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Saudi Arabian Monetary Authority

Financial Stability Report

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Executive Summary

Global trade has picked up during 2017, which has helped propel global economic growth forward. The positive developments in growth can be noted in both Emerging and Advanced Economies; the US economy especially has exhibited a robust recovery among its peers, which has led to their gradual monetary normalization. The growth momentum has had a tangible impact on commodity prices increasing relative to the previous year; oil market developments have benefited from the positive tailwinds stemming from growth, and the successful commitment of the OPEC and Non-OPEC production cut.

The Saudi Economy contracted by the end of 2017. Despite the pick-up in global growth, Saudi economic growth recorded a contraction of 0.86 percent in 2017, largely attributed to the oil production cuts. The oil sector dropped by 3 percent while the non-oil GDP increased by 1 percent. Other macroeconomic indicators showed some slowdown by the end of the year, in line with the overall economic environment. Inflation recorded a negative rate of 0.8 by 2017 along with sluggish growth in money supply at 0.2 percent.

The domestic fiscal stance showed improvement in 2017, as the budget deficit dropped by 23 percent in 2017 and non-oil revenues increased by 33 percent, compared with the previous year. The main risk facing the Saudi economy continues to be a reversal in the oil price. Oil is still the dominant source of the budget revenues as well as the main source of export receipts.

Recent global markets developments and increased volatility in oil prices have motivated a new fiscal approach. The Saudi government has implemented a countercyclical fiscal policy aimed at increasing spending financed through the issuance of debt securities. In 2017, the Debt Management Office (DMO) continued its' issuance program without influencing liquidity conditions due to enhanced coordination between the Fiscal and Monetary Authorities. The demand for Saudi government bonds has been overwhelmingly strong, for both conventional bonds and Sukuk, which signals positive investors' expectation about the good future of the Saudi economy. Even with the recent issuance, Debt to GDP ratio remains low by global standards reflecting the ample space to continue to stimulate the domestic economy through efficient fiscal spending.

The real sector showed recovery signs in 2017, relative to the preceding two years. The publicly listed companies' performance in 2017 was largely dependent on the sector as different businesses exposure to the decline in oil prices widely varies. Consumer related sectors seem to have been most impacted by the economic slowdown as revenue levels are notably smaller than years prior to the fall in oil prices. However, most sectors appear to be back-on-track trend wise, although continued recovery at a similar pace would be needed for the negative effects to completely subside. The real estate market has suffered a decline on both commercial and residential fronts, the decline being evident in both the volume and value of transactions.

The banking system continued to be stable, resilient, and profitable, despite a notable slowdown in credit demand. In line with the sluggish economic growth, credit demand has contracted in the aggregate as the economy undergoes the necessary structural adjustments. However, there have been some positive developments in the household sector; despite the contraction in credit in most business lines, the retail segment was lifted by a persistent increase in retail real estate lending. This can be partially attributed to the decrease in real estate prices, and SAMA's easing of the LTV to 85 percent.[1] The

[1] Increased to 90 percent during 2018.

decision to use the LTV countercyclically, considered three main factors: real estate market developments, retail real estate loan asset quality, and size of retail real estate loans.

Asset quality remains strong despite the small increase in Non-Performing Loans (NPLs). The Saudi Arabian banking system remains highly capitalized, and has reported an improvement in liquidity relative to 2016. Overall, the banking sector is in a good position to tackle any further increases in NPLs. Looking at exposures prone to develop into problem loans, we find that the banking system remains highly capitalized with high provision coverage far exceeding minimum requirements.

The year of 2017 was challenging for the insurance industry. The overall written premiums declined slightly, but profitability was down significantly. In Health insurance, the number of insured lives dropped significantly, chiefly due to the reduction in the expatriate workforce and their dependents. Medical costs inflation continued and due to stiff competition did not allow companies to pass on fully the increased costs in higher rates, causing a spike in claims-to-premium ratio and hence squeezing profits in the health insurance business, which is the cause of the decreased overall profitability. In motor insurance, total written premiums decreased, due mainly to the reduction in the number of new cars sold. SAMA's introduction of compulsory no-claim discounts and instructions for more differentiated pricing added further pressure on total motor premiums. Despite this, the profitability of the motor business improved, as companies resorted to seeking greater efficiency in managing claims and expenses. The Engineering and Property lines of business were affected by the slowdown in the construction and in other business activities.

Despite the above challenges, the market remains resilient and continues to make strides towards greater sophistication and improvements in risk management. SAMA further strengthened the regulatory framework through the introduction of the Risk-Based Supervision Framework. SAMA also has increased the rigor of its inspections and its review of the prudential returns. Companies are underwriting new lines of business, such as cyber risks, and there is a growing interest in motor telematics products. The total shareholders' equity of insurance companies has continued to grow as has the total number employed in the insurance industry, bringing more capacity and skills to the industry. Overall, the outlook for the insurance industry is positive and it is responding well to the economic and regulatory changes.

Finance Companies have recorded a slowdown in credit extended. Finance Companies overall lending contracted slightly for the year, although there was some growth in real estate lending. The companies in this sector on a whole appear to have de-risked some of their exposures given the large uptick in NPLs, which may have attributed to the slowdown in credit extended within the finance companies sector.

Capital Markets showed some improvement over the past year, with an increase in the market capitalization of listed companies. Although major policy developments and reforms took place during 2017, the stock market index, market capitalization, capital market activities and listed companies' performance improved when compared to 2016. There was also greater amount of financing operations during 2017 compared to 2016, most notably in equity. However, turnover activity which decreased over the year could reflect some uncertainty as the economy undergoes a structural adjustment in response to the implemented reforms. Investment activity has been waning as well, which can be noted in the slowdown in the net income growth of Authorized Person's (APs) over the year, although they remain highly capitalized. The CMA has also been diligent in monitoring the required liquidity standards to ensure the resilience of the sector and protect investors, and APs as a whole have witnessed some improvement in liquidity.

1. Global Economic Growth

1.1 Recent Developments

Global growth momentum increased amid optimism due to increased global demand. Global economic output grew by 3.8 percent in 2017, an increase from just 3.2 percent growth in the preceding year. Moreover, revised global growth forecasts for 2018 and 2019 indicate that the global growth will continue to increase by upwards of 0.1 percent to a global growth of 3.9 percent. The main reason for this increase is that key economies that make up a significant portion of the global economy have experienced an upsurge in year-on-year growth in 2017 in output and trade activity during 2017. Growth amongst developed economies, namely the United States, South Korea, Japan, and Germany, was particularly higher than anticipated in the third quarter of 2017. Similarly, prominent emerging market and developing economies such as China, Brazil and South Africa all experienced stronger third-quarter growth than predicted. This overall rise in the global economy can be attributed primarily to stronger trade over 2017 as seen by the significant growth in world trade (world trade volume growth reached 4.9, WEO, 2018). Trade activity was notable within advanced economies, and there was also an upswing in Asian manufacturing output stemming from the launch of several new smartphone models (WEO, 2017).

In general, global trade growth rates experienced considerable improvement in 2017, as global trade volume expanded to 4.9 percent compared to 2.5 percent in 2016. In advanced economies, trade volume (goods and services) increased from 2.6 percent in 2016 to 4.1 percent in 2017. There was also positive growth in Emerging Economies, which registered 5.9 percent relative to 2016. Noticeably, this strong increase in world trade volume can be attributed to the recovery of overall global demand. However, a potential trade war could bring up some risk that may reduce the world trade growth, which in turn will reduce the global economic growth.

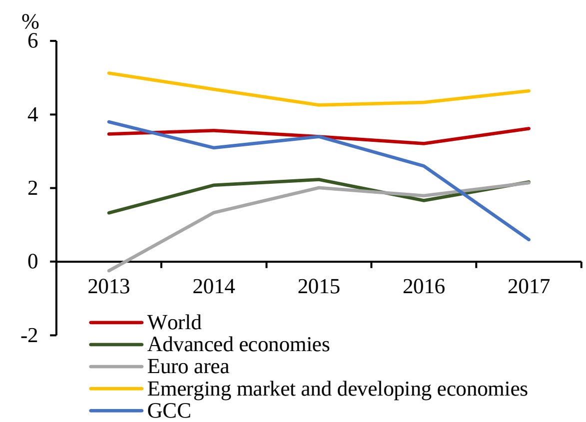
Growth in the world's advanced economies accelerated in 2017, expanding by 2.3 percent. The increase was partially due to a boost in growth amongst euro area countries, where growth increased from 1.8 percent in 2016, to 2.3 percent in 2017. The U.S. contributed to this accelerated growth as its 2017 GDP grew by 2.3 percent, well above the 1.5 growth during 2016. Unexpected upward growth was also pronounced in Asia; most notably in Japan, which showed faster growth at 1.7 percent in 2017 compared to only 0.9 percent in the prior year. However, the UK registered 1.7 percent growth, which is lower than the previous year. On average, since all advanced economies except for the UK registered an increase in growth, the growth rates of these advanced economies have reached 2.3 as seen in **Chart 1.1**. Arguably, the increased momentum experienced in 2017 should carry into 2018 and 2019 considering the stronger momentum in external demand in Advanced Economies if world trade remains robust, with anticipated tailwinds stemming US tax reforms[2].

Growth patterns in emerging and developing economies showed significant differences. The IMF estimated that the emerging and developing Asian region will remain the fastest growing region in the world (i.e. will grow around 6.5 percent into 2018 and 2019). In 2017, growth in China was 6.9 percent, which is still higher than the previous year. Russia's economic growth registered 1.5 percent in 2017 compared to a negative growth of 0.2 percent in 2016. The emerging and developing European region registered faster growth (5.2 percent) and is expected to remain strong in 2018 and to continue into

[2] The U.S. tax policy changes are anticipated to stimulate economic activities because of investment response to corporate income tax cuts.

2019 due to a favorable external environment, which includes positive financial conditions and strong export demand in the euro area (IMF FSR, 2017).[3] There was also a strong recovery in the emerging and developing Latin American region in 2017, where growth increased from -0.7 in 2016, to 1.3 percent in 2017. Moreover, IMF projects this region to continue to grow to 1.9 and 2.6 percent in 2018 and 2019 respectively. In this context, economic improvement in Brazil continued as its GDP increased from -3.5 in 2016 to 1.1 percent indicating a stable recovery. Growth in the Middle East, North Africa, Afghanistan, and Pakistan region dropped from 4.9 to 2.5 percent from 2016 to 2017, yet the IMF expects growth in this region to pick up in 2018 and 2019 due to the recovery in oil price. Despite the divergence in growth across emerging and developing economies, they all showed upward momentum with growth rates reaching 4.8, as can be seen in **(Chart 1.1)**.

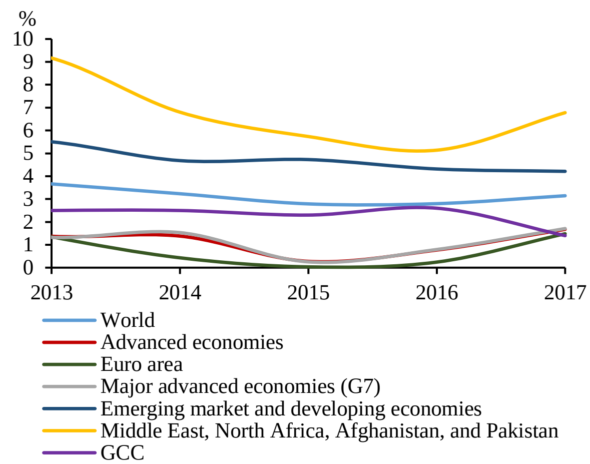
Chart 1.1: World and Regional Real GDP Growth Trends



Source: Bloomberg, IMF World Economic Outlook - January 2018 and Saudi Arabia-GASTA

Globally, inflation is picking up and deflation risks have declined. The global inflation rate rose in 2017 to 3.1 percent **(Chart 1.2)**, noticeably higher than 2.8 percent growth during the previous year. The uptick in global inflation has primarily stemmed from advanced economies, as inflation in advanced economies increased from 0.8 in 2016 to 1.7 percent in 2017, inflation in emerging and developing countries slowed slightly from 4.3 percent in 2016 to 4.0 percent in 2017. The rise in inflation in advanced economies can be attributed to both higher commodity prices as seen in the increase in oil prices, and a recovery in economic growth.

Chart 1.2: World and Regional CPI Inflation Trends



Source: Bloomberg, IMF World Economic Outlook - January 2018 and Saudi Arabia-GASTA

The U.S. economy recovered with growth registering an increase from 1.5 in 2016 to 2.3 in 2017. The signs of real GDP growth are measured by the pace of monetary policy normalization, and is expected to increase with tax reforms. According to the IMF, tax reforms are expected to stimulate economic activities through stirring positive investment responses to the corporate income tax cuts. This tax policy package positively impacts U.S growth in the short-term. However, this policy could slow U.S growth for several years starting in 2022 because certain provisions within the policy are only temporary (WEO, April 2018). Overall activities showed more resiliency supported by a strength in housing and labor markets. However, the subtle unwinding of the central bank balance sheet since 2014, and gradual increasing of the federal funds' rate since 2016, highlights the slow path in monetary normalization which is due to the sluggish increase in U.S. inflation, which rose from 1.2 in 2016 to 1.8 percent in 2017.

[3] The environment may deteriorate with the trade restriction games between us and China and the potential for trade war.

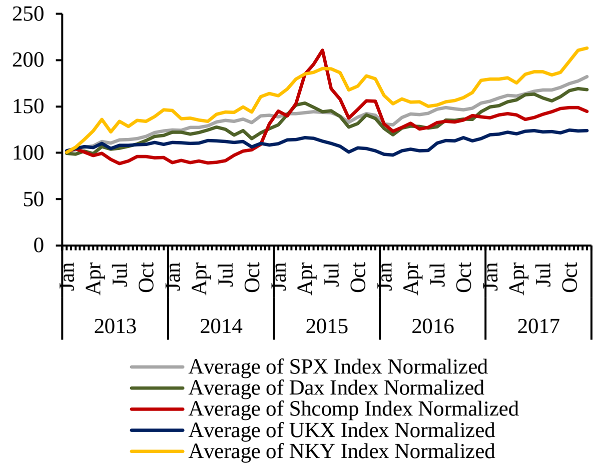
Euro area growth expanded to 2.4 percent in 2017— 0.6 percentage points higher compared with the preceding year. The positive effect on the growth stems from the quantitative easing (QE) program.

1.2 Global Financial Development and Financial Stability Risks

Global near-term financial stability risks have decreased as a result of stronger global economic recovery. Most advanced economies have continued following accommodative monetary policies, growth performance experienced a pickup in most advanced economies in 2017. Emerging economies additionally experienced a growth pickup in 2017, reversing the slowdown in some of these economies during the prior year. These combined factors have contributed to a further reduction of the near-term financial risks for 2017. However, the medium-term vulnerabilities have increased as the search for yield intensifies and risk appetite increases (GFSR, April 2018). Moreover, recent normalization of monetary policies in advanced economies would impact financial conditions via capital flows i.e. capital flows to EME would decrease, and those would significant debt loads may be impacted.

On average, equity markets in 2017 continued along an upward trend, with less volatility, even with the monetary policy normalization in certain advanced economies. All equity markets witnessed an improvement and reduced volatility during 2017 except the S&P 500 Index (SPX) which experienced a brief decrease during the 4th quarter of 2017. In fact, despite the U.S. monetary policy normalization and the Bank of England interest rate cut, equity markets continued to grow, defying prior expectations. **(Chart 1.3)**.

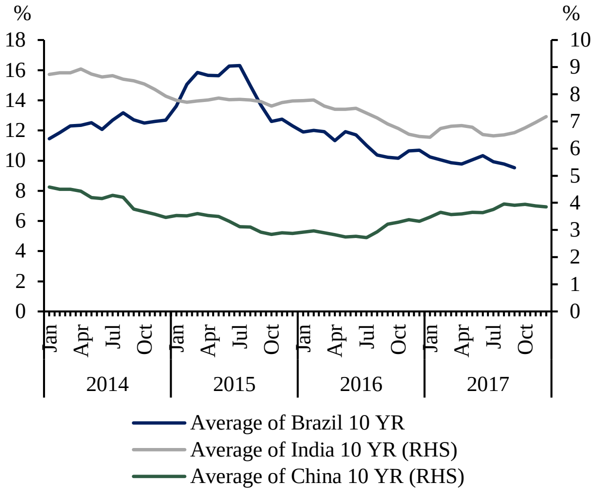
Chart 1.3: Global Equity Markets



Source: Bloomberg

Overall, EMEs sovereign bond yields remained stable. In the summer of 2013, the "announcement effect" for the tapering of the QE program triggered a short-lived volatility within financial markets. For instance, selected EMEs including Brazil, Indonesia, Turkey, India, and South Africa, saw an average rise in bond yields of 2.5 percentage points. Additionally, exchange rates depreciated by an average of 13.5 percent, the equity market fell by 13.75 percent, and reserves declined by 4.1 percent after the announcement for tapering of purchases of long-term assets (IMF, 2014). Furthermore, the Taper Tantrum was marked by a period of higher volatility relative to the current period in which economic conditions are more favorable and volatility is negligible. The tapering of QE could have had an impact on EMEs currencies, i.e. it depreciates EMEs currencies, augmenting net export for EMEs, and ultimately offsetting the abrupt capital inflows through the exchange rate channel. The gradual shrinking of the balance sheets in advanced economies evantually had a very weak impact on the EMEs sovereign bond yields. This minor impact can be attributed to the relatively deeper and better resilient financial markets as well as better macroeconomic fundamentals. Overall, EMEs soverign bond yields remained stable during 2017, as can be seen in (**Chart 1.4)**.

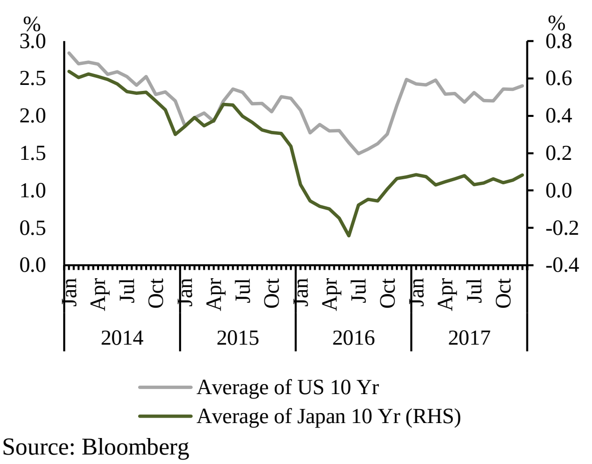
Chart 1.4: 10Y Sovereign Bond Yields in Emerging Markets



Source: Bloomberg

Bond yields in some advanced economies witnessed an increase in 2017. In the U.S. the slight increase in yields was mainly driven by the gradual interest rate hikes, with some expectations of inflation picking up in the long term**.** However, in Japan, the sovereign bond yields remained flat during the 2017, as can be seen in **(Chart 1.5)**.

