall Total Factor Productivity that year. The financial sector was responsible for one-quarter of GDP in 2010 while it grew by a real 3% that year. This marks a strong recovery from the 2009 decline caused by the global recession. Despite the output increase, employment in Finance grew by only 0.2% in 2010 and declined by 4% in 2011. Assuming minimal capital stock improvements in the sector due to the recession and instability, the productivity increase of 2.8% in 2010 and the 7.3% leap in 2011 can likely be attributed to more mature institutions and advanced technology. However, as employment growth in finance has been consistently low relative to other sectors during the period under discussion, this growth in total factor productivity is likely to have been a primarily cyclical phenomenon as highlighted by significant volatility in output per worker.

Similar evidence of an increase in total factor productivity is also seen in the labor-intensive trade sector in 2010. The sector registered labor productivity growth of 3.5% parallel to employment growth of only 2%, which in combination yielded a 5.6% increase in output. This productivity growth persisted into 2011 with a 2.7% increase in the face of declining employment. By contrast to financial services, however, the increase in total factor productivity in trade is less likely to be cyclical as productivity has not registered any positive growth during the period up to 2010 despite fluctuations in employment growth.

One of the factors underpinning economic growth over the past decade was made possible by regulatory reform and economic openness. One of the key objectives of Bahrain's Vision 2030 is to arrest the decline in productivity experienced over the past decade while promoting growth through improving the investment environment and attracting high value add foreign direct investment. Significant regulatory reforms have been undertaken or underway, among other things, in healthcare, education, finance, intellectual property protection, and the labor market.

Capital stock and investment efficiency as drivers of Bahrain's economy

Capital accumulation had a substantial impact on growth patterns during the decade under review. Apart from domestic capital, Bahrain's accommodating business environment helped bring in sizeable FDI investments which expanded from $364 million in 2000 to about $ 1,794 million in 2008. This made Bahrain's cumulative inward FDI between 2005 to 2010 36% as a share of the nominal 2010 GDP, which clearly surpassed regional economies such as the UAE and Qatar, who recorded shares of 20% and 23%, respectively4. Apart from its contribution to capital accumulation, FDI stimulates the development of technological capabilities and boosts the productive capacity of the economy as technological and knowledge transfers are made to the Bahraini economy and national workforce.

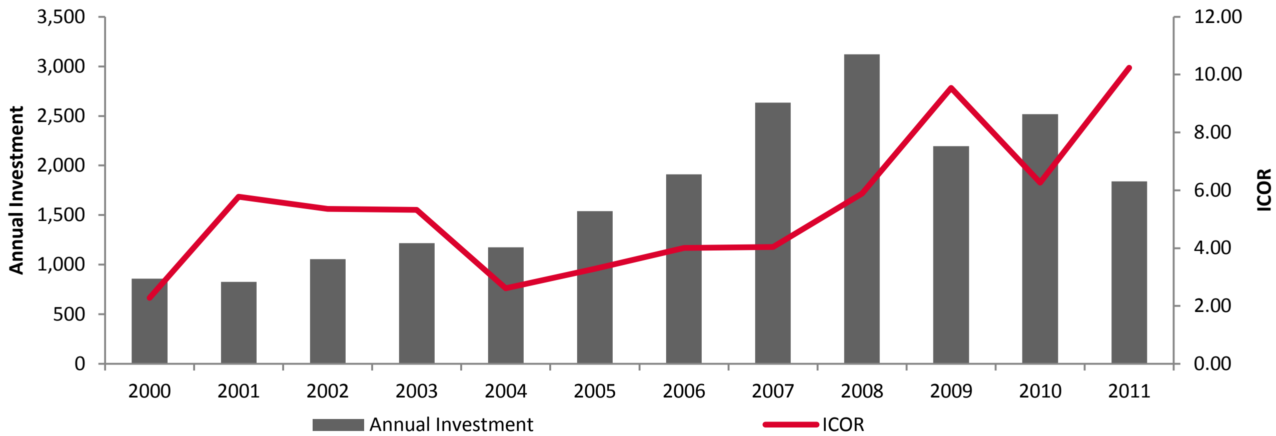
To assess the impact of the capital injected into the economy, the incremental capital output ratio (ICOR) is used to determine the amount of investment needed to generate an incremental unit of production (graph below). This analysis reveals that the efficiency of capital use in Bahrain has been declining throughout the past decade. Hence the growth contribution of additional units of investment tended diminish as investment flows expanded (Higher ICOR indicates lower efficiency). Even though the investment in 2010 was 2.9 times higher than that of 2000, the amount of investment needed to generate one additional unit of output also increased 2.8 times. This significantly curbed the growth contribution of additional investment.

A calculation of the contribution of capital to GDP growth over the past decade highlights these points. While capital was responsible for a large share of GDP growth prior to 2008, reaching 9.8 percentage points in 2007, its share fell significantly in 2008 making a negative contribution of -0.6% to the change in real GDP. However, the contribution of capital registered a robust recovery in subsequent years. The gradual decline in the efficiency of investment in the examined period coincided with relatively lower levels of private investment at the time.

[4] World Investment Report, 2011

Growth	2009	2010
Government investment	-16%	55 %
Private Investment	-33%	3%

Efficiency of capital use



Source: CIO, EDB analysis

The sectoral composition and volatility of economic growth

In a marked contrast to most of its GCC peers, the GDP share and growth contribution of Bahrain's oil sector have been steadily diminishing in recent years. Under the circumstances, growth has become increasingly reliant on the non-oil sector as economic diversification has gathered pace.5

In terms of individual sectors, Bahrain's growth has been above all driven by manufacturing and financial services. Manufacturing output predominantly consisted of petrochemicals and basic metals.

Although economic diversification received a major impetus from the emergence of the offshore banking sector in the 1970s, the launch of focus diversification and economic liberalization initiatives by the government can be traced back to the period of low oil prices in the 1980s. A reversal of the oil boom triggered a decline in GDP per capita from $11,127.9 in 1980 to $8710.86 in 1986 due to declining production and a low price environment. More recently, the growth of the non-oil sector has further benefited from the privatization of state-owned businesses, a strong regulatory framework, and physical infrastructure development. Infrastructure projects accounted for a large portion of government spending in 2000-2011, reaching 46% of government maintenance7

[5] Despite the increase in nominal oil prices in the pre -2008 era, faster growth in other sectors led to a decline in its share of GDP
[6] Using base year 2000
[7] Maintenance Spending includes the maintenance of government buildings, public spaces, technological infrastructures, heavy machinery and aviation maintenance

spending in 2007 and 70% of its consumables8 spending in 2007 and 2008. This markedly improved the environment for businesses to operate in and to transport goods and services.

Even as global risks persist, the non-oil sector, which accounted for 73.5%9 of Bahrain's nominal GDP in 2011, is well positioned to lead the country towards faster growth.

At the onset of the last decade, oil was still the dominant contributor to GDP providing 43.8% of the total in 2000, excluding oil-based manufacturing activities10. However, this share has gradually diminished up to a point where oil and gas contributed only 22% of GDP as of 2011.

In spite of its declining GDP contribution, the oil and gas sector remains by far the main source of government revenue. Hence the broad-based economic diversification has not yet been matched by meaningful progress in reducing the reliance of the national treasury on oil and gas revenues, even though a number of initiatives are under consideration both nationally and at the GCC level. The hydrocarbons sector accounted for 73% of total government revenue in 2000 and in fact an even greater proportion of 85% 2010, although some of this was reflective of the higher price of oil. Diversification of revenue sources in essential due to the high contribution of government spending to growth and its role in developing human capital, among other things. All of these components require securing a sustainable source of income and elevating the productivity of public services.

Even as hydrocarbons still accounted for a fairly significant 22% of GDP at the close of the decade, their contribution to real GDP growth was in fact negative in four of the years under review and only 2.5% in 2008. This picture of relative stagnation accounts for the progressive decrease in the GDP share of oil.

Manufacturing has led the diversification drive in the Kingdom, starting with the construction of the Sitrah refinery in 1936, the first of its kind in the region. Manufacturing was responsible for around one-fifth of real GDP growth in 2002 and 2004, one-fourth in 2006, 2009 and 2011. The sector is now dominated by four of the largest companies operating in the country, namely Aluminum Bahrain (Alba), The Bahrain Petroleum Company (Bapco), Gulf Petrochemical Industries Company (GPIC) and Tatweer Petroleum. These companies are all wholly or partially owned by the government and reflect the authorities' commitment to a strategy of developing downstream industries to exploit the resource wealth of the Gulf region in a way that allows local companies to capture more of the value chain. The manufacturing sector has increased its contribution to GDP from 12.6% in 2001 to 14.6% in 2011.

Although manufacturing was struck by the financial crisis in 2009, the large size of the leading manufacturing corporations and the relatively inelastic demand for their products led to sustaining growth at 4.8% that year. The sector has further benefited from the growth of downstream activities. Further progress in this regard will be critical for achieving the vision of becoming a knowledge-based economy.

Alongside manufacturing, financial corporations have been at the forefront of diversification and saw a steady increase in their percentage contribution to GDP over the past decade. Even though the sector was tested by the global crisis, its size and track record provide grounds for optimism about continued expansion over the coming decade.

[8] This includes spending related to energy, water, electricity, medicine as well as ships and aircrafts
[9] This figure excludes oil-based manufacturing, which is included in the remaining 26.5%
[10] Oil-based manufacturing is responsible for a large share of manufacturing's contribution making the actual contribution of oil much larger

The growth contribution of finance has increased in parallel with the liberalization efforts undertaken by the government during the decade. These targeted reforms have included initiatives to allow foreign companies to set up without a local partner, to reduce or eliminate taxes and tariffs, to tighten the country's anti-money laundering laws, to encourage the youth to pursue education in this field, and to enhance the Central Bank's oversight and regulation of financial institutions. A large portion of the FDI coming to Bahrain was directed into this sector, leading to a much larger technology transfer relative to other sectors. This has steadily pushed the percentage contribution of financial sector to GDP from 12.6% in 2001 to 17.1 of GDP in 2011. The sector is the second largest in the country in terms of its GDP contribution and boasted a Bahrainization rate of 63% in 2011. The main limitation of the sector is its highly capital-intensive nature and, especially in recent years, new job creation has remained fairly limited.

The growth of financial services in Bahrain has been partly due to the success of Islamic banking, an area where the country has emerged as a regional hub. The growing role of Shariah-compliant finance in the Middle East and beyond is likely to make it a key element in the further growth of financial services in Bahrain.

Beneath the overall positive growth trend, the financial sector has experienced sharp year-to-year fluctuations. However, this has been largely reflective of exogenous shocks linked to the global economic downturn. In spite of the volatility, financial services remained a key growth driver generating 30.5% of GDP growth in 2003, 65.4% in 2004, 23% in 2006. Finance was also responsible for one-third of GDP growth in 2010.

Also several smaller sectors have seen significant and sustained increases in their share of real GDP. Areas such as telecommunications and transport and social and personal services as well as tourism now appear to offer the most concrete potential for further diversification.