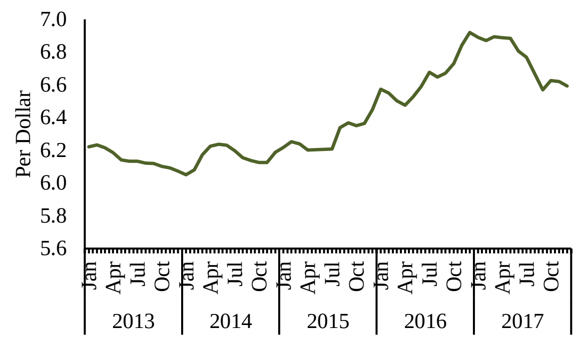
Chart 1.5: 10Y Sovereign Bond Yields in Advanced Economies



Source: Bloomberg

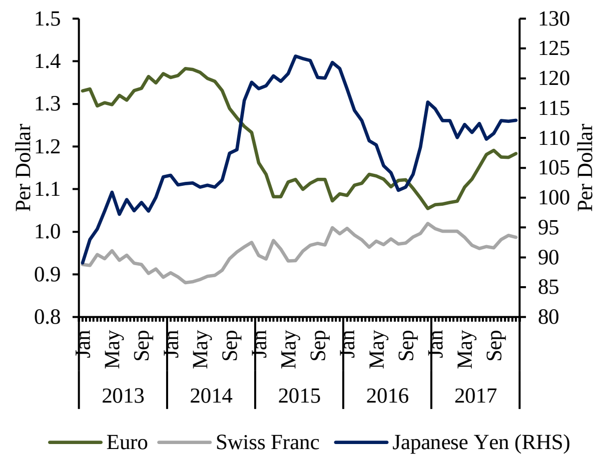
Volatility in foreign exchange markets has been lower compared to the last few years, while the USD continued to appreciate against most currencies (Charts 1.6, 1.7). This could be attributed to the divergence of monetary policies of major advanced economies from the U.S.'s monetary policy normalization, and a relative improvement in output performance in the U.S. Thus, the appreciation of the US dollar may help EME exports improve and offset any outflows (in 2018) that may cause by US monetary normalization via the intensification of the search for yield.

Chart 1.6: US Dollar Exchange Rate against the Chinese Yuan (Yuan/ $)



Source: Federal Reserve Bank of St. Louis

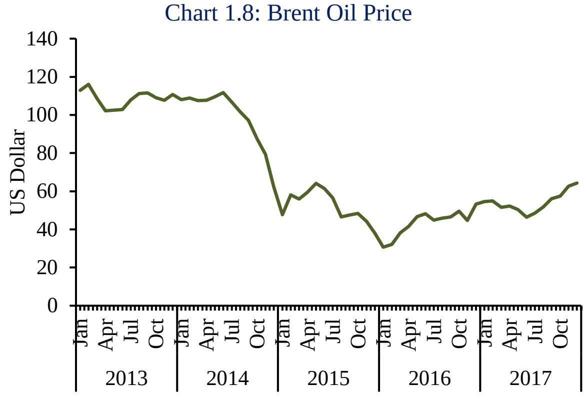
Chart 1.7: US Dollar Exchange Rate against Major Currencies



Source: Federal Reserve Bank of St. Louis

Considerable recovery of most commodity prices should further contribute to global financial stability. Throughout the 2017 year, the majority of commodity prices increased—most notably energy products—recovering from record-low levels registered at the end of 2015. Furthermore, a more pronounced recovery in most industrial commodities (including agricultural products compared to the preceding year) was evident. In particular, the Brent crude oil price outstripped its poor performance seen at the start of year 2016 (around $30/barrel) and rose to reach $64/barrel by the end of 2017. The recovery of oil prices can be partially attributed to the oil production cut agreement made by OPEC which led to a narrower gap between global supply and demand. Moreover, prices for natural gas, metals, and coal all exhibited strong recovery in light of higher global demand. The improvement in commodity prices is expected to improve financial stability across the global financial system. This stronger recovery would help oil-based-economies to bolster foreign reserves and enhance macro- fundamentals.

Chart 1.8: Brent Oil Price



Source: U.S. Energy Information administration EIA

1.3 Global Growth Outlook

Forward guidance, improvement in global demand and commodity prices, continued monetary policy accommodation, and moderate fiscal consolidation in advanced economies helped to reinforce growth and financial stability in 2017. However, according to the IMF the medium-term vulnerabilities are increasing and shifting to nonbank institutions. Improvement to the economic outlook is often associated with a rise in the search for yield, which in turn drives down a wide array of risk premiums. Arguably, the increase in the search for yield and higher risk appetite are desirable outcomes for unconventional monetary policy measures which ultimately enhances economic recovery. However, there are certain risks that may present themselves if these trends are carried too far. Thus, if changes to monetary policies are too sudden and widespread amongst advanced economies, it could carry the potential to bring about unwelcome instability within financial markets. This could ultimately increase medium–term vulnerabilities (Global Financial Stability Report, 2017).

Emerging market economies may suffer from monetary policy normalization in advanced economies. The current normalization in certain advanced economies could increase sovereign bond yields, which would eventually cause capital outflows from emerging market economies. In addition, the fiscal space of Emerging Economies with high debt exposure could be tested through further exposing them to roll-over risk if their exposures are relatively short-term. Therefore, policy makers in emerging markets should take advantage of current favorable external conditions to foster resilience within their financial systems via reduction of corporate leverage rates and accumulation of policy buffers by increasing their reserves.

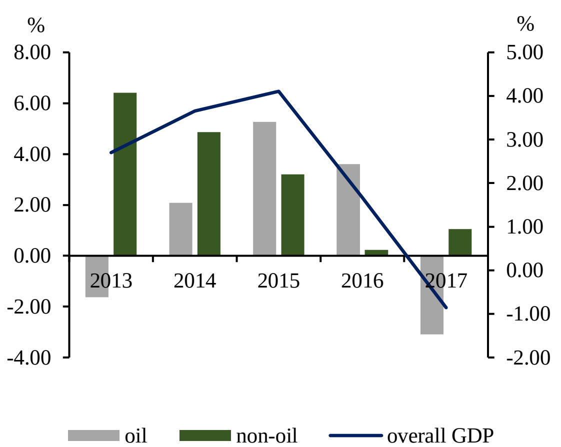
2. Domestic Macro-financial Developments

2.1 Growth Developments

The Saudi economy contracted by 0.86 percent during 2017, which was largely attributed to the reduction in oil production. The contraction was due to the country's commitment to the OPEC and Non-OPEC agreement which called for an oil production cut in order to stabilize oil market. The oil sector declined by 3 percent compared with an increase of 3.6 percent during 2016, and an average of 1.25 percent over the last 5 years. The non-oil sector accounts for 56 percent of overall GDP. The unstable oil market has led the government to take serious actions towards diversifying the economy away from oil dependency as a main source of growth. In this context, the Saudi Government launched *Vision 2030* in 2016 to promote the diversification of the economy by strengthening the non-oil sector **(Box 2.2)**.

Despite the contraction in Oil-GDP, the Non-Oil GDP has improved in 2017. The Non-oil GDP, which represents 56 percent of total GDP, grew by 1 percent for 2017, compared to 0.23 percent in the previous year. This is in line with the *Vision 2030* objective of increasing non-oil GDP growth. However, the non-oil growth is still significantly lower than the 5-year average of 3.15 percent. **Chart 2.1** displays growth rates broken down by sectors.

Chart 2.1: GDP Growth by Producing Sector

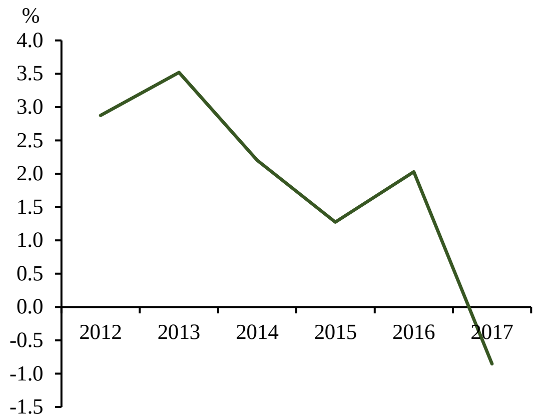


2.2 Inflation Trends

The economy experienced a deflationary phase in 2017, where the CPI decreased by 0.9 percent. The dip into negative price levels has not occurred since 2002, where there was a persistent deflationary trend from 1996 – 2002. The previous deflationary period was associated with low oil prices, consequently impacting government spending, where both factors clearly contributed to the subdued economic growth. The recent deflationary episode is similar to the previous one, where the main factors contributing to the resulting deflationary pressures were mainly due to the economic slowdown, and to a lesser extent to the side effects of some fiscal measures. Despite the partial reversal of some fiscal measures, such as reinstatement of salary benefits to public sector employees, the measure may have possibly impacted consumption behaviour **(Chart 2.2)**.

Most sections of the cost of living index witnessed a decrease over the year. Eight sections out of 11 declined: Clothing and footwear (3 percent); Goods and services (1.0 percent); recreation and culture (2.8 percent); transport (2 percent); furnishing, household equipment and maintenance (1.8 percent); housing, water, electricity, gas and other fuels (0.7 percent); Telecommunication (1 percent) and food and beverages (0.8 percent). The other three sections (Hotels and restaurants, Education and Tobacco) showed small increase during the same period except for the tobacco section, which increased by 100 percent due to the introduction of excise taxation of 100 percent. However, the influence of the tobacco section was limited in the overall index due to its low weight (0.7 percent). The general drop in most sections of the CPI comes as a result of the slowdown in domestic demand, which may have contributed to the sluggish non-oil growth over the past two years.

Chart 2.2: Inflation Trend



It is expected that inflation will increase during 2018 due to a second wave of energy price correction and other government measures such as the VAT. Such increases may contribute to a similar inflationary trend that occurred during 2016; i.e. one round increase in prices. Therefore, it is important to ensure the easing of deflationary pressures through policies that stimulate economic growth, attract investments, and increase aggregate demand.

Taking the Point of Sales (POS) data as indicative of consumer spending activity, it signals a healthy trend, possibly motivated by a low-price environment. POS transactions grew 42 percent, while POS sales grew by 11 percent by the end of 2017. The strong growth in transactions could possibly reflect the growing prevalence of terminals in a variety of retail stores, which could partially explain the consistent decline in the average value of POS transactions **(Chart 2.3)**. SAMA has been playing a pivotal role in easing the use of cashless technology, along with supporting a sustainable fintech environment **(Box 2.1)**.

Box 2.1
Fintech Innovation in Saudi Arabia

Financial technology, or ‘fintech’, describes the use of new and disruptive technology in financial services. Fintech has the capability to make financial products and services faster, more personalized or cheaper.

Fintech has the potential to support the development of the Saudi Arabian financial services industry including contributing to greater financial inclusion, moving towards a cashless society and contributing to the objectives of Vision 2030 by supporting the development of fintech SMEs and the development of fintech products and services that help all SMEs.

However, there are also a number of risks related to the development of fintech activity including the entrance of non-banking fintech companies that are not regulated in the same way as banks, the use of innovative technology that may not be fully understood and the development of cross border fintech innovation, which is harder to regulate.

SAMA acknowledges the added value of fintech products and services, while taking into account the associated risks. Therefore, SAMA has taken a dual approach to developing responsible fintech:

1. Risk based approach to testing and regulating fintech innovation.

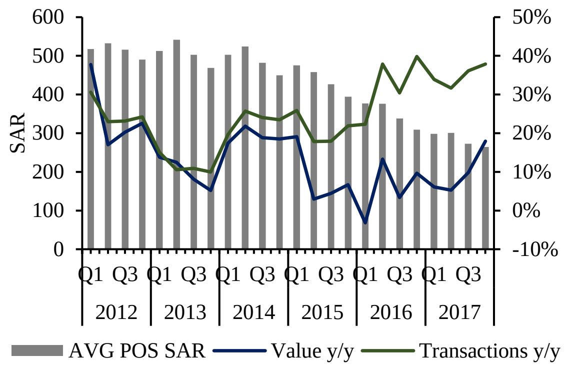
SAMA is currently developing a Regulatory Sandbox that will provide a light touch risk based approach to testing innovative fintech products. Through the Regulatory Sandbox, applicants are able to test innovative solutions whilst SAMA is able to understand the risks associated with the solutions and regulate them effectively before they are launched into the marketplace. SAMA also recognizes the importance of international co-operation in regulating cross-border fintech activity. SAMA is therefore actively involved in building relationships with financial service regulators in other markets and is represented on international bodies such as Financial Stability Board (FSB) and the Committee on Payment and Market Infrastructure (CPMI). SAMA is also involved in supporting regional co-ordination through Gulf Co-operation Council (GCC) and the Arab Monetary Fund (AMF).

2. Supporting fintechs through the development of a fintech ecosystem in Saudi Arabia.

SAMA launched Fintech Saudi in April 2018, to act as a catalyst to support the development of the fintech ecosystem in Saudi Arabia. Fintech Saudi is developing a number of initiatives with the objective to create a culture of collaboration by bringing together different stakeholders, build a broad understanding about fintech across Saudi Arabia and support fintech entrepreneurship and the development of fintech products and services.

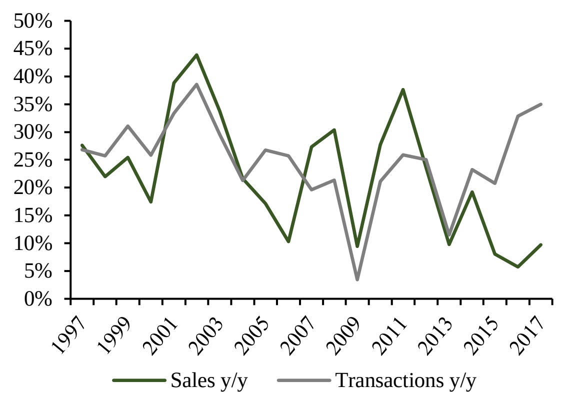
Through this dual approach, SAMA is seeking to address the challenges and hurdles faced in developing fintech innovation in Saudi Arabia and support the transformation of Saudi Arabia into an innovative fintech hub with a thriving and responsible fintech ecosystem driven by local and international stakeholders.

Chart 2.3: Point of Sale performance



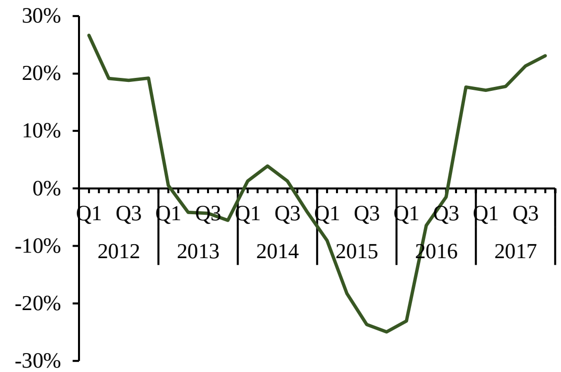
The divergence in growth between POS transactions and value, stemmed after the decline in oil prices by late 2014. It can be noted in **Chart 2.4**, that the spread has grown over the past 3 years, possibly capturing the low-price environment and a wider application of POS, resulting in a modest pickup in consumer demand.

Chart 2.4: Growth of POS transactions and value



Utilization rates reflect a pick-up in consumer activity. Another possible factor behind the robust growth in POS transactions is the growing usage in terms of terminals and customer awareness. However, when analyzing the utilization rate, i.e. the number of transactions per POS terminal (which somewhat controls for the growing use of cashless payments, as both transactions and terminals would increase), we note a rebound in activity following a steep decline through-out 2015, and part of 2016 **(Chart 2.5)**.

Chart 2.5: Utilization Rate (Y/Y)



2.3 Monetary Developments

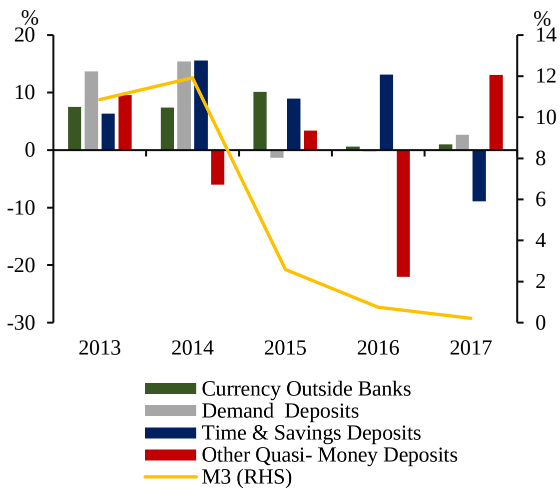
2.3.1 Monetary Aggregates

Monetary aggregates continued to show subdued growth, indicating less demand for money. The monetary base recorded a negative growth rate of 0.2 percent in 2017 for the first time since 2001, compared to 0.6 percent in 2016. Growth in M2 and M3 was affected accordingly, influenced by a strong relationship between government spending and growth in monetary aggregates.

Broad money supply (M3), capturing overall liquidity, witnessed a slower pace of growth during 2017 for the third consecutive year. It showed a slower growth rate of 0.21 percent; it has been in a downtrend since 2015, in which the registered growth rate was 2.59 percent, followed by 0.75 percent in 2016. The lower growth rate in M3 was due to the decline in growth of time and saving deposits.

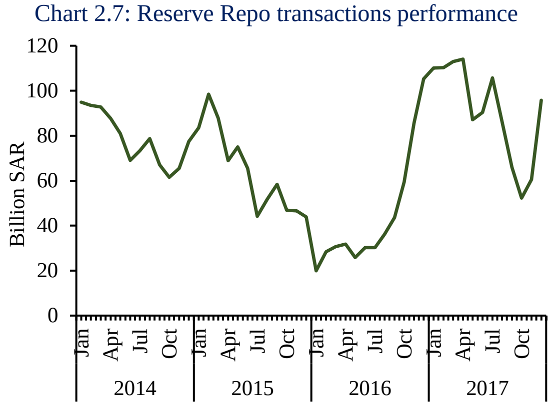
Among M3 components, lower growth was associated with a significant decline in time and savings deposits, despite the improvement in demand deposits. Demand deposits, which represent 55 percent of M3, witnessed an improvement in 2017, recording a growth rate of 2.7 percent, compared with negative growth in the previous two years. In addition, currency outside banks slightly improved from 0.60 percent in 2016 to 1.02 percent in 2017, but still demonstrated very low growth compared with the 5-year average of 5.33 percent. The other quasi-monetary deposits bounced back in 2017 to register a 13 percent increase during 2017 compared with negative growth in the previous year. Nonetheless, the only component of M3 that experienced a reduction in its growth rate is time and savings deposits, which declined by 8.9 percent in 2017 compared with 13 percent growth in 2016. The evolution of M3 and its components over the past five years is shown in **Chart 2.6**.

Chart 2.6: Growth Rates of M3 and its Components



Reverse repo transactions witnessed an increase since 2016, which reflect the improvement of system liquidity. As in **Chart 2.7,** the reverse repo transactions were in a downward trend since 2014 until mid-2016 and then significantly improved. The monthly average reverse repo stood at SAR 90 billion in 2017 compared with SAR 43 billion in 2016. This is one indicator of the improvement in the liquidity in the banking sector in 2017.

Chart 2.7: Reserve Repo transactions performance

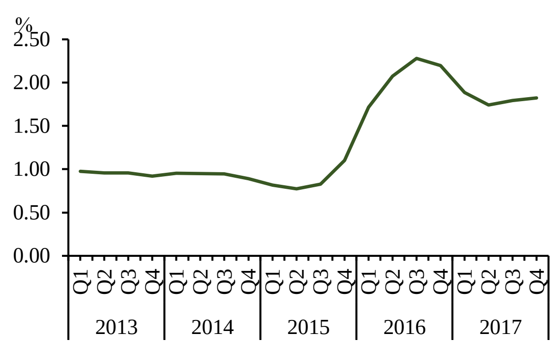


2.3.2 Monetary policy & market conditions

SAMA remains committed to maintaining its exchange rate policy. The Saudi Riyal (SAR) has been pegged to the US Dollar (USD) since 1986 at 3.75 SAR. The current exchange rate regime suits the economic structure and bolsters monetary and financial stability. In terms of policy actions, SAMA increased its reverse repo rate by an aggregate 75 basis points to reach 1.5 percent in 2017 to maintain the country's monetary and financial stability against the international monetary developments.