The GDP share of the transport and communications sector has grown steadily from 4.3% in 2001 to 6.8% in 2011. However, it was the social and personal services sector11 which saw the largest relative expansion in its share of GDP from a modest 1.2% in 2001 to 5% in 2011.

Both the transport and communications and the social and personal services sectors benefit from comprehensive, internationally competitive regulation and are dominated by private companies. They have been extremely resilient in the face of the global economic volatility.

The telecommunications sector has recorded accelerating positive growth since the launch of regulatory reform and privatization as well as the introduction of the Telecommunications Regulatory Authority in 2002. The new entity was tasked with curbing monopolistic practices and creating a competitive environment for the sector.

Transportation, similarly, has thrived after private sector involvement helped reform the infrastructure and increase the efficiency of its services. The growth of the sector accelerated from 5.4% in 2000 to 13.5% in 2009. The real GDP contribution of telecommunications and transportation underwent a steep increase toward the end of the last decade and the two sectors were jointly responsible for 36% of GDP growth in 2009, which marked a peak after remaining consistently over 8% since 200012. This made the sector the fifth largest contributor to growth in the period under review. This provides grounds for optimism as open high value-add sectors gradually gain importance as growth drivers, positively influencing productivity levels and national employment.

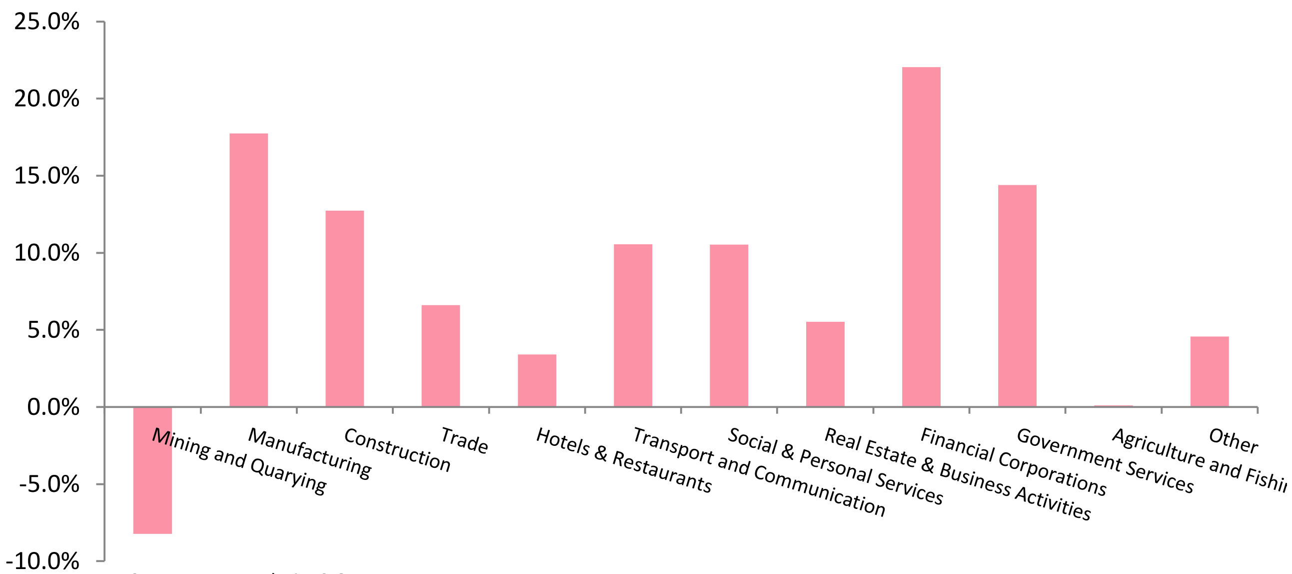
[11] Composed mainly of private health, private education and other services not captured under business activities and trade
[12] With the exception of 2003 where growth was at 4%

Similarly, social and personal services exhibited very fast growth over the past decade, something that reflected a steady increase in average living standards and disposable incomes. The growth rate of the sector peaked at 19.7% in 2006 but remained strong even thereafter, standing at 12.3% even in 2011.

The sector was responsible for 3.6% of GDP growth in 2001 rising to 6% in 2010. Given its labor-intensive nature, services have the potential to evolve into a significant growth engine in the coming decade in terms of GDP contribution and employment. The continued growth of the sector will be in large part linked to the positive demographic dynamics and income levels which will drive the demand for quality education and health care.

Hotels and restaurants was another sector that grew in its GDP contribution over the period thanks in part to targeted investment in a tourism infrastructure. This has led to the construction of a growing number of first-class hotels, sea and desert resorts, as well as the emergence of niche hospitality services and attractions. The King Fahad Causeway connecting Bahrain with Saudi Arabia has played an important role as a conduit of regional tourist flows, an area with considerable growth potential as growing increasing income levels in the region create a growing demand for weekend and short holiday travel. At the same time, Bahrain's position as an aviation hub has channeled more international tourism into the Kingdom, accelerating the sector's growth steadily from 4.7% in 2000 to 11.1% in 2010. The upcoming GCC railway project and the Bahrain Airport expansion also promise to further boost tourism further encouraging growth as well as high potential spillovers across many sectors.