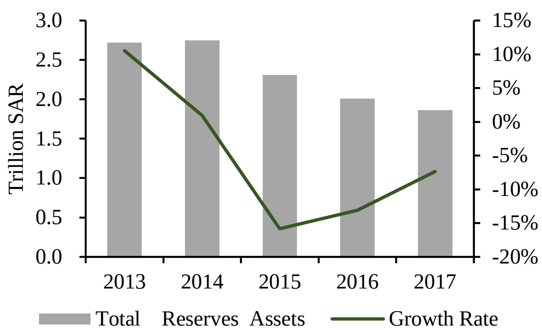
The 3-month Saudi Arabian Interbank Offer Rate (SAIBOR) declined in 2017, despite the increase in SAMA's reverse repo rate reflecting the current positive liquidity condition. As **Chart 2.8** illustrates, the SAIBOR accelerated during the first three quarters of 2016 and declined in the fourth quarter and continued to decline up until the second quarter of 2017, then it began to stabilize around 1.8 percent. This drop in SAIBOR was due to improved liquidity conditions in 2017 relative to 2016. One key observation is that the improvement in liquidity and the decrease in SAIBOR occurred, along with the continuation of government bond issuance, which is the outcome of good coordination between the fiscal and monetary authorities.

Chart 2.8: Saudi Interbank Offer Rate (SAIBOR)



Pressures on total foreign reserve assets continue to decrease, partially due to improvement in the fiscal position. In 2017, the decline in SAMA's total foreign reserve assets moderated at 7.3 percent vs. 13.1 percent in 2016 **(Chart 2.9)**. Foreign reserves totalled SAR 1.9 trillion at the end of 2017 versus SAR 2 trillion at the end of 2016. In terms of reserve adequacy and ranking, Saudi Arabia is among the top five countries worldwide in foreign reserve assets. Furthermore, the current reserve position is still at comfortable levels, which is reflected in the high reserve adequacy levels that is much higher than the standard reserve adequacy norms. Finally, a combination of FX reserves at 72 percent of GDP and the government's international borrowing program provides a strong buffer to maintain the peg and meet the genuine FX needs of the economy for the foreseeable future.

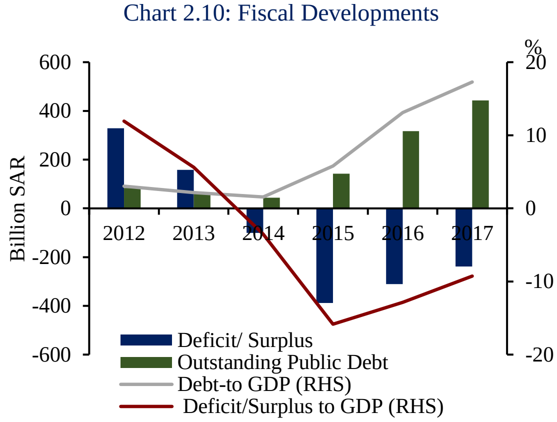
Chart 2.9: Total Reserve Assets



2.4 Fiscal Developments

The government's fiscal consolidations contributed to a significant improvement in the government budget. In 2017, the government budget deficit reached SAR 238.5 billion, around 23.3 percent lower than the previous year. It represented approximately 8.9 percent of GDP compared to about 12.8 percent in 2016 **(Chart 2.10).**

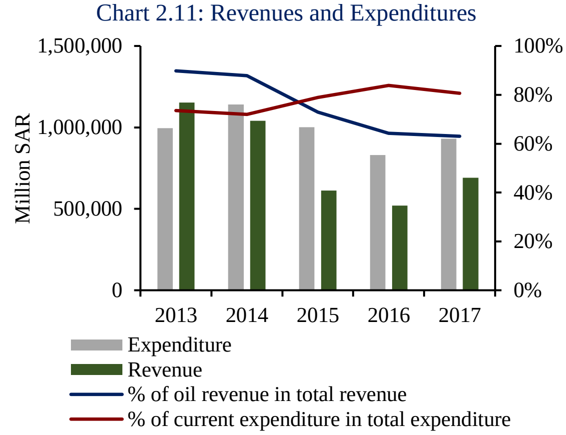
Chart 2.10: Fiscal Developments



Revenues have increased from the oil and non-oil sectors alike. Total revenues reached SAR 691.5 billion in 2017, an increase of 33.1 percent compared to the previous year. Despite the cut in oil production, oil revenues witnessed an increase to SAR 435.9 billion. Non-oil revenues grew significantly as well and reached SAR 255.6 billion. Tax revenues were around SAR 87 billion in 2017 and increased by 7 percent from the previous year. In general, the government has been successful in increasing revenues from non-oil resources. There has been a good progress to further realize revenues diversification, nonetheless oil revenues continue to remain elevated at 63 percent of total revenues, though down from 90 percent in 2013 **(Chart 2.11).**

Government expenditures increased by 12.0 percent to reach SAR 930 billion. Current expenditures grew by 10.9 percent, reaching SAR 772.2 billion in 2017. It accounted approximately for 80 percent of total government expenditures. Because of the relatively lower capital spending, current expenditures account for a higher portion in 2017. Salary expenses are the main component of current expenditures (59 percent); the government has successfully limited the increase of this component for 2017 and has a clear objective of making the private sector the main driver of employment rather than the government sector. Capital expenditures reached SAR 180 billion by the end of 2017, demonstrating growth of 34 percent compared to the previous year but remains below recent historical levels.

Chart 2.11: Revenues and Expenditures



It is also useful to shed light on the implemented fiscal consolidation measures. During 2017, the government applied some measures—such as the dependant's fees and the Saudization of the telecom sector—in order to lessen the fiscal burden on the government. Further fiscal and structural reforms are expected to contribute significantly to boosting fiscal balance. Such reforms include the value-added tax [4]in 2018 and a second round of energy and water price alignment during 2018-2020. They would contribute to reducing the downward pressures on the government's fiscal balance. It should be noted, the Ministry of Finance announced that the fiscal balance target was postponed to 2023. By postponing the balancing of the budget, we believe it will allow for a more gradual transmission that should support the economy.

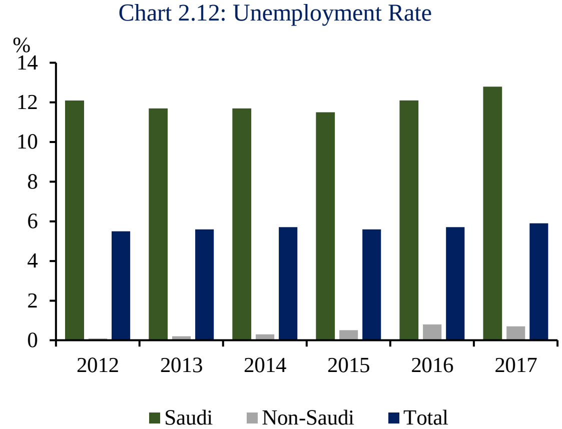
The government continued to finance its deficit efficiently. The government financed its deficit through a combined approach of issuing debt and withdrawing from reserves. In addition, the government diversified its debt across markets and categories. It is important to mention that all issuances received high attention from investors; as they were oversubscribed by at least 3 times, which reflects confidence in the Saudi economy.

Effective debt management is essential not only for the sustainability of the economy, but also for financial stability. The establishment of Debt Management Office (DMO) in 2016 was a step in the right direction to manage debt issuance at home and abroad. The DMO is fully dedicated to exploit resources for issuing debt in a cost-effective manner and support the development of a secondary bond market to create liquidity and demand for SAR denominated debt and sukuk.

2.5 Labour Market Performance

Unemployment continues to be a challenge to the Saudi economy. The unemployment rate for Saudis in Q4 2017 increased to 12.8 percent. This increase in overall unemployment was only associated with an increase in unemployment among Saudi nationals. The unemployment rate for males at 7.4 percent, which is significantly lower than the female unemployment of 32.7 percent. This might reflect the limited number of jobs created in the private sector due to sluggish economic growth. There has been a noteworthy slowdown in employment among Saudis. This is expected to be temporary given that the country is in a transitional period with various labour initiatives, which aim to reduce unemployment among Saudis in upcoming years. These initiatives are a continuation of the labour market reforms that have been implemented over the past years, aimed at attracting more Saudis into the private sector by enhancing their work environment in this sector, and augmenting the skillset of potential Saudi employees. **Chart 2.12** displays the overall unemployment rate as well as unemployment rates among Saudis and foreigners. There have also been significant efforts to reduce the female unemployment rate by both public and private sectors measures.

Chart 2.12: Unemployment Rate



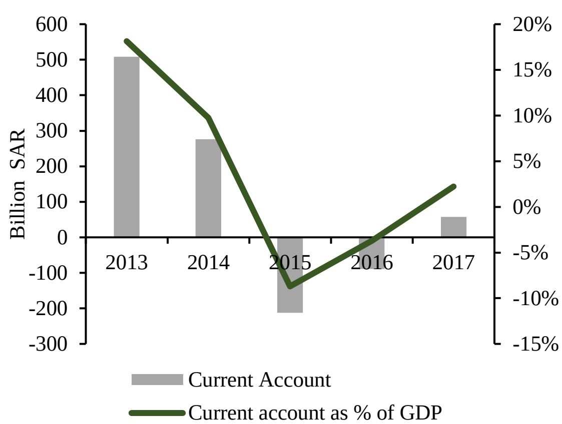
Source: General Authority for Statistics

[4] Implemented January 1st, 2018

2.6 Current accounts

The current account registered a surplus during 2017, reflecting the rebound in oil prices despite the cut in oil production. Preliminary data suggest that there could be a surplus of SAR 57.1 billion, 2.2 percent of GDP, compared with a deficit in 2016 and 2015 of 3.7 percent and 8.7 percent of GDP, respectively. However, this improvement is less than the five-year average surplus, which was SAR 107 billion **(Chart 2.12).** The improvement in the current account is primarily driven by two factors: The first factor is the rebound in oil prices despite the decline in crude oil exports. Total oil export receipts increased to SAR 638 billion in 2017, demonstrating growth of 25 percent. The second is the drop in import prices, which recorded SAR 504 billion in 2017, representing a drop of 4 percent compared with 2016. The decline in imports could mainly be attributed to a slowdown in local demand, as can be noted in the Real Sector section with most corporates reporting declines in revenue over the past two years.

Chart 2.13: Current Account



2.7 Saudi Economy Growth Outlook and Risks

Economic forecasts point to an optimistic outlook for the Saudi Economy. It is expected to grow by 1.7 percent during 2018, as per estimates from the IMF. Potential growth in the non-oil and oil sectors alike is presumed to contribute to this expected growth. In the oil sector, oil prices have been in an upward trend since mid-2017 and are expected to increase, due to the rise in global oil demand and the decrease in oil supply in some oil-exporting countries. For the non-oil sector, the potential growth is contributed to the expansionary government's budget for 2018 and government initiatives to boost non-oil sector growth.

The main challenge facing Saudi Arabia in the upcoming year comes primarily from the global oil market. Oil GDP sector represents around 43 percent of the total GDP and accounts for more than 63 percent of budget revenue. Until the government objectives of diversifying the economy away from oil are met, the economy remains vulnerable to fluctuations in oil prices.

The implementation of key economic reforms during this period could bear some temporary drag on economic growth over the short term. The government is aware of these risks and has introduced some initiatives to minimise the negative impacts, especially plans targeted at low- and middle-income households, such as the citizen's account programme.

On balance, the Saudi economy can cope with cyclical shocks, given the comfortable level of reserve adequacy, low public debt/GDP and a more disciplined approach to fiscal operations. Saudi Arabia still maintains a high level of accumulated foreign reserves and a low public debt despite the withdrawals from the reserves and the rise of public debt over the past two years, reflecting good fiscal space for further budget financing. Therefore, fiscal consolidation efforts can help nudge fiscal planning in a manner that is both conducive to economic growth and sustainable in the long-run. The government's budget balance programme made a successful start by reducing the deficit in 2017, and is expected to achieve its goal of a balanced budget by 2023.

Box 2.2

Recent Developments toward VISON 2030

In 2016, Saudi Arabia launched Vision 2030, an ambitious plan for shifting the -dependent economy to a more diversified economy. One of several initiatives is the National Transformation Programme (NTP) 2020, aiming to accomplish various social and economic goals. Select government entities, based on the NTP 2020, has a key role in diversifying the economy through the outlined strategies, in which all contribute to maintaining a sustainable and more resilient economy. To pursue these goals, the government has been implementing a series of fiscal and structural reforms since 2016 for a sustainable economy. The most recent developments are as follows:

- Excise taxes on tobacco and carbonated energy were introduced in June 2017, with a rate of 100 percent for tobacco and 50percent for carbonated drinks. The effect of excise duty/taxes on inflation was very limited due to their small influence in the basket of the general price index.
- In July 2017, expat levy was introduced on dependents of expatriate workers in the private sector, starting from SAR 100 per person per month in 2017 to progressively rising by SAR 100 each year until 2020. This reform has increased non-oil revenue and the cost of employing non-Saudis. The flipside of it is seen in falling housing rents as expat families are leaving the country.
- In January 2018, Value Added Tax (VAT) was introduced as part of GCC agreement. The 5 percent VAT is applied on most goods and services, which will boost non-oil revenue.
- In January 2018, energy price reforms were further phased-in as a part of a gradual implementation.
- The government launched the “citizen’s account” program, which is designed to protect the income of middle, and low-income groups form the side effects of higher energy prices. The first distribution was in December 2017, totalling SAR 2 billion.
- The Financial Sector Development Program was launched in 2018 and aims to promote financial awareness, increase savings and inclusiveness while promoting financial stability.
- In December 2017, the government announced a package of SAR 72 billion to stimulate growth in the private sector. The package consists of 16 initiatives for several sectors such Housing, Small and Medium-sized Enterprises (SMEs) and exports. In May 2018, the Quality of life program 2020 has been launched to improve the quality of lifestyle and to build a society in which individuals enjoy a balanced lifestyle.

3. Government Debt

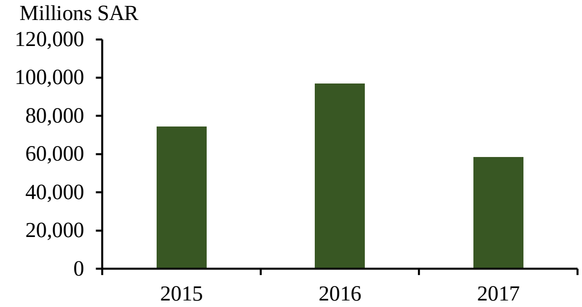
3.1 Overview:

Government securities are debt instruments issued by the government to meet its financing needs. These instruments are characterized by very low credit risk as it is backed by the Saudi government. Hence, it is considered the safest investment, and creates a benchmark in which riskier securities may be compared to. Saudi Arabia has long been familiar with debt issuance, dating back to 1988 when a prolonged oil market weakness in the 1980s caused persistent budget deficits. In 1999, outstanding government debt/GDP exceeded 100 percent, indicating the severity of oil market volatility for public finances. SAMA back then managed debt on behalf of the government on a principal/agent relationship basis. Debt issuance was suspended in 2007 given market conditions and fiscal position.

In 2015, the Ministry of Finance established the Debt Management Office (DMO). The DMO's main objective is to raise debt to finance planned and unexpected budget deficits and to manage central government debt portfolio all at the best possible costs and within acceptable risk parameters. To achieve its objectives, the DMO developed a 5-year Medium Term Debt Strategy (MTDS) and an Annual Borrowing Plan (ABP).

The Saudi Government resumed its debt issuances in 2015 to finance the budget deficit after eight years of suspension. During the period from 2007 to 2014, the government suspended its debt issuances and decided to pay down debt because of the improved fiscal position. Since mid-2014, volatility in the oil market affected the fiscal balance, resulting in government debt issuance. **(Chart 3.1)** shows the size of the local issuance since 2015.

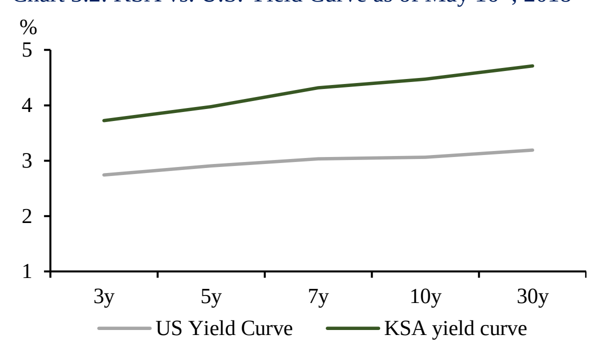
Chart 3.1: Government Local Debt Issuance



Source: Tadawul[5]

The yield curve, which plots the yield to maturity for various tenors, also reflect economic activity. The slope, shape and level of yield curve may vary overtime; the upward sloping yield curve represented in **(Chart 3.2)** reflect market expectation of the future, indicating a rise in long-term interest rates. A downward sloping or inverted yield curve tends to reflect some pessimism towards future economic growth. The government bond yield curve is a guidepost for pricing quasi government and corporate bonds. **(Chart 3.2).** Having a complete government yield curve is imperative for the development of the secondary market as it can be used as a benchmark to measure the general direction and performance of the market, as well as to compare prices and yields of non-sovereign domestic securities.

Chart 3.2: KSA vs. U.S. Yield Curve as of May 16th, 2018



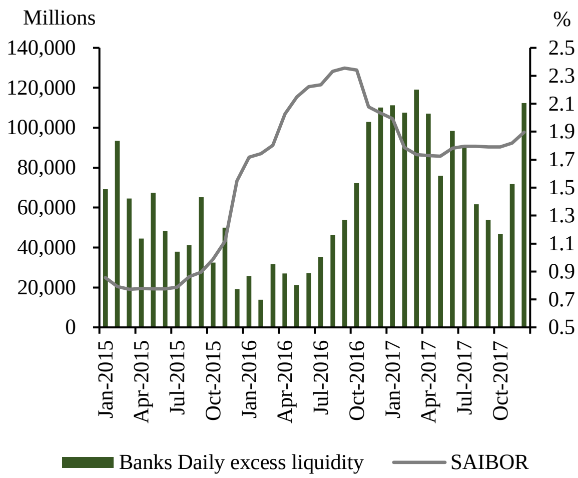
Source: Reuters

[5] Tadawul only has data on registered and listed government securities.

3.2 Liquidity and Government Securities Issuances:

Although the issuance continued in 2017, the market did not experience any liquidity stress. As captured in **(Chart 3.3)**, the SAIBOR was stable during the year, and reverse repo levels have improved to 112 billion SAR. The improvement in liquidity is further enhanced by strengthening communication between fiscal authority and monetary authority to ensure stability of liquidity conditions. The two authorities engage in transparent communication to gauge domestic liquidity levels before the issuance of any domestic debt. Issuance of government bonds aimed at financing government spending should not have a significant impact on liquidity conditions, as liquidity absorbed tends to circulate back to the financial system through government payments.

Chart 3.3: SAIBOR and Liquidity

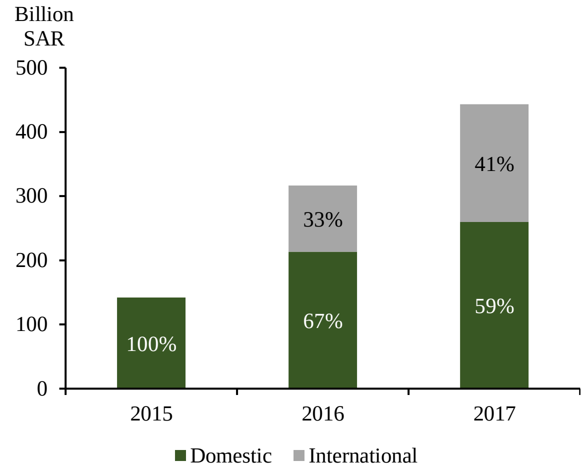


Domestic and international demand for government bonds is very strong and overwhelmingly oversubscribed. (Chart 3.4) shows the total outstanding local and international debt. High demand reflects investors' confidence in government's macroeconomic policies and structural reforms. The total issuance as per registered government securities on Tadawul was 83 billion SAR in 2017, slightly lower relative to 2016, which was around 103 billion SAR. **(Chart 3.4).** The international issuance has a positive impact on liquidity in the local market to the extent of capital inflow for the following two main reasons:

1. Liquidity is not obtained from the local market.
2. International Issuance is usually injected into the local market through government payments.