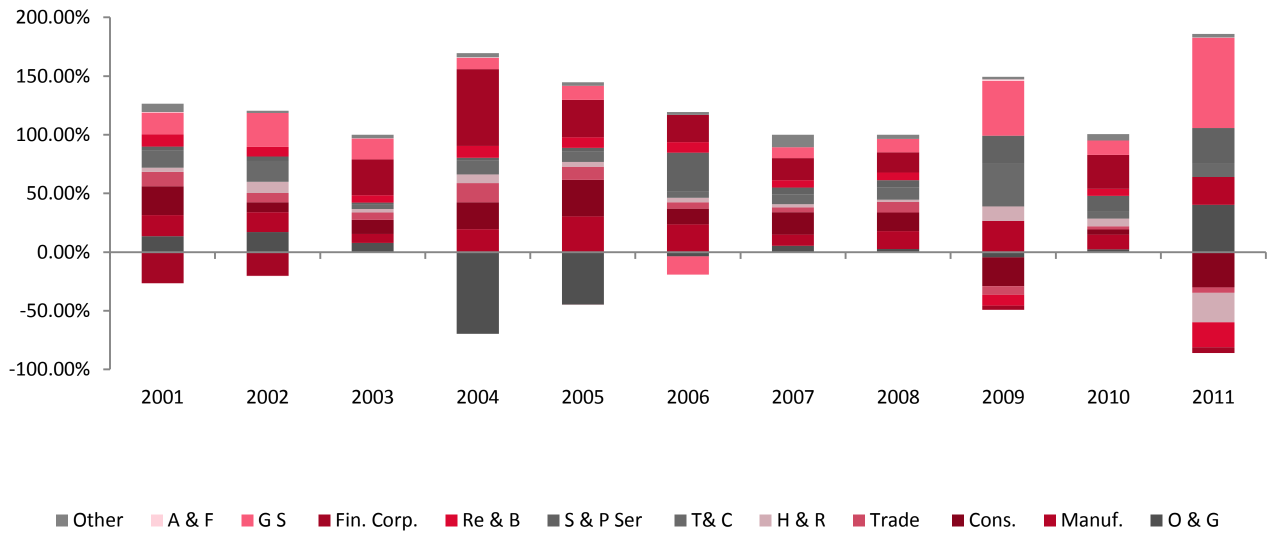
Cumulative growth contributions (2000-2011)



Source: EDB analysis, CIO

Despite the positive trend, the hotels and restaurant sector, which is heavily dependent on tourism, was hit hard by the political instability in 2011. As a result, the sector contracted by 17.2% but began to rebound in 2012, This demonstrates its resilience and the importance of structural growth drivers, such as intra-regional travel. Given Bahrain's regional significance and the broader growth of the GCC as a globally significant transportation hub, the hotels and restaurants sector possesses considerable further potential as a leading growth driver. The sector was responsible for 3.4% of GDP growth in 2001 but its contribution subsequently took off, reaching 7% in 2004 and 12.1% in 2009.

Sectoral contribution to growth[13]



Source: Central Informatics Organization, EDB analysis

Government services have consistently figured among the leading sectors in terms of their GDP contribution, although their share has remained relatively stable during the period. The GDP share of government services was 9.7% in 2000 and 11.7% in 2011.

Reflecting in part the robust 6.5% annual population growth during the period under review, the government services sector displayed an accelerating growth trend from 9.7% 2002 to 13.6% in 2011. This increase was connected with an increase in public sector wages in 2011 which pushed the sector's contribution to headline real growth to 77%. Public expenditure thus played a critically important countercyclical role during the year. However, the sustainability of recent trends in public services depends on the government's ability to diversify revenue sources, privatize, raise productivity and grow high potential sectors.

The progress of diversification has naturally entailed a decline in the GDP share of certain sectors. This has been most notably the case with the agriculture and fishing sector. The reduction of the national fish reserves as well as the decrease in arable land from 2.8% of total land in 2002 to only 1.3% in 2011 have led to the gradual marginalization of this sector as a source of local income. Its share of real GDP was only 0.3% in 2011; a 25% decline from its share of 0.4% in 2001. However, increasing awareness of the need for addressing food security issues as well as the introduction of new techniques is promising to change the situation. Hydroponics/dry farming and vertical farming are seen as particularly promising and are already being profitably used by some

[13] O & G = Oil and Gas – Manuf. = Manufacturing – Re & B = Real Estate and Business Activities - Cons. = Construction - S & P Ser = Social and Personal Services - Fin. Corp. = Financial Corporation - H & R = Hotels and Restaurants - T & C = Transport and Communications - GS = Government Services – A& F =Agriculture and Fishing

companies. Further progress along these lines is seen as likely, not least because food already accounted for more than 10% of the country’s non-oil imports in 2011.

The growth contribution of other sectors has tended to be more variable. For instance, the construction sector accelerated sharply in 2001 after the passing of legislation that permitted GCC and foreign ownership of land. This reform triggered a national property boom and the sector generated 24.7% of the overall GDP growth in 2001 and as much as 30.9% in 2005. However, construction proved one of the most vulnerable sectors during the global downturn, echoing broader regional trend. The contribution of construction to overall growth remained negative in 2011 after a slight recovery in 2010. While the construction sector has clearly been hit by a cyclical correction, it is also faced with structural challenges after a period when developments tended to favor luxury residential and commercial real estate developments across the GCC region. However, the strong demand for housing by a growing population, as well as additional resources for infrastructure development should contribute to renewed growth in the coming years.

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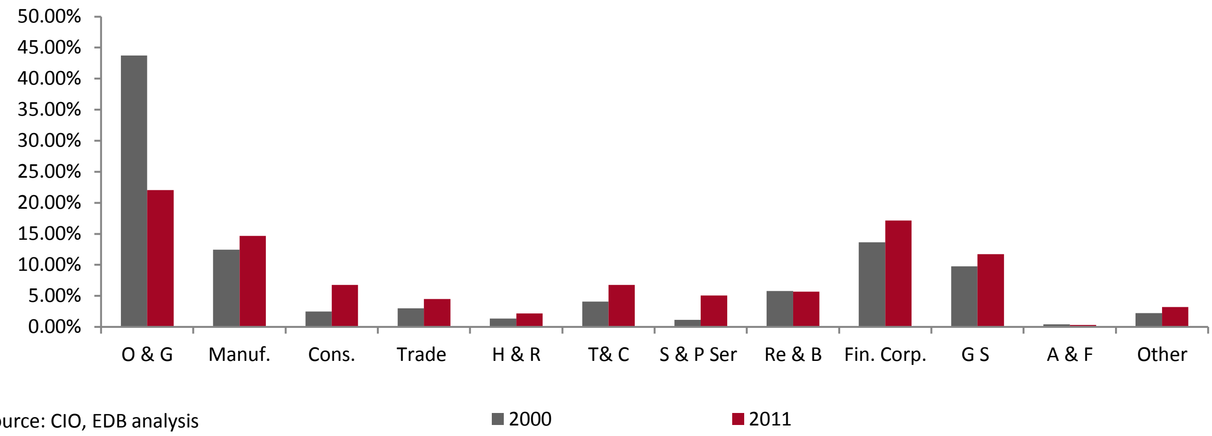
Trade is another sector which has proven highly cyclical during the decade, recovering from a decline of 6.5% in 2000 to record expansion of 32.3% in 2004, partly thanks to deliberate government policy initiatives to encourage entrepreneurship. This sector was hard hit by the downturn in 2009 when it contributed -7.3% to overall change in real GDP. However, the sector experienced a rebound in subsequent years. Having been a leader of economic growth early in the decade with 12.3% contribution to real GDP growth, trade saw its contribution decline slowly to 4% in 2007. It remained at this level until 2010 with the exception of the disruption caused by the downturn.

A comparison of sectoral contributions to real GDP 2000 and 2011[14]



Source: CIO, EDB analysis

In general, volatility is an important indicator of a given sector's sensitivity to economic shocks and a measure of its resilience. However, volatility can also be a positive sign, reflective of a rapid take-off of growth.

To measure growth volatility of the economy as a whole, the standard deviation of real GDP growth was used as a proxy for the variability of GDP across the period reviewed here. Most economies that have a high standard deviation of growth have experienced a sharp acceleration in their rate of expansion.

A case in point is Singapore with 4.6 percentage points in 2000-2011. By contrast, the 3.1 percentage points recorded in Lebanon or the standard deviation of 6.7% seen in Argentina are reflective of local instability. Kuwait (5.6%) and Qatar (6.6%) experienced high standard deviations because of increases in the production of oil and gas.

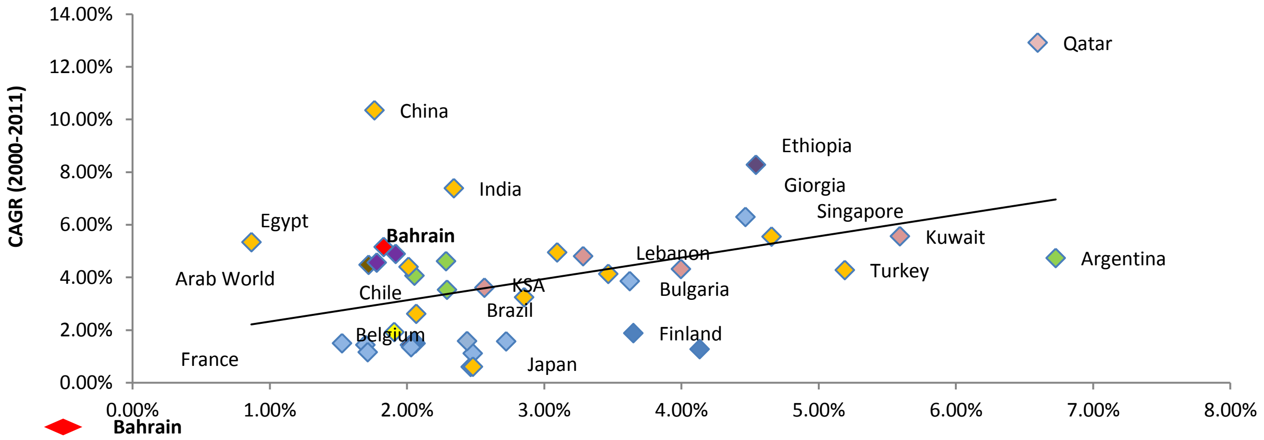
A simple analysis of the correlation between the average annual growth rates of several economies and their standard deviation of growth in the period 2000-2011 indicates that an increase of 1% in the standard deviation of growth typically corresponds to a 0.8% increase in annual average growth rates. This result is most likely attributable to the importance of emerging economies recording sharp take-offs in their growth during the period, which in turn went hand in hand with increasing variances in growth over time.

The graph below shows that developed European countries, which experienced their growth take-off long before the past decade, registered a stable low average growth rate between 2% and 3% per annum. By contrast, large emerging economies such as China and India achieved a consistently high growth rate throughout this period. In

[14] Refer to abbreviations in footnote 13

comparison, Bahrain saw low variance in its growth, with an average annual growth rate that falls in between emerging and developed economies. While Bahrain hence seems to possess potential for faster growth, its GDP per capita is already much higher than that of the fastest growing emerging economies. A sustained acceleration in growth is likely to necessitate a greater focus on export-oriented activities or high value added production, strategies that have underpinned growth in other successful emerging economies.