The balance between domestic and international issuances is important to strike, as too much domestic issuance could have an impact on liquidity if it is not injected back into the system.

Chart 3.4: Total outstanding of Local and International Issuance

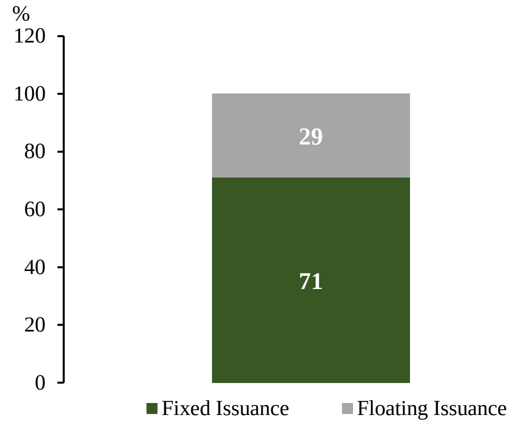


Source: Tadawul

3.3 Government Securities Coupons and Maturities.

There are two main types of pricing of government securities, fixed or float. Government debt includes both fixed and floating government securities **(Chart 3.5)**. The fixed coupon payments are determined prior to the purchase of the security and does not change over time. The floating coupon payments, are linked to a specific benchmark, therefore every payment varies depending on the price of the benchmark. Moreover, the floating coupons were issued in 2016, and suspended thereafter. As at year-end 2017, 92 billion of government local outstanding debt, in addition to SAR 37.5 billion of international debt is priced with floating coupons, which represent 29 percent of total issuance versus 71 percent of debt issuance with fixed rate.

Chart 3.5: Fixed and Floating Issuance

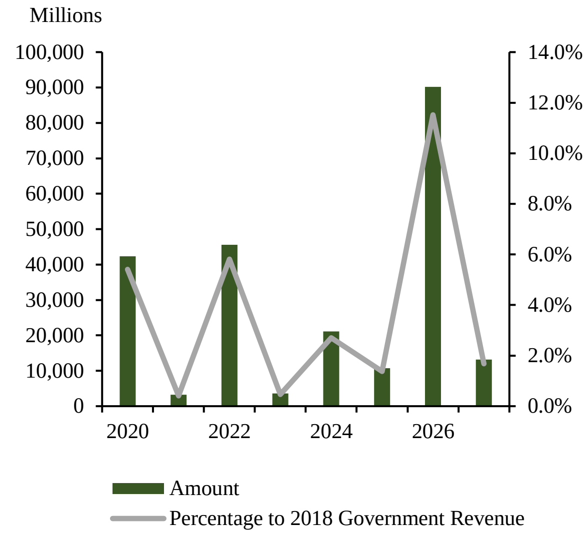


Source: DMO

While floating rate notes tend to be more attractive to liability sensitive investors (i.e. banks), however, it may pose challenges to fiscal policy in an increasing interest rate environment. The floating issuance is very attractive to investors as they are naturally hedged against interest rate risks. However, the government will bear market risk instead of the investors. In addition, it does not create an effective risk-free yield curve as the pricing is linked to an interbank benchmark.

Unlike 2016, government debt issued in 2017 carried fixed coupon rates. The shift to fixed rate coupons, have effectively decreased the proportion of floating rate notes. Furthermore, this step helps limit the exposure of fiscal expenditures to interest rate risk, as well as it helps develop the secondary market by establishing a risk-free yield curve. The maturity date of the government bonds is of a high importance for the fiscal authority**.** On the date of maturity, the government must pay back the principle on the bonds. Therefore, it could represent a notable cost on the fiscal budget. It is important to diversify the maturities overtime to reduce the cost of principle on the fiscal budget. However, data shows that there is a maturity concentration in the debt securities in 2026, with around SAR 90 billion or 37 percent of the total issuance maturing in that year **(Chart 3.6).**[6] That is equivalent to 12 percent of 2018 government revenue. On the other hand, the year of 2021 is going to be the lowest with 3.2 billion maturities. The lack of a clear well drafted strategy to contain this issue could cause a pressure on the government budget.

Chart 3.6: Government Securities Maturities

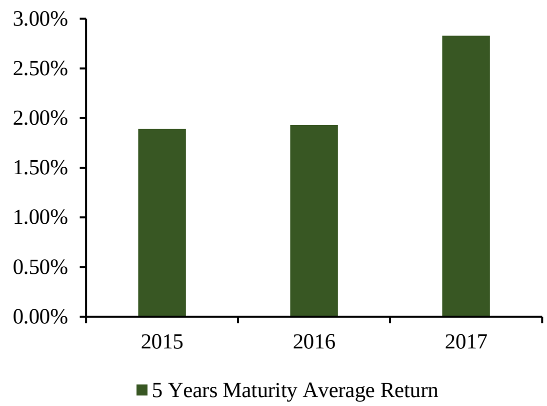


Source: Tadawul, MoF

The cost of borrowing has increased in 2017. (Chart 3.7). The pricing of debt is influenced by domestic monetary conditions and international rates, particularly U.S. rates, due to the currency peg framework between the Saudi Riyal and the U.S. Dollar. Given the recent monetary policy developments, the interest rate increased in the U.S, was reflected by an increase in cost of borrowing in the Saudi market. In 2017, the average 5-year bond yield was around 2.83 percent compared to 1.93 percent in 2016 **(Chart 3.7)**.

[6] Listed Tadawul securities as of end of 2017.

Chart 3.7: 5 Years Bonds Average Return



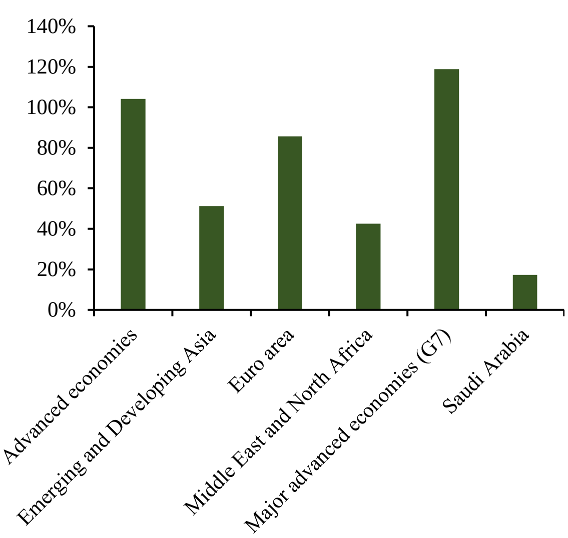
Source: Tadawul

3.4 Government Debt Effects on the Saudi Economy.

The Saudi economy is highly dependent on oil revenue, however non-oil revenue diversification has shown some improvement. As the private sector contribution to GDP is still a function of government spending, Ministry of Finance conducts a countercyclical fiscal policy increasing spending, financed by the issuance of debt or the drawdowns from the government reserves, to stimulate the private sector and improve the performance of the economy.

The Debt to GDP ratio continues to increase, yet remains relatively low. Saudi Arabia's rationalization of spending and a debt ceiling guideline of about 30 percent of GDP bodes well for debt sustainability and economic activity **(Chart 3.8)**. The ratio helps compare the amount of leverage of debt by normalizing it to the countries' domestic production capacity. Despite the uptick in issuances, Saudi Arabia has started from low levels after consistently paying down its debt**.** In 2017, the ratio in Saudi Arabia is 17 percent[7] it is considered low compared to other countries globally **(Chart 3.8)**. According to the IMF, the G7 major economies debt to GDP is averaged around 119 percent while emerging and developing Asian economies averaged around 51 percent. This clearly indicates the ample fiscal space to continue to stimulate the domestic economy through efficient and expansionary fiscal spending. Despite the ample room to increase debt, the fiscal authority had placed a debt ceiling of 30 percent, which helps ensure that funds raised through issuances are efficiently utilized.

Chart 3.8: Debt to GDP Ratio



Source: IMF

[7] Debt to Nominal GDP

Box 3.1
Debt Management Office

The Debt Management Office (“DMO”) was established in the fourth quarter of 2015 to secure Kingdom of Saudi Arabia’s financing needs with the best financing costs in the short, medium, and long term under an acceptable degree of risk in compliance with the financial policies of the fiscal authority, and to maintain Kingdom’s ability to access different international financial markets at fair pricing.

DMO’s main responsibilities include the following:

- Managing Government Direct and Contingent liabilities and all of its related operations.
- Developing a strategy for the public debt (“Medium Term Debt Strategy” or “MTDS”) and an Annual Debt Borrowing Plan (“ABP”).
- Arranging, leading and issuing public debt in all forms (both local and international borrowing), refinancing, restructuring, and managing the Ministry of Finance’s guarantees to support the Kingdom’s public financing efficiently.
- Developing legal frameworks, governance and risk management policies related to the public debt management.
- Developing internal policies of the DMO and its management structure.

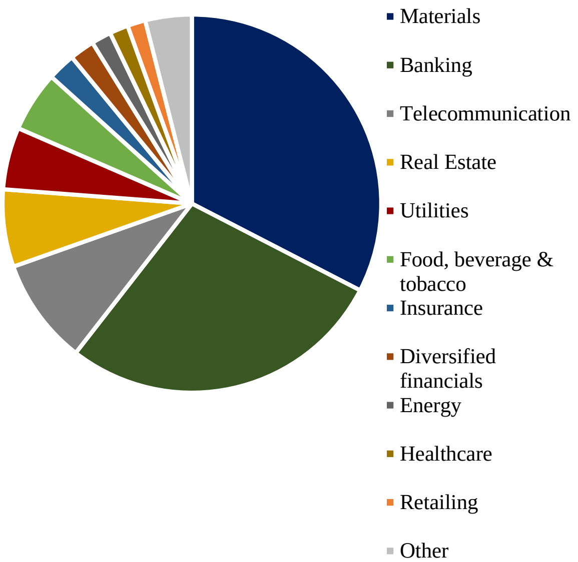
In addition to the conventional bond issuance, the DMO is also committed to the sukuk market. The DMO has established local sukuk program denominated in SAR. Additionally, an international sukuk issuance program was established as well. As of 2017, total debt issued under the local sukuk program amounted to SAR 58.5 billion; moreover, total debt issued under the international sukuk program amounted to USD 9 billion.

4. Real Sector Developments

4.1 Publicly Listed Companies

Corporate activities offer key insights into the impact of the recent economic headwinds on the real sector. To further assess such impact on the stability of the financial system, we utilize the financial statements of publicly listed companies. The Saudi stock market consists of 181 companies with a market capitalization of 1,689 billion riyals divided into 20 sectors. Materials sector holds the largest share in terms of market value with 33 percent, followed by the banking and telecommunication sectors with 28 percent and 9 percent respectively **(Chart 4.1)**. The analysis will be conducted on a sectoral basis and will take into account the key financial ratios that capture developments in terms of liquidity, debt, efficiency, and profitability. The sample set of companies will then be assessed over the past five years in order to extrapolate the financial soundness of the market.

Chart 4.1: Sectors Share by Market Value



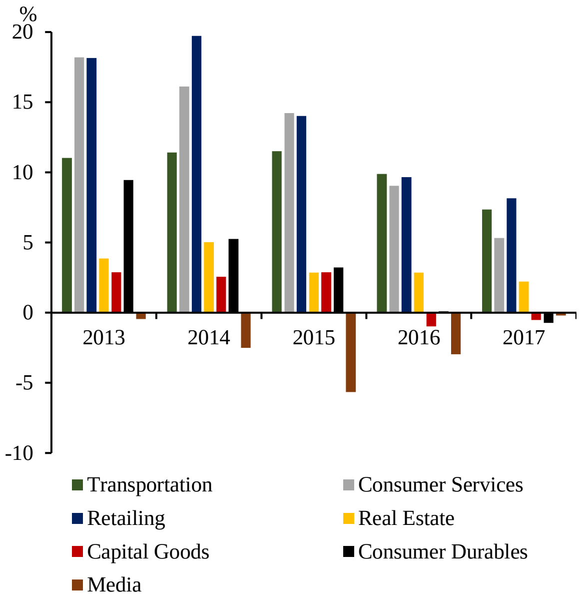
Source: TADAWUL

4.1.1 Profitability

Selected sectors appear to be more responsive to the sluggish economic conditions with reduced levels of profitability by 2017. To assess the overall sectoral profitability, we will consider two ratios, namely return on assets (ROA) and return on equity (ROE). Return on assets measures corporate efficiency in asset utilization; the higher ROA is the more efficient the sector would be. As far as the return on equity is concerned, it measures the level of income against the shareholders' investments rather than total assets, which is captured in the ROA. In other words, it takes into account the targeted-level of financial leverage. In cases where we notice a significant discrepancy between these two ratios, it is important to assess the liquidity and coverage ratios as it is a sign of high amounts of debt.

Profitability measures indicate a clear decrease in profitability across all sectors over the past few years relative to years prior to the drop in oil prices. The lower levels of profitability reflect the prevalence of oil induced shocks on the real economy. However, a sign of recovery can be noted in some sectors such as materials, telecommunication, energy and utilities by 2017. While sectors like transportation, consumer services, retail and real estate have not found their way to an upward trend as far as ROA and ROE ratios are concerned **(Chart 4.2)**. This is partially due to the implementation of value added tax (VAT) and removing government subsidies, which impacted disposable income. A possible risk can come from sectors with negative profitability ratios, such as consumer durables, capital goods and media, although the latter two are on an upward trend. The risk for sectors with weak profits would be exacerbated if these sectors were to witness a continuation of negative profitability. However, **Chart 4.2** indicates that there is an improvement in these sectors. In addition, these sectors are coupled up with lower levels of debt, which means a contraction in financial obligations that have to be met on the medium to long term. Finally, recent government measures to alleviate impacts to disposable income such as the cost of living allowance and the citizen's account may allow for a reversal in consumer spending behavior, allowing for a positive development in the bottom-line of the aforementioned sectors during this year.

Chart 4.2: Return on Assets for Negatively Impacted Sectors*



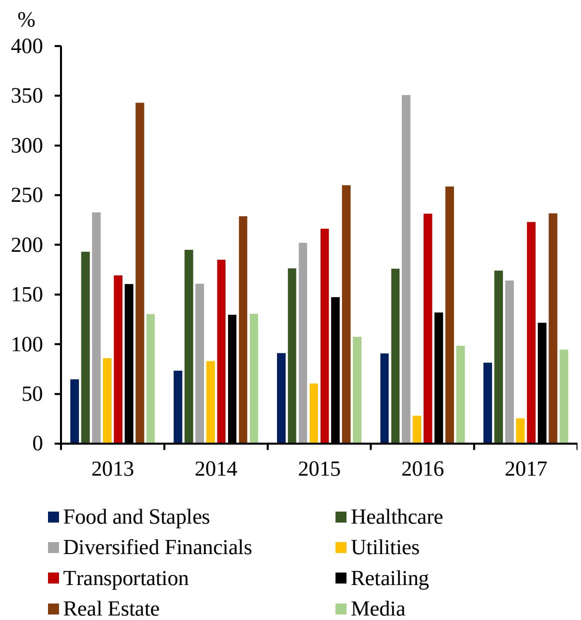
Source: Bloomberg
*The data represent at least 70 percent of the sectors' total assets

4.1.2 Liquidity

Liquidity levels are relatively stable despite the slowdown in economic growth. Two of the key liquidity indicators are quick and current ratios. The current ratio examines an entity's ability to meet financial obligations over the short-term. It is often preferred that companies have a current ratio above 100 percent, as it reflects their capacity to meet short-term obligations. However, a very high current ratio however signals that an entity may be holding an excess of liquid assets and anticipating a slowdown in its operating activities. The quick ratio takes a narrower approach in assessing the ability to meet short term financial obligations as it excludes any current assets that cannot be promptly converted into cash. One major example of such assets is inventory. An entity's discrepancy between these two ratios depends on its main line of operation and the levels of needed inventory.

If we were to look at the sectoral liquidity levels, the ratios appear to move in tandem, which means there has not been any strategic change in terms of inventory management. A positive take away is that most sectors have ample liquid assets to meet their obligations as they fall due, which indicate that despite the difficulty in earnings, most sectors have healthy liquidity buffers in place. To that end, some sectors have recorded higher levels of liquidity in 2017 such as materials, capital goods, telecommunications and consumer durables and services. Whereas sectors like food and staples, healthcare, diversified financials and utilities were showing lower liquidity ratios **(Chart 4.3)**, which could possibly be attributed to a change in the sector's asset structure and a transformation in the operating cycle. From a financial stability standpoint, sectors with low liquidity ratios along with low or even negative profitability should be monitored.

Chart 4.3: Current Ratio*



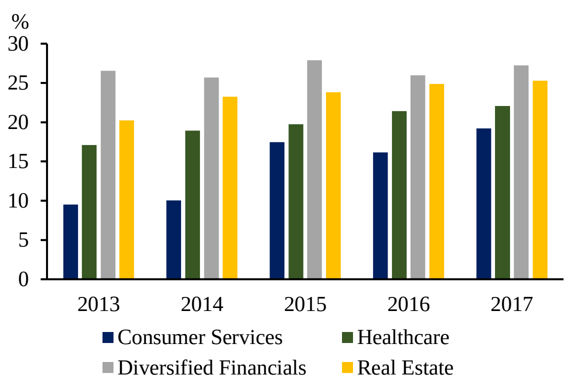
Source: Bloomberg
*The data represent at least 70 percent of the sectors' total assets

4.1.3 Debt ratios

Debt levels appear to have dropped for most sectors in 2017. For debt level assessment, we will use debt to equity and debt to assets ratios. Debt to asset ratio assesses how much of an entity's total assets are financed through debt. High levels of financial leverage raise the overall financial risk and places extra burden on the sector in meeting its financial obligations. Low levels of debt tend to be preferable by both shareholders and regulators as excessive credit growth is mitigated which lowers the risk exposure, as long as it does not hinder the sectors growth.

When assessing the sectoral debt ratios we notice that most sectors have had lower debt in 2017, which is in line with the credit trends exhibited from both banking and finance companies. However, some sectors have higher debt ratios by 2017 are consumer services, healthcare, diversified financials and real estate **(Chart 4.4)**. Despite the slightly elevated levels of debt, they remain comfortably low at below 30 percent. Lower sectoral financial leverage is preferable as it weakens the ties to the banking and financial sectors, However, lower debt may constrain firms' ability to reach higher levels of growth and breakout from the most recent downturn. Most certainly, debt ratios shall not be analyzed in vacuum, and as we comprehensively observe the sectors' financial conditions, it is clear that a continuation of higher debt with dropping profitability may increase the likelihood of the risk of default.

Chart 4.4: Debt to Assets*



Source: Bloomberg

*The data represent at least 70percent of the sectors' total assets

4.1.4 Efficiency ratios

Given the reduced economic activity, efficiency measures have dropped for most sectors by 2017. For efficiency indicators, we will use two indicators, namely asset turnover and inventory turnover. The asset turnover ratio shows how a firm uses their total assets to generate revenues, a higher ratio is considered as an indication of better efficiency in asset utilization. The inventory turnover ratio indicates the rate by which an entity depletes their inventory in ordinary circumstances. This ratio is usually kept around the industry average since the need of inventory depends on the business line. It's also important to mention that the interpretation may not be accurate in abnormal economic conditions. We will compare inventory turnover ratios in 2017 with the 2013-2016 average in order to get a better industry benchmark.