CAGR versus SD of growth 2000-2011



Source: World Bank, EDB analysis

The data reviewed here suggests that the economic diversification story in Bahrain is not only well underway but in fact gathering further momentum. Encouragingly, the shift in economic activity towards manufacturing and services entails a general increase in labor intensity and thereby more job opportunities for the Kingdom's growing population. However, broad-based diversification is critical given the cyclical nature of some of the sectors, as discussed above.

The breakdown of economic growth by type of expenditure

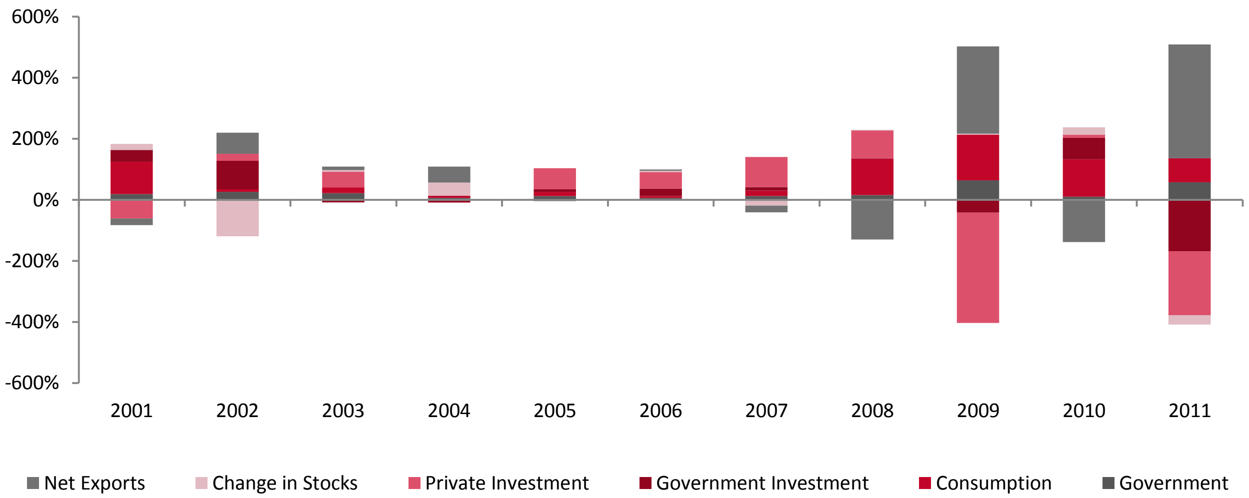
In addition to identifying the sectors responsible for economic growth, an analysis of the expenditure components of GDP in this section will clarify areas of weakness as well as the speed and extent to which each component drives growth.

A review of consumption during the period under review reveals a fluctuating yet positive real growth rate and a gradual increase in the GDP share of consumption from 35.4% in 2000 to 41.8% in 2011. Not only did consumption remain the largest component of GDP but it also accounted for a high proportion of overall GDP growth, indeed in excess of 100% during four of the years under examination.

Investment is an important driver of growth in terms of its contribution to GDP but also its ability to boost the productive potential of the economy. While investment made an important contribution to economic expansion during most of the decade, 2009 was an exception when the drop in investment led to the majority of the decline in GDP growth. This highlights the vulnerability of investor sentiment to external influences.

The calculation of government spending reveals that it was responsible for an average of 23.1% of GDP growth, although the range of variation in its share has been less than in the case of private consumption. Although years that registered high growth in government spending yielded significant increases in GDP growth, fiscal sustainability considerations will likely limit its ability to play the same role in the future.

Income component contribution to growth



Source: EDB analysis, Central Informatics Organization

Net exports have historically accounted for an average of 30% of real GDP in Bahrain. However, given the magnitude of exports and imports, year-on-year variations can have a substantial impact on the GDP contribution of net exports. In 2009, the greater decrease in imports relative to exports was responsible for 286% of GDP growth. This increased contribution prevented GDP from contracting that year despite the large decline in investment as a result of the economic downturn. Conversely, during many of the years of fast growth, the contribution of net exports to GDP growth tended to be negative as import growth significantly outpaced export growth. This highlights the importance of export-oriented strategies as a potential growth driver moving forward. The size of the Bahraini market and the importance of exports, specifically high value-add products and services make it essential to increase the ability of local businesses to tap into regional and international markets and invest in research and development.

Growth promotion policies:

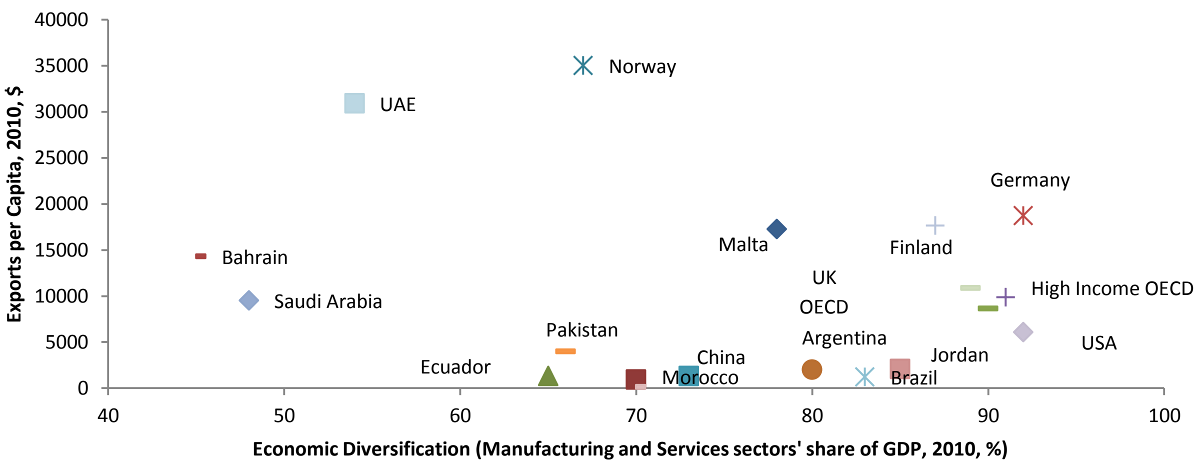
Bahrain’s growth record over the past decade highlights a number of areas of strength but also sources of potential vulnerability. Economic policy has a potentially important role to play in addressing and containing these weaknesses. This section reviews lessons from the historical track record of as well as initiatives that have been successfully implemented in various emerging economies in a bid to drive growth and employment as well as to boost productivity in order to steer the economy towards higher value add sectors. These experiences hold potentially important lessons for Bahrain as well.

Expansion of diversification initiatives

The urgency of economic diversification in Bahrain continues to stem in large measure from the relative maturity of the oil sector and its likely diminishing ability to continue to drive real growth and government revenue in the longer run. This and the capital-intensive nature of the sector mean that other activities are needed to drive growth and to generate sufficient employment opportunities for the growing population. Also government revenue sources will have to be diversified to ensure the sustainability of public sector expenditure.

To assess the extent of diversification in Bahrain in comparison to other economies, two methods of calculation were used. The first uses the share of manufacturing and services as a percentage of GDP as a proxy for diversification. This methodology was adopted due to the unavailability of global data on the GDP share of the financial sector in emerging and developing economies. Since financial services account for much of the diversification in Bahrain, another proxy measuring oil rents as a percentage of GDP was used as an indication of the economy's reliance on oil.

Bahrain's sustainable growth position on the global map (first methodology)



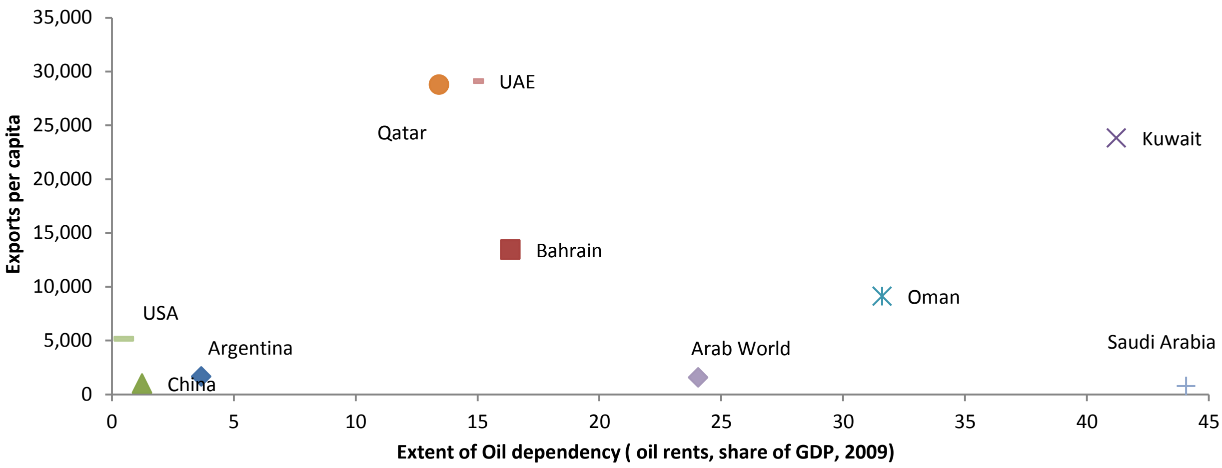
Source: World Bank , EDB analysis , CIO

While the first method disadvantages Bahrain slightly, it provides a clear indication that Bahrain's capacity for diversification is still substantial as it is ranked the lowest amongst reference countries in terms of this measure of diversity.

Further progress in manufacturing and services is possible in Bahrain, not least thanks to the skilled national workforce. In the area of manufacturing, the emphasis should be on high value-added and relatively labor intensive operations. A concerted effort to expanding these sectors alongside finance will create more job opportunities and boost income levels while contributing to the growth of Bahrain's non-oil exports. This is likely to be critical for significantly boosting gains in income and output per capita.

The second method also illustrates that although Bahrain's economy is moving further away from oil dependency than its GCC counterparts Saudi Arabia, Kuwait and Oman, this does not drastically change its global position in terms of diversification as it ranks very closely to these countries according the first method.

Oil depency per country (second methodology)



Source: World Bank, Central Informatics Organization

Sector-specific strategic development and investment

The proactive promotion of specific industries and sectors through sustained high levels of investment is a growth model that was successfully implemented in East Asian countries such as Singapore and South Korea. It proved instrumental for propelling these countries from developing into advanced economies.

Comparable initiatives have clearly been instrumental in fostering growth in Bahrain as well and continued to hold significant potential for further expansion. The service sector in many ways seems like the most logical development opportunity in Bahrain due to the limited reserves of natural resources as well as the sector's modest current GDP contribution coupled, which contrasts with its growing share of GDP growth. Specific areas such as ICT can prove particularly effective in mobilizing the supply of skilled national labor. The scale and evolving needs of the financial sector which often compliments ICT industries could prove instrumental for the promotion of this sector.