Based on the previous five years, asset turnover ratio in 2017 appears to have dropped across the board except for media and real estate. Sectors with the most significant drop were consumer services, consumer durables, energy and capital goods with 61 percent, 30 percent, 28 percent and 23 percent respectively. As for inventory turnover ratio, our benchmark is the 2013-2016 average. Sectors with the highest deviation from the average (whether positive or negative deviation) are considered the ones facing challenges with efficient inventory management. A drop is recorded in inventory levels by 66 percent and 46 percent in consumer services and real estate sector respectively. Whereas the highest positive deviation were in diversified financials, utilities and media with 108 percent, 59 percent and 51 percent, respectively

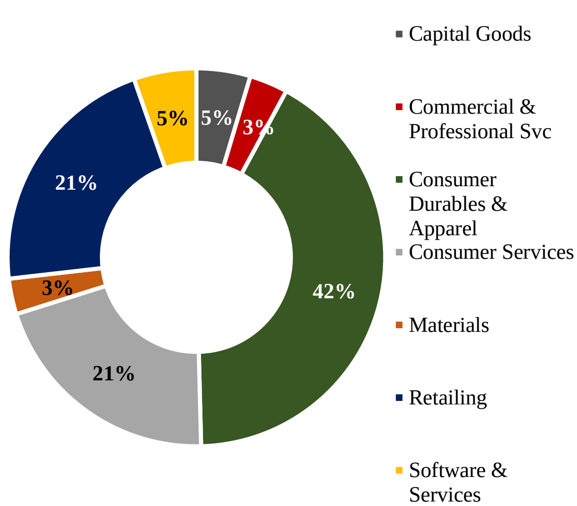
Although there has been a sign of recovery in the overall performance of the publicly traded companies, most financial ratios in 2017 are still well below the arithmetic average of the four preceding years. Yet, it is anticipated that a full recovery is expected in the coming years with the government's various plans and initiatives aiming to support the economy.

4.2 Developments in Saudi Arabian Parallel Market (Nomu)

Nomu is an alternative stock exchange designed to meet the listing need of small and medium enterprises and other businesses in the Kingdom. Listing requirements for Nomu are less strict than TASI regulations **(Box 8.1).** Even though the Nomu market has looser listing and disclosure requirements, it is limited to Qualified investors that are determined by the CMA, which should promote sound investment decisions and lessen market inefficiencies. The introduction of this market is deemed to have a positive contribution to the development of the overall capital market by facilitating a new financing channel.

The Parallel market was launched in February 26, 2017 with seven companies initially listed and by the end of the year, there were nine listed companies. By the end of 2017, the breakdown of the listed companies market share by sector as shown in **Chart 4.5**. As of the end of 2017, the total market value of companies listed in Nomu market equals to SAR 2.26 billion. It is worth noting that as at the end of 2017 most stocks were trading below their listing price resulting in 29 percent aggregate loss in market capitalization, which is equivalent to SAR 919 million.

Chart 4.5: Market Share

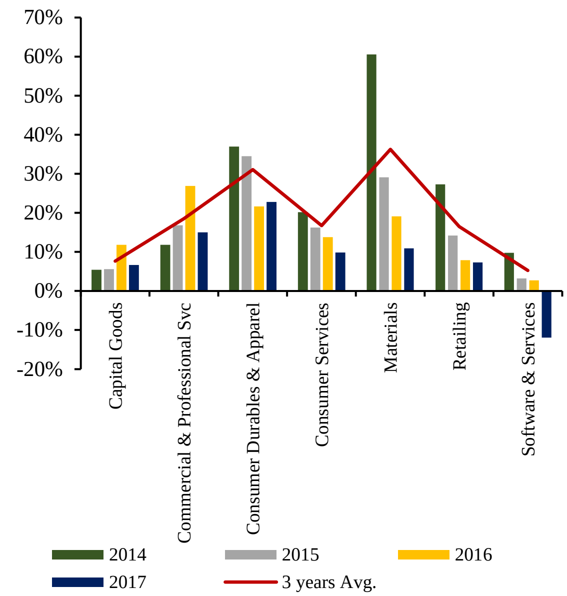


Source: TADAWUL

The analysis will be on a sectoral basis and will take into account the main financial ratios over the three years preceding 2017 in order to extrapolate the financial soundness of Nomu. The following analysis will compare 2017 ratios with the industry average for the period 2014-2016.

All sectors witnessed a downward trend in profitability, **due to the sluggish economic growth over the most recent period (Chart 4.6).** The reduced profitability can be linked to the new structural changes and the imposition of the value-added-tax as well as the expatriate levy.

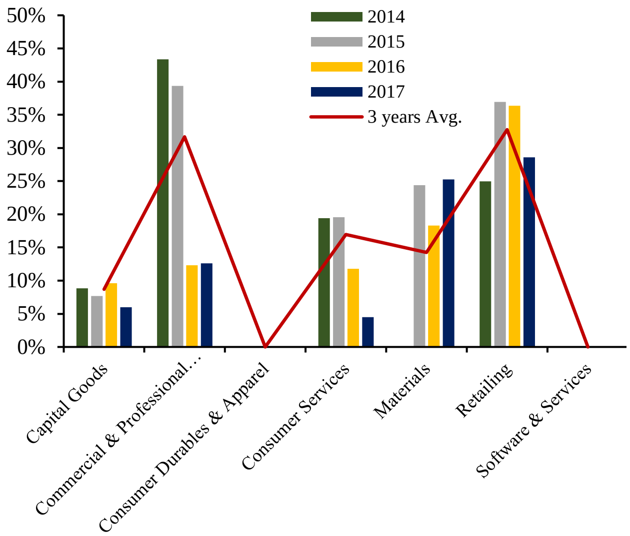
Chart 4.6: Return on Assets



Source: Bloomberg

Leverage ratios indicate less of a concern with the decline in profitability from a financial stability point of view as both the Debt to Assets and Debt to Equity ratios are at a downward trend as well. All sectors exposure to debt are diminishing except for the Materials sector **(Chart 4.7)**. Interestingly, two sectors did not use debt for the past years, Consumer Durables & Apparel, and Software & Services. When looking at the Consumer Durables sector it can be noted that it has significantly higher liquidity ratios than the average of the remaining sectors, which can be attributed to sufficient cash inflows to maintain the operations and expansion of projects without resorting to debt. In contrast, the Software and Services sector was characterized by a decline in liquidity, which is associated with weaker revenues.

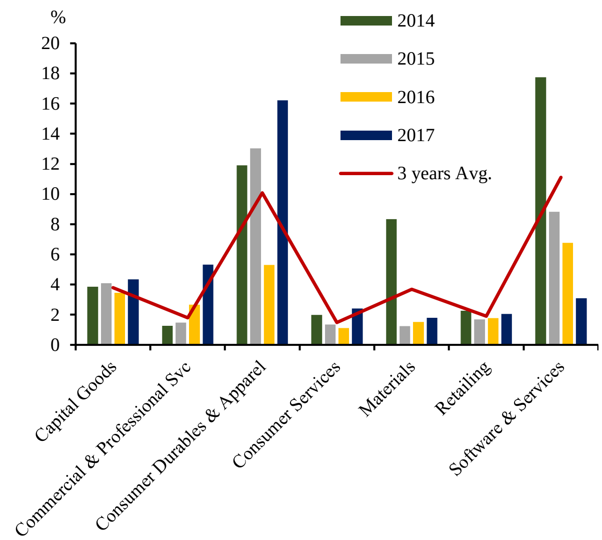
Chart 4.7: Debt to Assets



Source: Bloomberg

The majority of the sectors show some improvement in their liquidity ratios reflecting a healthy position to meet short-term obligations. The increasing liquidity ratios could indicate that the companies are anticipating a slowdown in their operations. The Materials and Software & Services sectors exhibited some of the lowest liquidity ratios. However, both the aforementioned sectors' current ratio, remain above 100 percent, indicating adequate levels of liquidity **(Chart 4.8)**. If we were to consider the Quick Ratio, it can be noted that liquidity measures drop for the Retail sector and more significantly for Capital Goods, indicating an accumulation of inventory.

Chart 4.8: Current Ratio



Source: Bloomberg

The Asset Turn-Over ratio is the highest for Consumer Durables sector as at the end of 2017. Capital goods have a slight improvement in efficiency compared to the historical 3-year average. Overall, most sectors have shown a decline in turnover. The asset-turnover ratio is most useful for capital-intensive sectors, which justifies the low value of this ratio for the Software sector compared to others.

4.3 Real estate

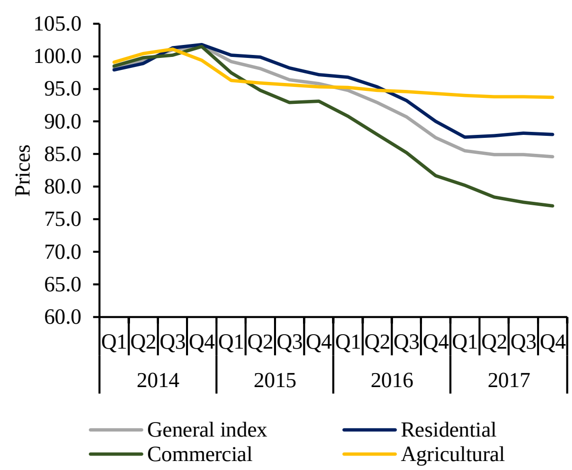
The real estate sector is an integral part of every economy and a core component of economic development. A struggling real estate sector with no sign of recovery could signal a troubled economy. As we look into the real estate sector and attempt to analyze the possible origins of risk that may undermine the overall financial stability, it would be most appropriate to start by understanding how fluctuations in property prices could influence economic activities and development.

Property prices have the potential to impact economic growth through different propagation channels. For instance, high prices could lead to exuberant optimism which will channel investments toward real estate projects. Rising real estate prices may fuel speculative behavior, which is more prone to occur in Saudi Arabia given the limited domestic investment opportunities. As prices increase, which are initially driven by household demand, developers may flood the supply hoping to capitalize on the available opportunities, which consequently increases the financing being lent to developers. As demand for real estate wanes, prices would respond in kind. Therefore, prices fluctuations may impose immense risk to both development and possibly on financial institutions as it would change the valuation of real estate properties they hold as collateral. A decline in prices may add to the downside pressure on credit, as lower valuations of collateral holdings would reduce the amount extended by the financial system, and possibly banks would exhibit more risk aversion towards the real estate sector.

The government's plan to increase the real estate sector's contribution to GDP according to Vision 2030 comes with various initiatives. First, we should mention the activity in the real estate investment traded funds (REIT) market. Indeed, 7 Funds have been approved to operate in 2017 after the CMA had finalized its guidelines in October 2016. This is expected to increase the cash injected into the sector as it expands the prospective investor pool. According to the current trend, more REITs Funds are expected to be approved in 2018 as other APs notice the investment opportunities. Furthermore, the white land tax law has been put into effect in 2017; lands sized 10,000 square meters and larger are subject to taxation according to this law. The objective of such a law is to encourage real estate development and deter investment in white lands. It seems like this law had reaped results already as the Ministry of Justice (MoJ) reported 18.5 percent decrease in land prices last year, which may allow for a greater subset of the population to purchase land for development. Finally, the Public Investment Fund (PIF) have established the Saudi Real Estate Refinancing Company (SRC) in October 2017. Aiming to ease the residential real estate ownership, SRC provides another channel of financing to finance companies in need of further funding options; the process aims to offer a securitization of high quality real estate exposures extended by the finance companies sector, which will be introduced as investment opportunities for domestic and international investors. The establishment of the SRC will provide an additional source of liquidity, and enhance development in the secondary market as more securities become availed to the financial sector.

As we assess the activity of this sector, we shall look at the overall prices. Taking 2014 as a base year, we notice a drop by 23 percent in the commercial real estate prices. We can also notice lower elasticity in the residential real estate demand, since the downturn had only affected prices by 12 percent. Given the small size of the agriculture real estate market it is not surprising that it was the least affected with only a decrease of 6 percent **(Chart 4.9)**.

Chart 4.9: Real Estate Quarterly Overall Prices

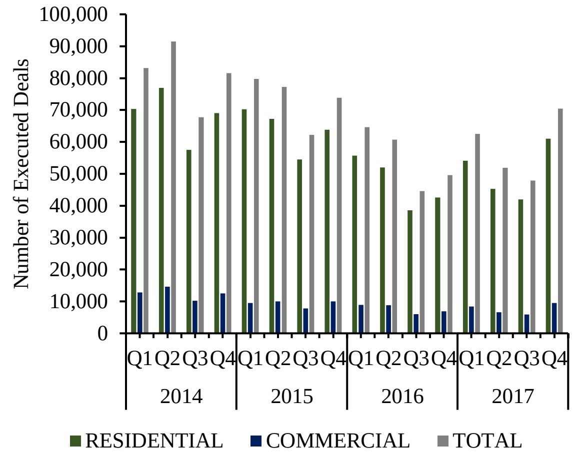


Source: General Authority for Statistics

There was a notable drop in real estate activity over the past year. Looking into the number of deals executed over the past four years, we can note a drop from a quarterly average of 81 thousand deals in 2014 to an average of 58 thousand in 2017 **(Chart 4.10)**. The 2017 average is slightly higher than 2016. If we take this observation along with the fact that prices are still on a downward trend we can infer that the latter has been inflated and the market is readjusting to a more stable level of pricing. As far as the market composition is concerned, the deals executed over the past four years consist mainly of commercial and residential land deals, with an aggregate average of 85 percent. Apartments comes second with 7 percent, and agricultural lands with 5 percent.

The main risk arises from the possibility of default on residential and commercial real estate loans. If we were to assess the indirect risks that might be imposed on the financial system, as it has been previously mentioned, the banking sector in Saudi Arabia is well diversified and real estate loans extended to individuals and entities hold a relatively minor share of overall banking credit portfolio. In addition, the financing companies sector does not pose a cause of concern as its share of the overall economy is insignificant, limiting any spillover impact to the rest of the financial sector.

Chart 4.10: Real Estate Quarterly Executed Deals



Source: Ministry of Justice

Despite the current downturn in the real estate sector, we expect it to ease as healthy pricing boosts demand for housing. We believe that the sector will be mainly uplifted by the retail side, motivated by three factors, namely, the slightly lower prices of real estate, the easing of the LTV, and the relatively low interest rates.

Box 4.1

Residential lending, fixed interest vs. adjustable interest rate loans

Due to the changing nature of the economic climate, borrowers and lenders alike must take into account interest rate risk when considering long term loan options. As consumers' protection is one of SAMA's primary mandates that it is entrusted to do, we find it necessary to discuss real estate loans and their various features in addition to different types of risk both entail.

Fixed interest rate loans, as the name suggest, offer funding with a predetermined interest rate that will hold constant throughout the term of the loan, adjustable interest rate loans grant the lender the right to change the interest rate as economic conditions change. Fixed usually start with a higher rate as lenders try to shield their earnings from unexpected market fluctuations, in other words, the lender is the one who bears the risk of the changing market rate. Adjustable interest rate loans, on the other hand, mitigate the risk for the lender as the interest rate will be repriced in line with the benchmark rate.

When assessing a consumer's choices regarding the type that best suits their preferences, factors such as economic outlook, risk appetite, and loan duration help determine the suitability of the type of loan chosen. Not surprisingly, expectations of future market conditions by consumers is key when determining the type of loan they are willing to obtain. A consumer expecting market rates to remain constant or drop due to an increase in supply would prefer adjustable interest rate loans and vice versa. Consumer's attitude toward risk is also a primary factor that distinguishes between preferable loan options. Finally, the duration of the loan also affects a consumer's choice, longer loan duration exacerbates the element of uncertainty that results in lower demand on adjustable interest rate loans.

5. Banking Sector Developments

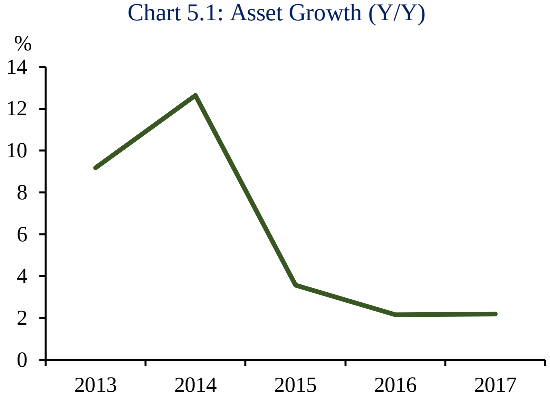
5.1 Overview

The impact from the domestic economic environment has materialized with muted loan growth within the banking sector. Lending activities contracted by the end of the year in key sectors that have historically benefited from thriving economic activity. However, there have been positive developments relative to 2016; liquidity conditions have continued improving through-out the year, along with an uptick in earnings which has enhanced the capitalization of the banking sector. Overall, despite the headwinds stemming from the sluggish economic environment, the banking system continue to be at comfortable levels in terms of capital and liquidity to meet the anticipated structural economic changes, which will serve to rejuvenate the demand for credit.

5.2 Banking Sector Assets

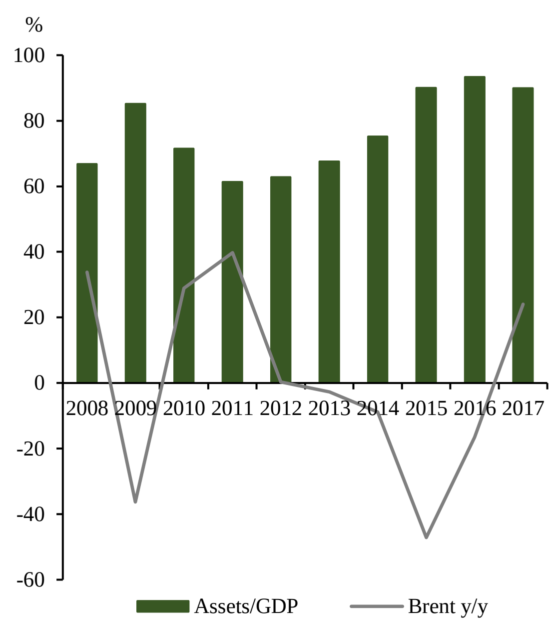
Total Assets in the banking system grew roughly at the same rate as in 2016, driven largely by the growth stemmed from the public sector. Total assets grew by 2.19 percent in 2017 compared to 2.15 percent in 2016. The slowdown in asset growth following the steep drop in oil prices by the end of 2015 was immediate, where asset growth noticeably decreased from 12.6 percent in 2014 to 3.5 percent in 2015; this has carried on well into 2017 as depicted in **Chart 5.1.**

Chart 5.1: Asset Growth (Y/Y)



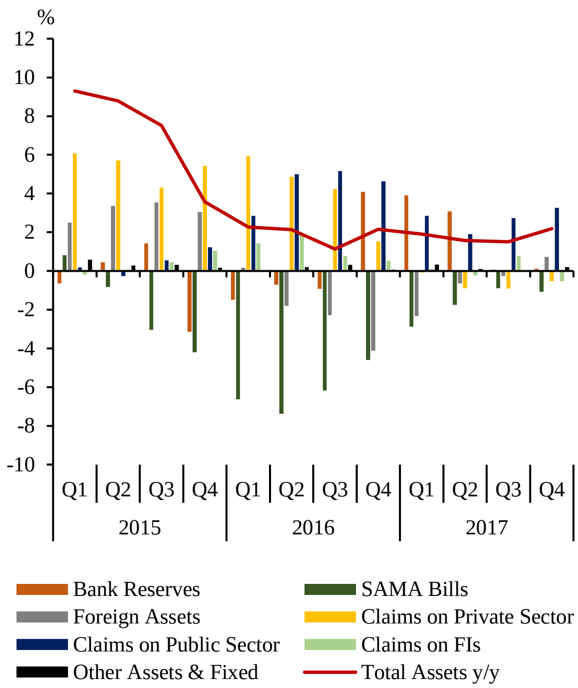
The improvement in oil prices helped bring down leverage within the economy. Positive developments in oil prices during 2017 were captured in the year-end figures of nominal GDP. The figure is primarily composed of output from oil activities, therefore the value is largely guided by changes in the international oil market. Developments in a volatile market should be kept in mind when attempting to normalize the banking system's assets by its total nominal output, as it is heavily determined by swings in a volatile commodity. The last sharp decline in oil prices prior to the recent one was prompted by the global financial crisis, which resulted in the Asset/GDP ratio to sharply increase during 2009 **(Chart 5.2)**. The recent decline in oil prices had a stronger impact on the ratio, which recorded elevated levels relative to the 10-year historical average of 74 percent.