A number of targeted growth initiatives in Bahrain offer further potential for fostering growth through expansion and refocusing. These include the following:

a. Target subsidized loans to new ventures

b. Formulate a workforce development strategy involving scholarships, the introduction of higher degrees and more training options
c. Allocate research and development funding and grants for the domestic development of target sectors
d. Encourage foreign direct investment from innovative companies which complement the existing strengths of the economy

Development of export-oriented sectors to finance investments

Bahrain's exports are historically dominated by low value added products such as oil, aluminum, and textiles. Given the small size of the domestic market, Bahraini companies have to rely on exports as a source of incremental demand and market expansion. However, as discussed above, the growth contribution of net exports has demonstrated considerable volatility and the growth of imports has generally tended to outpace export growth. This highlights the need to prioritize exports a driver of future development, especially in view of the limitations of the national market and resources.

Bahrain's global position in terms of its export performance is relatively favorable in comparison to large economies such as China, Brazil and the USA in 2010 (first methodology graph above). However, the export bundle is heavily dominated by primary goods and growing more slowly than imports. Moreover, Bahraini exports tend to be produced by large export-oriented government-owned businesses, whereas private sector companies typically struggle to grow beyond the narrow confines of the domestic market. Enabling small and medium-sized businesses to tap the export markets hence offers considerable potential. However, progress is still hindered by limited access to relevant knowledge, difficulties in disseminating market information, and the need to enhance the quality and efficiency of production as well as product differentiation so as to better compete in the global market. Further progress in this regard should receive a major positive impetus from government initiatives such as the establishment of export development centres.

Beyond this, export value can be enhanced by developing domestic downstream activities which use such raw materials such as oil, gas, and aluminum as inputs and converts them into more valuable finished products. The ambitions to boost productivity and skill the labor force should also be translated it increased efforts to foster innovative, high technology exports.

Upgrade the efficiency of government funding and availability of private funding

The development of the financial sector has been a significant driver of economic growth in Bahrain. It has helped provide funding for the expansion of local businesses and the development of infrastructure and the standard of living. However, it is important to reposition the financial sector to drive diversification rather than support the current structure. Among other things, the ability of the financial sector to cater to the needs of new private sector companies requires improvement and small and medium-sized businesses have often been left stagnating far below their full potential, with 90% of the companies operating in Bahrain classified as microbusinesses15.

Survey data suggests that access to capital remains one of the key constraints facing SMEs, both in terms of new company formation and for the growth of existing companies. Appropriate funding solutions, underpinned by a realistic assessment of risks versus returns are a key part of the solution. Diversifying the range of funding options as well as the availability of quality advice and consultancy remains critical success.

[15] Micro businesses are those with 10 or less employees

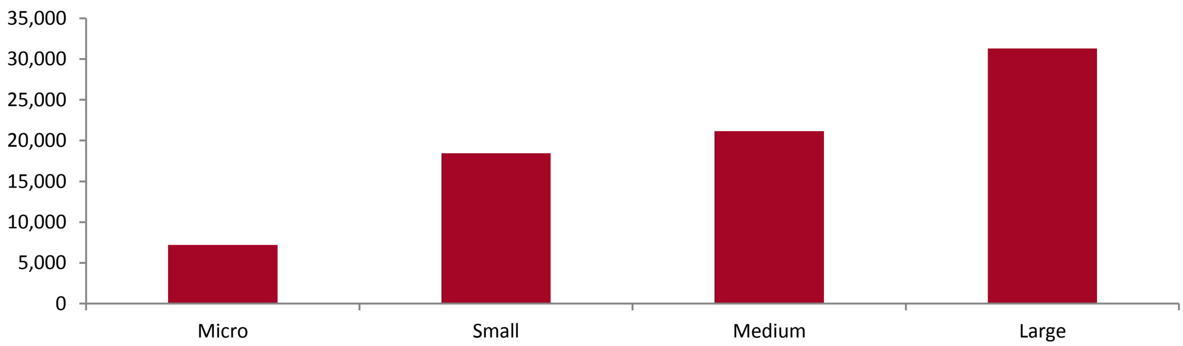
Potential policy solutions to help alleviate these challenges include the following:

a. Replace bailout grants and financial aid programs with monitored subsidized loans
b. Mandate favorable risk/return analysis and routine status reports as criteria for granting loans
c. Provide low-cost consultancy and auxiliary service support to SMEs
d. Foster SME listings on Bahrain Bourse
e. Long-term tracking of government allocated investments and funding to ensure the functioning of market driven risk management
f. Proactively increase the depth of the financial system through regulatory reform to provide the private sector with additional financing options. This should above all include new venture capital and private equity solutions

Support the transition of small and medium size businesses to larger corporations

As of 2010, the proportion of Bahrainis employed in the private sector was significantly lower than that of non-Bahrainis. 60% of those Bahrainis are employed in small or medium sized businesses. This represents a huge disparity given that 99.6% of registered institutions fall within this category while the few large institutions employ the remaining 40%.

Bahraini employees in the private sector- 2010



Source: GOSI, EDB Analysis

This indicates that, despite the substantial contribution of large corporations to national employment, SMEs lag far behind their potential in terms of employing nationals. The contribution of private companies to national job creation tends to increase with size and initiatives to foster company growth hence appear critical from the job creation perspective.

Initiatives to enable small and medium sized businesses to expand their operations are likely to create significant job opportunities and boost both output and export growth. To achieve this goal, strategic policies need to be implemented that include:

a. Dissemination of market information regarding high potential, high skill industries
b. Equity-based government initiatives to invest in public-private partnerships that target the expansion of existing SMEs
c. Expand existing subsidized loans targeted to production and productive enterprise expansion
d. Offer consulting aid to develop business plans for operating franchises, new market penetration and business diversification as well as small scale mergers and acquisitions
e. Mobilize legal reform to create a framework for businesses to license products and issue patents. Bahrain ratified a law on patents in 2004.

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