Chart 5.2: Bank Assets to Total GDP



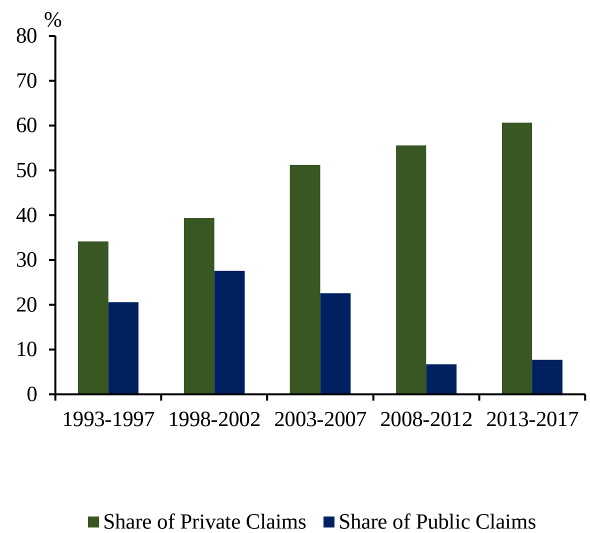
The apparent slowdown in economic growth is captured in the persistent decline in claims on the private sector. Claims on the private sector began its downward trend during 2016 to register a negative growth by the first quarter of 2017 and onwards, reflecting the persistent slowdown in economic growth **(Chart 5.3)**. Similarly, the growth in banking system's reserves that are largely composed of reverse repo placements with SAMA has also been trending down to record a muted growth in 2017. In contrast to the trends in private claims, the public sector has continued to be a key contributor to asset growth over 2017.

Chart 5.3: Y/Y Changes in Asset Growth by Type



The growing shares of exposures to the public sector in the banking system have not resulted in crowding out the private sector claims. When looking at average shares of private and public sectors at 5-year intervals, it can be noted that the relationship was not necessarily inverse. Two key elements to note are that as the government increased its debt from the late 1990's to early 2000's **(Chart 5.4)**, claims on the private sector also increased and continued to do so as the government decreased its debt financing activities.

Chart 5.4: Avg. Claim Shares of Private and Public to Assets



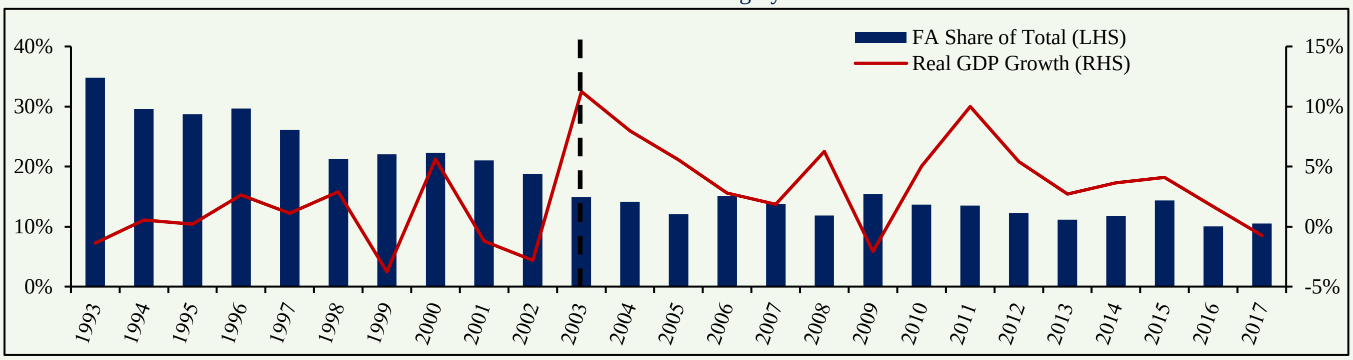
Box 5.1

Foreign Asset Exposures in the Saudi Banking System

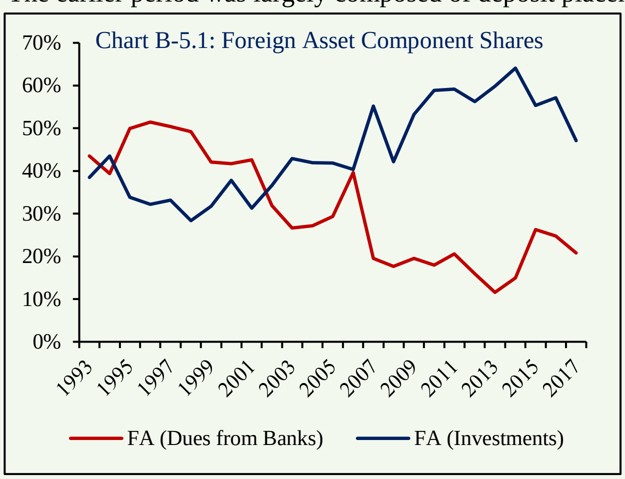
The 2017 year witnessed a period of muted credit growth. Furthermore, if there is a weak credit demand, it would be useful to determine if outward flows to foreign asset exposures present a risk to the domestic financial system. To be able to conduct such assessment, it is useful to note the structural changes that domestic banking system has undergone.

Chart B-5.1 shows that the share of foreign assets accounted for a significant portion of the banking system's total assets during the mid-nineties, the large share coincided with weak domestic economic conditions largely marked by low oil prices, in return resulting in minimal growth. This can be seen by the average share of foreign assets to total assets during 1993-2002, which was roughly 24 percent, with average real GDP growth during the same period of 0.39 percent. The financial system's infrastructure was underdeveloped, leaving banks with few investment options.

Chart B-5.1: Average share of foreign assets to total assets during 1993-2017 and Real GDP Growth: Historical Foreign Asset Trends in the Saudi Arabian Banking System



The earlier period was largely composed of deposit placements with banks abroad, possibly indicating the limited investment options for domestic banks. However, starting from early 2000s, investments abroad began to overtake foreign bank placements in conjunction with a reducing share of Foreign Assets to Total Assets.



The persistently declining share of Foreign Assets **(Chart B-5.2)** highlights a shift in bank behaviour, i.e. foreign banks placements were substituted with domestic investments.

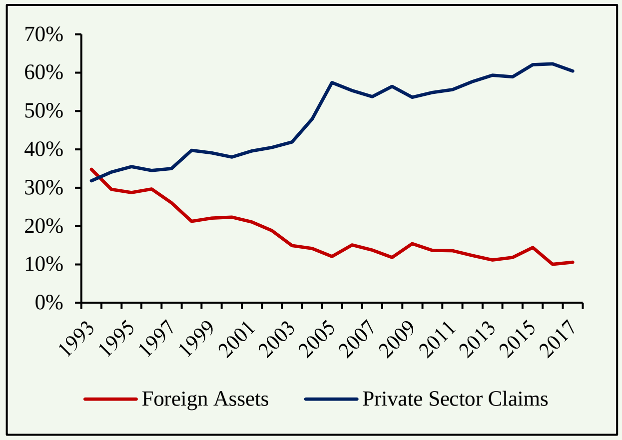
As banks shifted toward domestic opportunities, foreign investments as a share of foreign assets increased because foreign assets in aggregate decreased. As foreign placements returned domestically, those placements represented a smaller share of foreign assets.

The changing composition of foreign assets is evident in the growing divergence between the shares of foreign and domestic private sector claims **(Chart B-5.3)**, which became more pronounced by the late 90's.

Given that the financial intermediaries primary function is the extension of credit, as market segments expanded for domestic banks, so did their claims on the private sector.

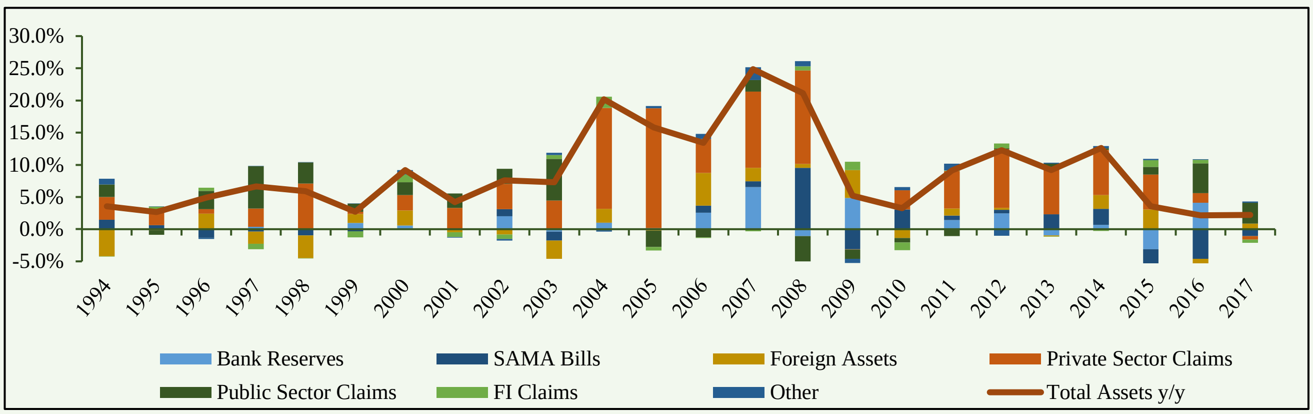
Domestic banks largely extended credit to businesses with minimal lending activities to households. SAMA invested in the financial ecosystem, such as facilitating salary assignment and the creation of SIMAH. Furthermore, SAMA pushed banks to expand their branch network.

Chart B-5.3: Shares of Foreign and Domestic Private Claims



The development of the financial system's infrastructure in addition to a sharp uptick in economic activity saw an increase in lending by banks, where the average share of foreign assets to total assets came down to around 13 percent **(Chart B-5.4)**, with economic growth averaging a 4.4 percent growth rate. Rapidly growing assets were mainly driven by growth in claims on the private sector; the graph below further highlights the waning contribution of foreign assets to total asset growth.

Chart B-5.4: Divers of Asset Growth



Current Bank System Drivers in Foreign Assets

Chart B-5.5: Foreign Share of Investments

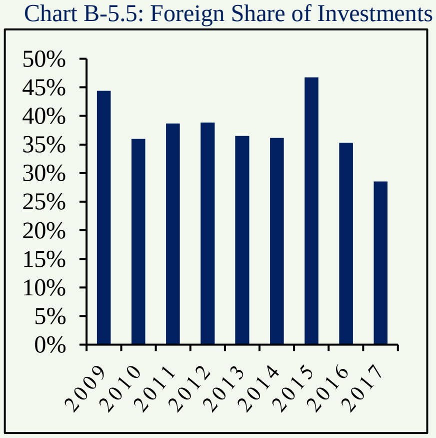


Chart B-5.6: Foreign Share of Loans

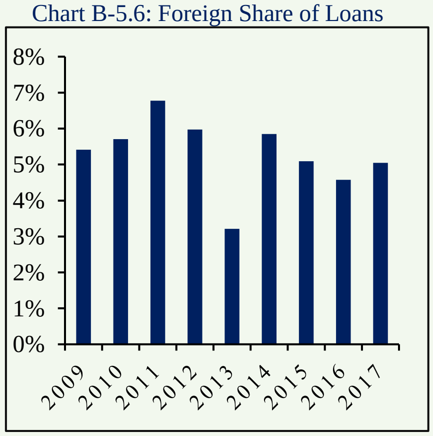
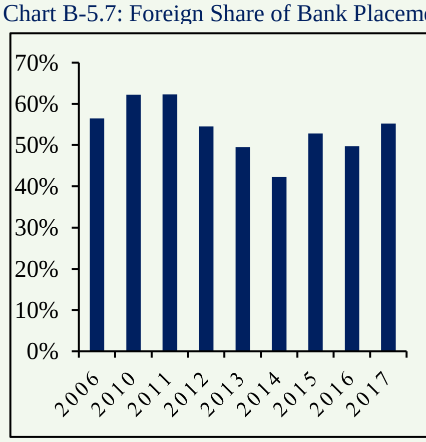


Chart B-5.7: Foreign Share of Bank Placements



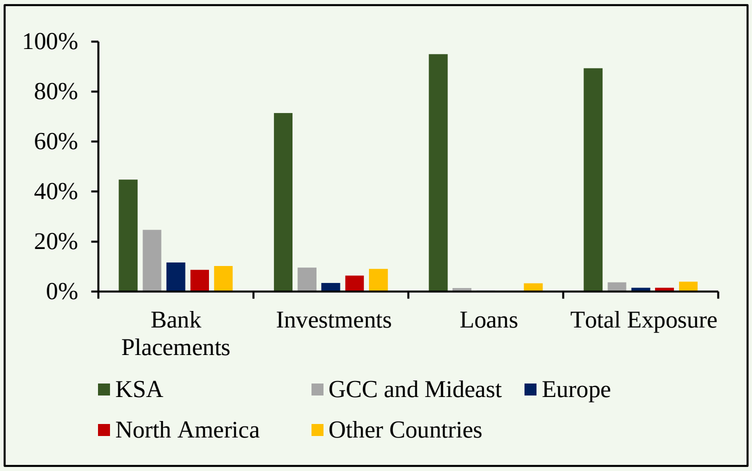
Utilizing information from the financial statements of 11 out of 12 domestic banks, we analyzed the major components of foreign assets on more granular levels, allowing for a comparison on major concentrations of foreign exposures relative to domestic exposures.

As of 2017, most of the line items were concentrated domestically **(Chart B-5.8)**, except for bank placements which were 45 percent. The key takeaway is that 71 percent of investments, and 95 percent of loans are domestic in nature. It should be noted that foreign loans are assessed by SAMA on a case by case basis.

The main financial intermediation activities are centered domestically, with minimal change between 2009 and 2017. However, in total, domestic exposures increased to 89 percent in 2017 compared to 84 percent in 2009.

Foreign lending activities are slightly influenced by banks with significant stakes in foreign banking subsidiaries. When removing the exposures of one bank, we get notably lower shares of foreign assets.

Chart B-5.8: Regional Distribution of Major Line Items



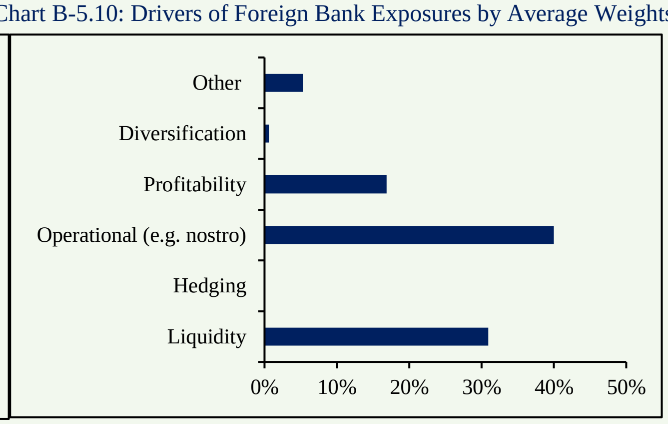
SAMA conducted a brief survey with domestic banks to quantify the makeup of their foreign asset exposures in greater level of granularity. Banks submitted figures to each of the previously mentioned line items, along with weights and the purpose of each line items; e.g. Investments could serve a number of purposes, such as diversification, liquidity, or simply profitability. By quantifying the makeup of main foreign exposures, we were able to determine if there is room for those investments to be funneled domestically.

We prepared charts based on the responses of banks in terms of levels and the average of weights, since the latter would mitigate the bias of some of the larger banks in the sample. Foreign placements are primarily done for operational and liquidity reasons that are two key measures to ensure the efficiency of the banking system **(Chart B-5.9 & B-5.10)**.

Furthermore, foreign placements also allow banks greater avenues to place excess liquidity when the system as a whole has surplus liquidity. Placements offer an avenue to build relationships with foreign banks, which would afford them greater access to liquidity beyond the domestic banking system.

Chart B-5.9: Drivers of Foreign Bank Exposures in levels

Chart B-5.10: Drivers of Foreign Bank Exposures by Average Weights



Furthermore, we noted that on average, the respondents placed the highest weight on profitability as a driver for foreign investments **(Chart B-5.11 & B-5.12)**.

Chart B-5.11: Drivers of Foreign Investments in Levels

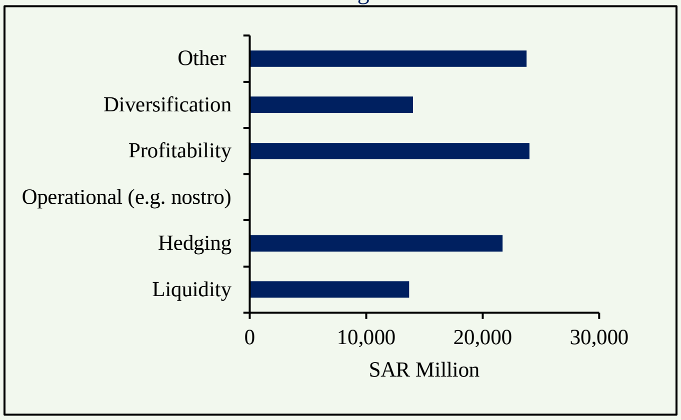
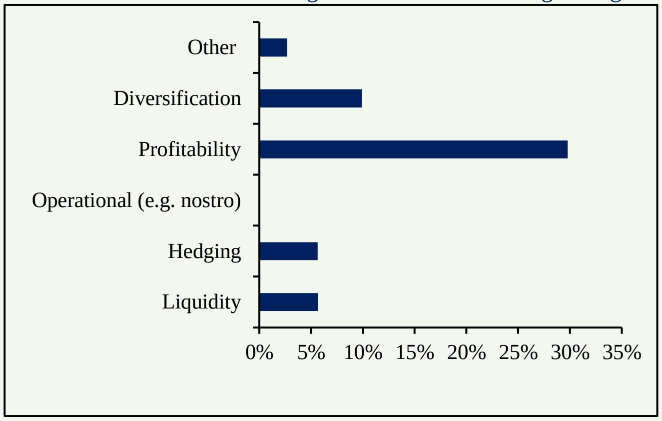


Chart B-5.12: Drivers of Foreign Investments in Average Weights



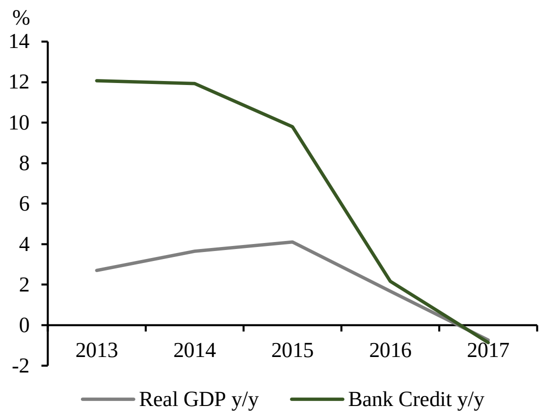
Domestic banks tend to have country limits set up based on rigorous criteria, where credit ratings are taken into account. Investments in foreign countries are mainly driven by yield after a thorough assessment of the risk-reward profile.

Even though profitability is the main driver, it pays dividends by allowing banks to mitigate other areas of risk. For example, domestic banks will be able to reduce their concentration risk mitigating any potential fallout to both depositors and shareholders. Despite the growing investment opportunities domestically, there remain further progress to be done in the development of the capital markets. Foreign investments allow banks to diversify their pool of high quality liquid assets, which would help meet international regulatory standards and to withstand domestic related shocks by having a diversified source of revenues that will bolster their resilience.

5.3 Overall Credit Developments

Banking sector credit contracted by the end of 2017, a response to slowdown in economic environment. The banking system's credit decreased by 1 percent at the end of 2017 in line with the decreasing share of claims on the private sector. The contraction in credit was mirrored in the negative growth of real GDP **(Chart 5.5)** which was primarily the result of the negative growth in the oil sector.

Chart 5.5: GDP and Total Banking Credit Growth Rates

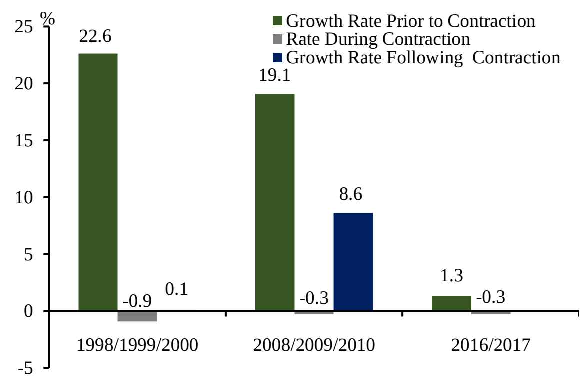


Rebound in private sector economic growth, and a credit contraction indicate that growth was not fueled by credit. In contrast to total GDP, non-oil GDP rebounded by the end of 2017, growing by roughly 1 percent, mostly fueled by expansion in the government sector**.** The private sector rebounded at a moderate pace at 0.71 percent compared to a historical low of 0.07 percent at the end of 2016, indicating that credit played a limited role in the rebound.

5.3.1 Corporate Credit

Credit extended to the corporate sector contributed to the negative contraction in credit for the first time since 2009. Previous episodes of credit contraction in the corporate sector were limited, as they rebounded the following year **(Chart 5.6)**. The Chart below plots three historic periods of contraction, each contraction period coincided with a contraction in total GDP, driven by shocks to oil prices. A key observation is the reaction to corporate credit growth following the contraction; the first episode (1999) resulted in a quite subdued rebound in credit, while the second (2009) was much more robust due to the quick recovery in economic growth.

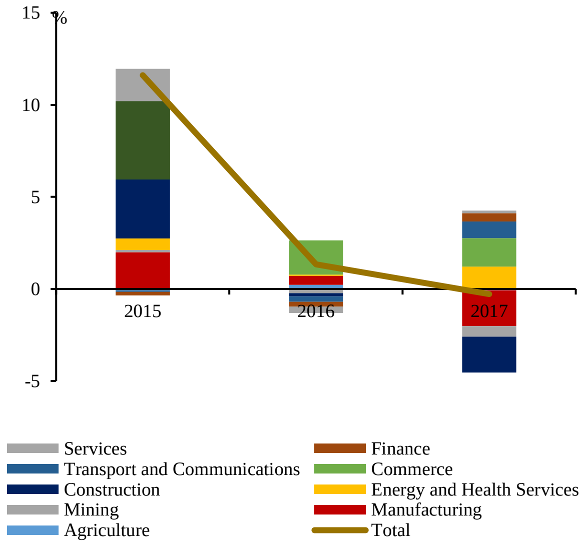
Chart 5.6: Episodes of Corporate Credit Contraction



The two previous episodes of negative credit growth were followed by two different recoveries. Growth in 2010 was largely motivated by a strong expansion in the non-oil sector, despite the oil sector registering negative growth rates. During 2000, the recovery was both in the oil and non-oil sector, however the former's recovery quickly returned to persistent declines. Furthermore, the underlying structure of the economy varied between 2000 and 2010, where the non-oil sector's contribution to total output was roughly 40 percent, which later increased to approximately 55 percent by 2010. The most recent contraction differs from the previous two, in that it followed a gradual deleveraging process; the non-oil sector's contribution by 2017 is around 56 percent, highlighting the strong interlinkages between non-oil economic output and bank lending.

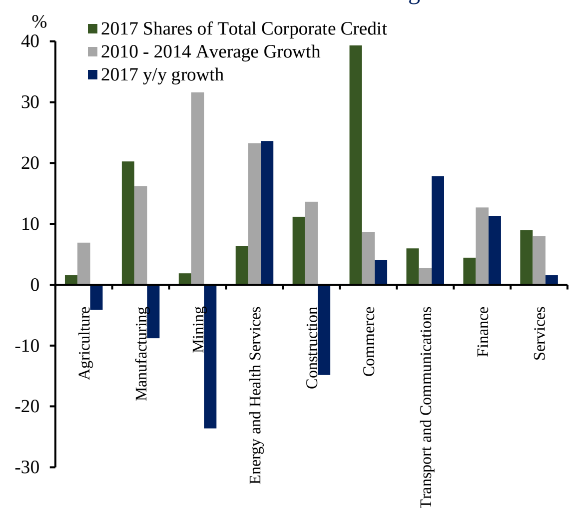
The slowdown in economic activity materialized in the credit extension to the construction and manufacturing sectors. When comparing exposures by corporate sector between 2016 and 2017, the results for the most recent year seemed much more varied. Credit developments primarily stemmed from the contraction in both construction and manufacturing sectors, where both capture the reduced economic activity in the infrastructure and consumption front **(Chart 5.7)**. It should be noted that there could be different factors at play when it pertains to the reduction in construction and manufacturing credit. It could be a byproduct of risk aversion by the banking system and a slowdown in growth opportunities for both sectors. However, this trend was not readily apparent in exposures to the commerce sector, which slowed down but continued to grow at a positive rate. The composition of sectoral exposures to different corporate sectors is not quick to change due to the sticky nature of loans.

Chart 5.7: Contribution to Corporate Credit Growth



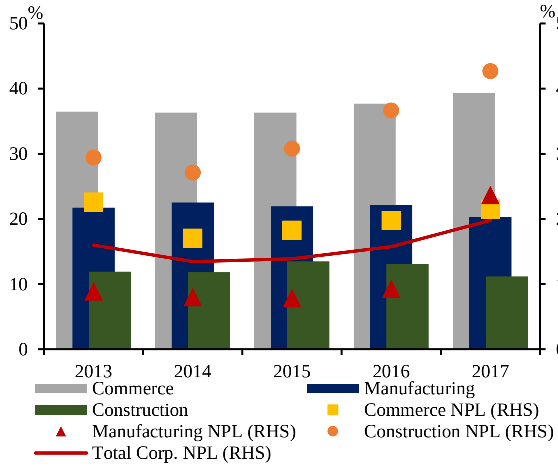
Energy and health services and transport and communications sectors both grew at a rate higher than their 2010-2014 average. The slowdown in credit demand may compel the banking system to expand to new segments in an effort to grow their lending book, or it could be a reason for banks to diversify their loan book to sectors with higher asset quality. The recent slowdown allows us to compare average individual growth rates by sector prior to the drop in oil prices to individual growth rates by the end of 2017 **(Chart 5.8).** Most sectors registered growth rates in 2017 that were lower than their average growth rates during the last 5 years. However, when taking into consideration the expansion in energy and health services and transport and communications sectors, it can be noted that these sectors have relatively small portions of total corporate credit. The increased growth in the last two sectors possibly indicates the banking system's expansion to untapped segments. The commerce sector, which holds the largest proportion of corporate credit, registered growth rates in 2017 below its historical average, which may indicate a sector that is saturated. The expansion to new segments could serve to reduce the banking system's sectoral concentration.

Chart 5.8: Loan Book Changes



The largest exposures within the corporate segment also contain the highest individual NPL rates, though they remain low at the portfolio level. Earlier in the section, it was noted that the reduction in construction and manufacturing sectors could possibly be attributed to some conscious deleveraging in the banking system. The point is made clear by the elevated NPL rates in the aforementioned sectors. As Chart 5.9 shows, NPL rate in construction sector increased to 4.3 percent, while NPL rate in manufacturing sector had a steeper increase from a low 0.9 percent in 2016 to 2.2 percent by the end of 2017. As for the commerce sector, NPL rate remained roughly similar to previous year. Despite the slight increase in NPL rates in construction and manufacturing sectors, their exposures have been coming down and is outweighed by the relatively low NPL rates in the remaining sectors, which is evident in the total NPL rate for corporate sectors that reached 2 percent by the end of 2017.

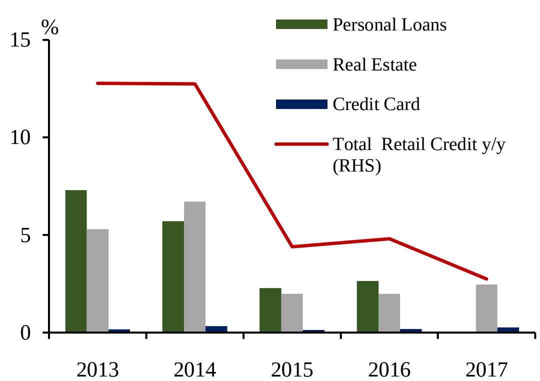
Chart 5.9: Largest Share of Corporate Credit and NPL Rates



5.3.2 Retail Credit

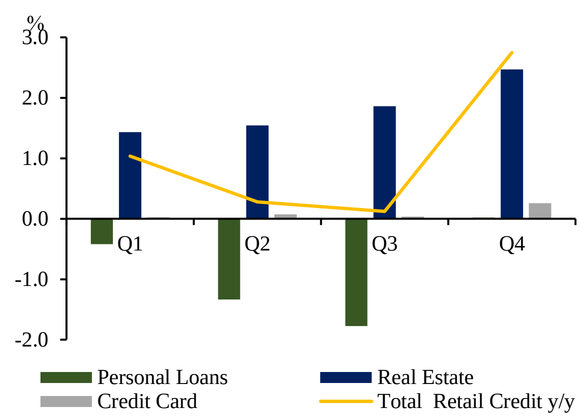
Credit to the retail sector decreased in 2017, but continues to record a positive growth. Total retail credit registered 2.7 percent growth by the end of 2017 **(Chart 5.10)**. The contribution of personal loans was insignificant by the year-end, which dipped into the negative territory during 2017, before rebounding by the end of the year. There was a slight increase in the contribution of credit card exposures, while they remain small relative to the total retail lending. This increase could reflect some strain borne by retail customers as they resort to a more expensive form of financing to meet payment obligations.

Chart 5.10: Contribution to Retail Credit Growth



Credit dynamics within the retail sector indicate some appetite for mortgage-based lending. The quarterly contraction in personal lending may reflect a shift towards real estate loans over the year, and a smaller market for new retail customers **(Chart 5.11)**. However, the sustained slowdown in economic activity could have reduced the pool of potential new applicants that are employed in low risk sectors. As a large majority of retail exposures are salary assigned, reduced employment opportunities in the domestic economy may also contribute to fewer retail loans being granted. Another factor could be the regulatory measures taken, specifically, the easing of the LTV from 75 percent to 85 percent during 2017 and the reduction in risk weight of residential mortgages from 100 percent to 75 percent, which clearly had the anticipated impact on retail mortgages.[8,9] Creditworthy retail customers may have shifted to real estate loans as the down payment burden was reduced, as opposed to refinancing their personal loan exposures.

Chart 5.11: Quarterly Contribution to Retail Credit Growth



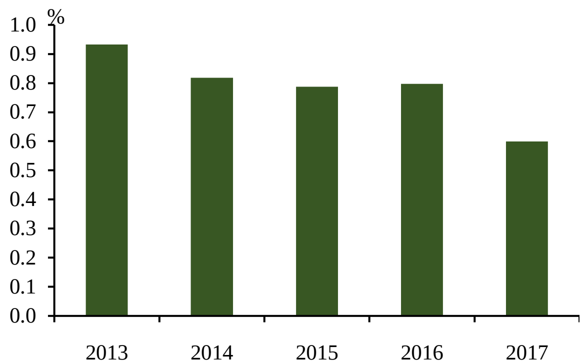
Growth in retail loans coincided with a decrease in the NPL rates of retail exposures by the end of 2017. Loans to households tend to contain lower default risk than loans to corporates **(Chart 5.12)**. However, the large portion of growth during 2017 largely stemmed from real estate lending which

[8] LTV was further raised to 90 percent in 2018

[9] Risk weight of residential mortgages was further reduced to 50 percent in 2018

has different risk characteristics than personal loans. While both types of consumer credit are backed by salary assignment for a large majority of the banking system, real estate exposures carry the added risks of lengthy tenors and interest rate fluctuations for variable rate loans.

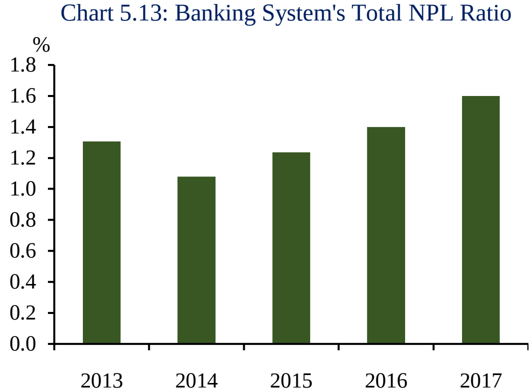
Chart 5.12: Retail Loans NPL Ratios



5.4 Asset Quality

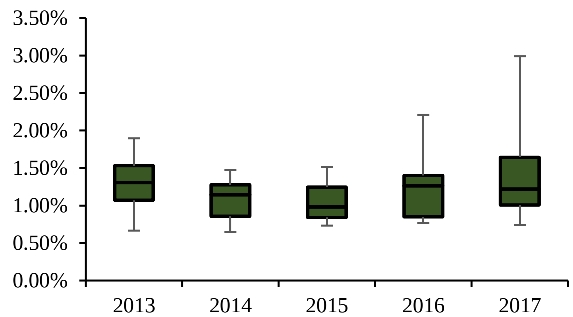
NPL Ratios across the banking system slightly increased but remain relatively low. The ratio recorded 1.6 percent in 2017 compared with 1.4 percent in 2016. As highlighted in the earlier sections, the increase in the NPL ratio of the aggregate banking system appears to stem from exposure to the corporate sector, while the retail sector has effectively weighed down the NPL Ratio **(Chart 5.13)**. When looking across sectors, NPLs appear to be highest in construction and manufacturing sectors, which has resulted due to decrease in the lending activities in those sectors.

Chart 5.13: Banking System's Total NPL Ratio



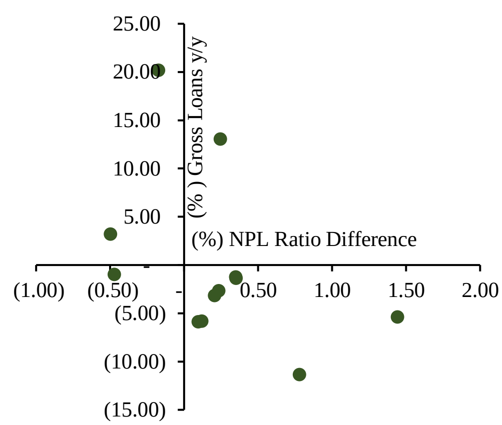
NPL Ratios are more widely dispersed across banks by the end of 2017. While the total of NPLs and gross loans reflects the actual amount of impaired debt within the system, it may mask some increased asset deterioration by the smaller banks. The boxplot in **Chart 5.14** allows us to capture the variation in NPLs across the banking system, where the dark green boxes represent 50 percent of the observations, the black line is the median, and the vertical bars represent the maximum and minimum. The greater dispersion in NPL ratios across banks indicates the clustering of exposures to selected banks within the system, i.e. loans that went bad were borne by some banks and not the entire banking system. Although, NPL ratios are more widely scattered by 2017, the highest NPL ratio within the system remains quite low at 3 percent.

Chart 5.14: Distribution of NPL Ratios across Banks



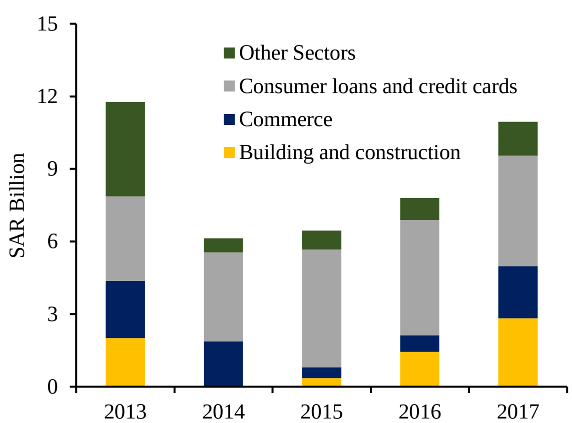
Banks that exhibited loan book contractions also witnessed an increase in their NPL ratios. While NPL ratios remain low in the banking system, NPLs may prove to be a drag on certain banks' ability to extend credit. **Chart 5.15** notes that most banks that had a decrease in lending activities registered higher NPL ratios when taken as a difference from 2016 and 2017; and vice versa.

Chart 5.15: Scatter Plot of NPL Ratio vs. Gross Loans y/y



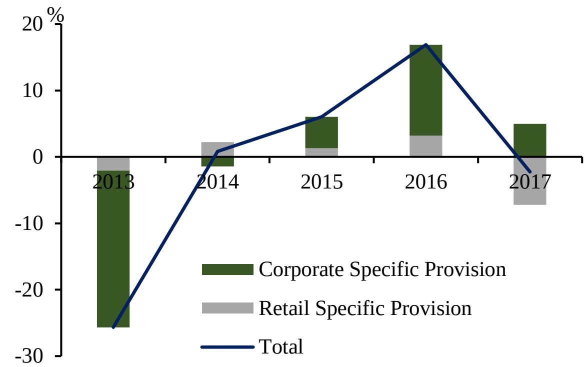
The banking system reported an increase in write-offs over 2017. Write-offs tend to be considered as a conservative practice, and the profitability recorded across the banking sector during the year reflects ample room for banks to increase write-offs and maintain their high provisions. Past year's write-offs mainly stemmed from construction and commerce segment. Write-off activity has been trending upwards since 2014, possibly reflecting the financial strains borne by the private sector as economic growth slows down **(Chart 5.16)**. Despite the uptick in write-off activity in the aforementioned sectors, both commerce and construction registered higher NPL ratios over the past year. The banking system has been reducing its exposure to the construction sector, which can be attributed to the relatively higher risk in that sector as proxied by the NPL ratio. In addition, while the commerce sector grew in 2017, it's growth were at rates below its historic average, which possibly reflects some risk aversion by banks.

Chart 5.16: Write-Offs by Main Sectors



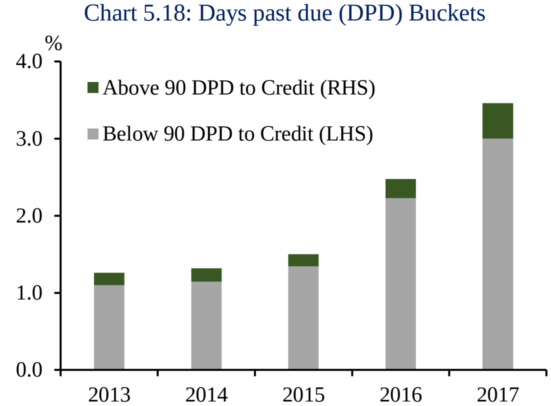
Specific provisions in the banking sector decreased in 2017, primarily due to a reduction in retail related provisions. Growth in specific provisions tend to serve as a leading indicator to asset quality deterioration. **Chart 5.17** notes that a key contributor to the decrease in specific provisions stemmed from retail exposures, indicating some improvement in the type of assets. The smaller contribution of specific provisions of the corporate sector also indicates some positive developments on that front. The peak in specific provisions from the past year did not carry over into 2017, highlighting that the number of companies that have been impacted by the economic slowdown did not pick up pace during 2017.

Chart 5.17: Growth Contribution to Specific Provisions



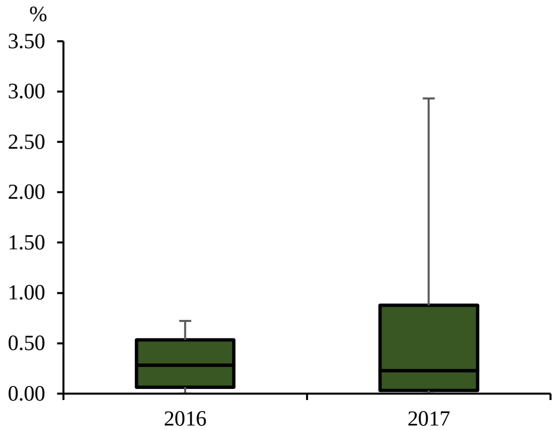
There has been a notable uptick in delinquency behavior over 2017. The large majority of delinquent exposures are captured in below 90 days buckets. The exposures in the 90 days and above bucket are considered performing and not impaired and they remain small relative to total credit, making up roughly 0.46 percent **(Chart 5.18)**.

Chart 5.18: Days past due (DPD) Buckets



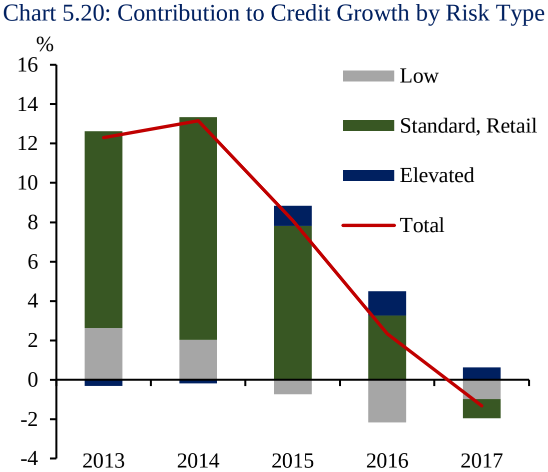
Bank specific days past due (DPD) indicates that some banks are carrying a significantly higher amount of delinquent exposures relative to 2016. As captured by **Chart 5.19**, certain banks have been taking on greater exposures that are classified in the greater than 90-day bucket. Taking into account the variations across the banking system as opposed to the aggregate view of delinquency behavior indicates that some banks are holding a greater amount of risky debt. The data did not indicate any abnormalities with banks that reported higher DPD amounts relative to credit, but this may prove to be a strain on lending behavior going into 2018, if these exposures remain delinquent.

Chart 5.19: Bank Distribution of DPD>90 to Total Credit



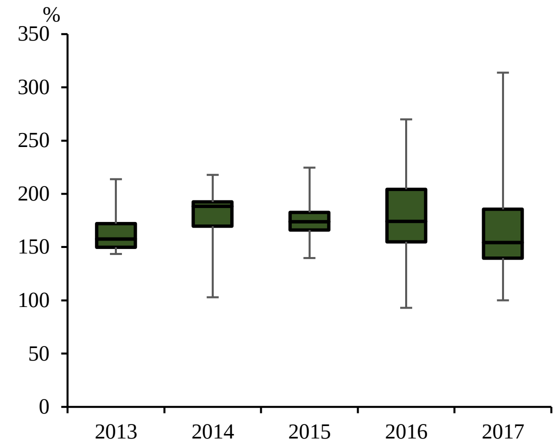
The contraction in credit coincided with some deterioration in asset quality. An important take away from the **Chart 5.20** is that banks have not been allocating their credit to higher risk exposures, but have noticed a degradation in the quality of their loan book as loans shifted from standard to elevated risk during 2017. However, risky debt had a smaller contribution to growth by 2017 at 0.6 percent relative to 1.2 percent in 2016, indicating a slower pace of deterioration in credit.

Chart 5.20: Contribution to Credit Growth by Risk Type



Despite the slight deterioration in assets, the banking system remains highly provisioned. Provision coverage, as given by both general and specific provisions over the value of NPLs, reflect that banks have ample funds provided to meet further deteriorations in assets **(Chart 5.21)**.

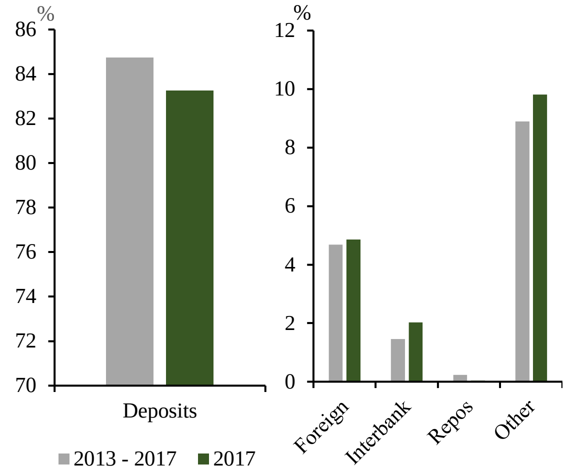
Chart 5.21: Distribution of Provision Coverage



5.5 Funding and Liquidity

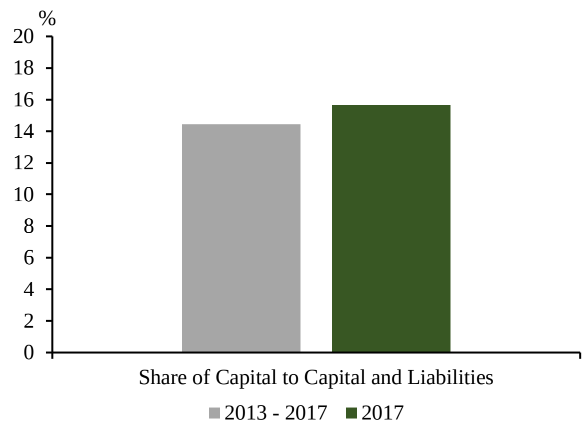
The liability and capital structure of the banking system recorded minor variations from historical trends, yet generally remained unchanged. The muted asset growth noted in an earlier section was funded by slightly different dynamics. Given the slowdown in economic growth, the liability structure recorded a slightly different composition by the end of 2017 relative to the 5-year average. While deposits remain the largest portion of liabilities, their contribution moderately decreased over 2017 **(Chart 5.22)**. In addition, there has been marginally higher reliance on foreign and interbank liabilities recording 4.9 and 2 percent respectively by the end of 2017 **(Chart 5.23).** However, overall there have not been any significant changes in the liability structure of the banking system and it remains prudent to track changes in the development of funding sources during an environment of low lending activities.

Chart 5.22 & 5.23: Component Shares of Banking Liabilities



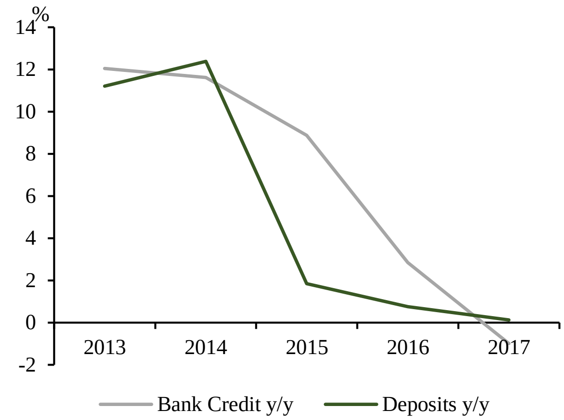
Even with the overall slowdown in credit growth, capital has increased relative to liabilities. A larger share of capital mitigates the slight increase in short-term funding sources on the liability portion of the banking system's balance sheet. **Chart 5.24** plots the 5-year average of the portion of capital and the most recent figure, which was 15.7 percent by 2017, slightly higher than the 5-year average of 14.4 percent.

Chart 5.24: Share of Capital



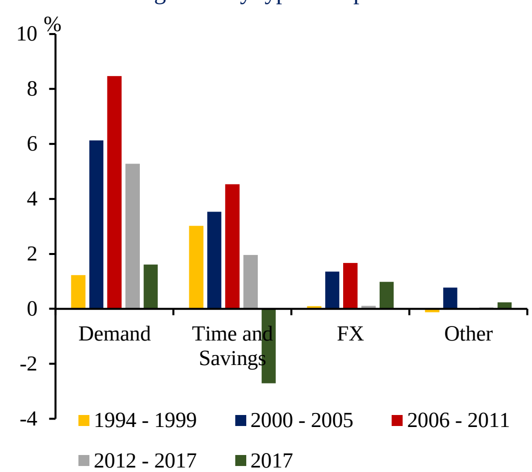
The year ended with marginal deposit growth. Deposits slowed down to 0.13 percent by 2017, slightly lower than 0.76 by 2016 **(Chart 5.25)**. Despite the smaller growth rate, monthly trends indicate that brief dips into negative growth were not as severe as the developments during 2016, which recorded negative growth rates before ending the year on a positive note.

Chart 5.25: Deposit and Credit y/y



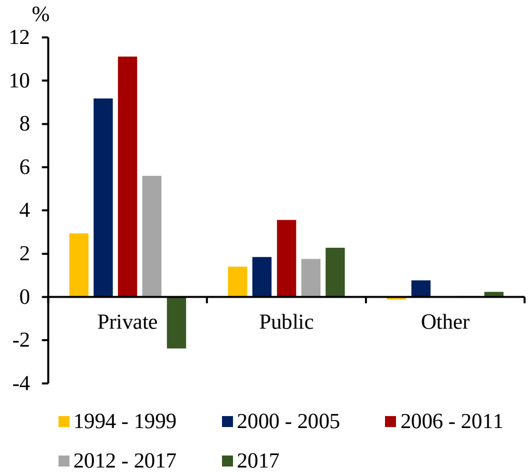
Contribution to deposit growth has undergone a significant shift over 2017. Historically, demand deposits have been the strongest contributor to deposit growth as indicated by **Chart 5.26**, which plots the main components that make up total deposits within the banking system. The main takeaway is that deposit growth for the year-end has benefited from positive developments in demand deposits and was weighed down by the steep drop in contribution stemming from time and savings deposits.

Chart 5.26: 6-year average of contribution to deposit growth by type of deposits



There has been a steep drop in private-sector deposits relative to historical trends. The banking system's deposits have largely stemmed from demand deposits, with an increasingly larger contribution from private sector deposits. By the end of 2017, it can be noted that the private sector recorded a contraction in deposit growth **(Chart 5.27)**; while the public sector contributed to growth approximately in line with historical averages in the early 2000's.

Chart 5.27: 6-year average of contribution to deposit growth by sector



Changes in the drivers of deposits became more pronounced by the end of the year. The reduction in deposits during 2016 stemmed from both the private and public sectors. Both **Charts 5.28 and 5.29** show that the total deposits of public and private related deposits in 2016 recorded a negative contribution to total growth. However, when considering deposit growth by type, it can be seen that demand deposits suffered the greatest contraction during Q2 and Q3 of 2016. The pressure on demand deposits during 2016 may have stemmed from two factors, the first being small demand deposits leaving the system and the second being a substitution effect as both public and private sector entities shifted from demand to time and savings deposits.

Deposit growth during 2017 was driven by demand deposits, which are stickier source of funding. The end of 2017 also noted a drop in time and savings deposits, which poses a challenge as it historically served as a stable source of medium term funding.

Chart 5.28: Contribution to Deposit Growth by Type

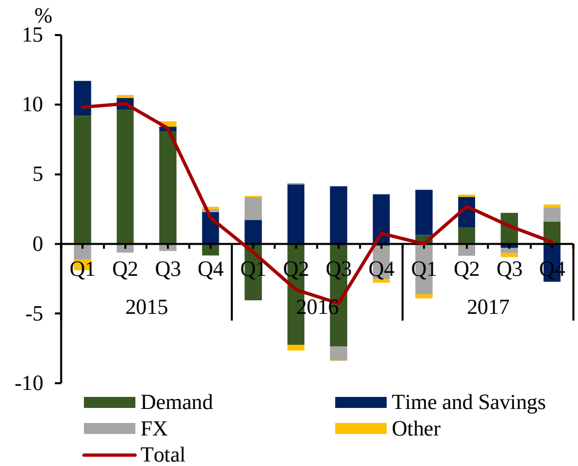
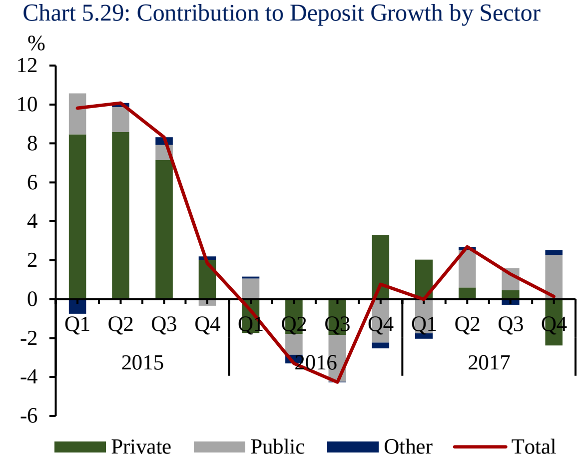
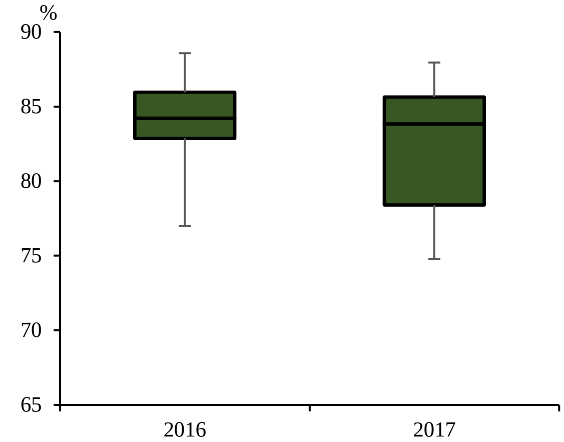


Chart 5.29: Contribution to Deposit Growth by Sector



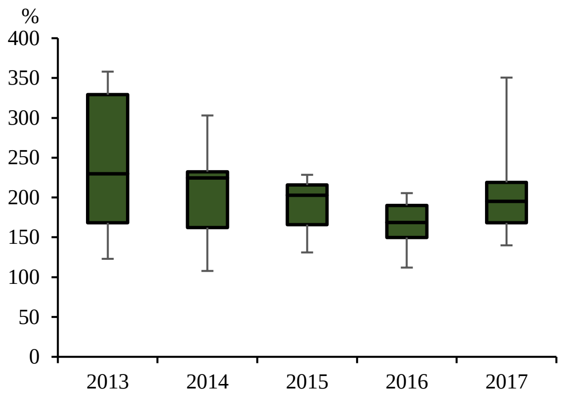
Loan to Deposit Ratio (LDR) shows a marked improvement across the banking system. The improvement in the LDR **(Chart 5.30)** can be partially attributed to the contraction in lending with a marginal improvement in deposit growth. It should be noted that the LDR does reflect the capacity of the banking system to meet unanticipated deposit outflows.

Chart 5.30: Distribution of LDR



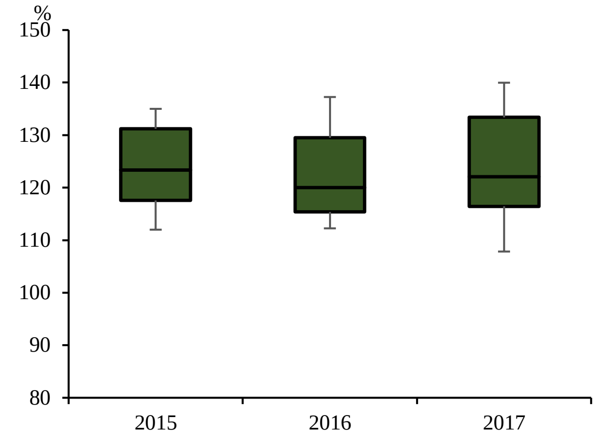
Basel's Liquidity Coverage Ratio (LCR) also reflects a rebound in liquidity. The LCR serves as a stressed measure of liquidity, which relates high quality liquid assets to net cash outflows. Liquidity strains in 2016 resulted in a slight drop in the LCR (it still remained largely above Basel's minimum requirement), however it rebounded by 2017 **(Chart 5.31)**. The general resilience of the LCR despite tightened market liquidity during 2016 offered a valuable window into bank behavior during that period. Instead of drawing down on their assets or posting collateral with SAMA, they resorted to other sources of funding despite the higher cost paid.

Chart 5.31: Distribution of LCR



Long-term funding measures indicate stability. The Net Stable Funding Ratio (NSFR) of the banking system shows little changes in long-term funding sources **(Chart 5.32)**. This is in line with a banking system that is highly capitalized and represents a stable source of available funding.

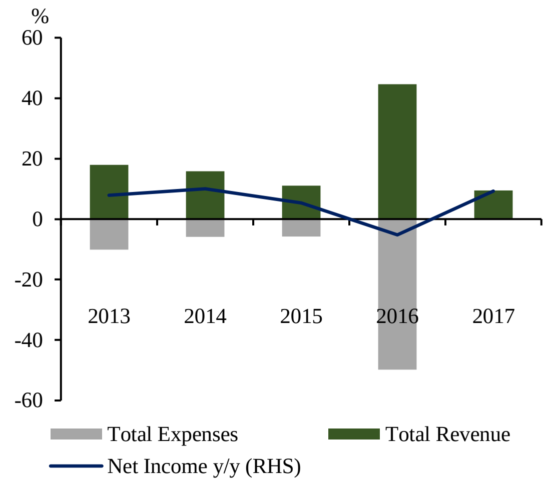
Chart 5.32: Distribution of NSFR



5.6 P&L Developments

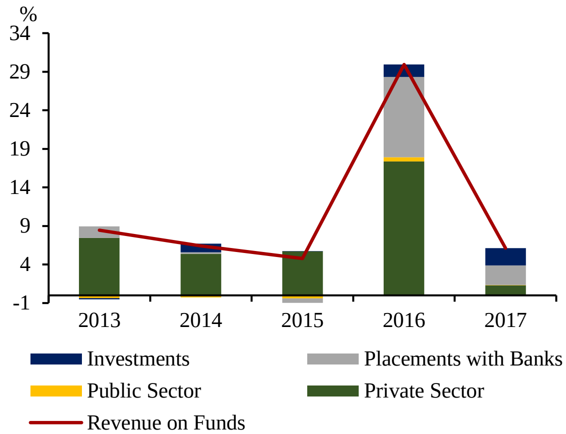
The banking system's bottom line improved by the end of 2017, which is mainly attributed to a sharp reduction in expenses relative to 2016. The brief liquidity squeeze during 2016 significantly increased both expenses and revenue from revenue generating assets. However, last year's growth in expenses had a greater contribution relative to revenues for all banks, which has abated by 2017, where total expenses recorded only negative 0.19 percent **(Chart 5.33)**. Net income has returned to a positive growth rate after the minor drop in 2016. However, the sources of revenue generation may test the banking system's profitability if credit growth remains muted.

Chart 5.33: Contribution to Net Income Growth



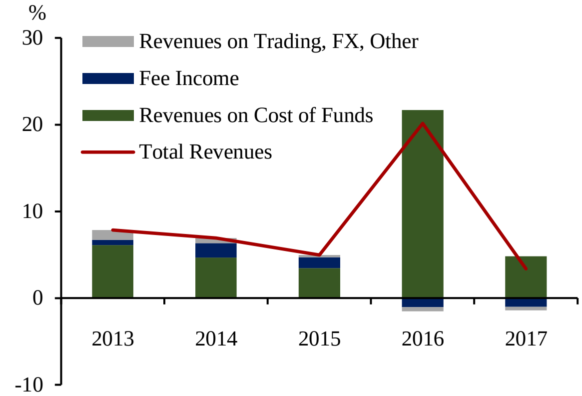
Private sector contribution to the banking system's revenue generation weakened in 2017. The main drivers for this year's revenues stemmed from placements with other banks, and investments **(Chart 5.34)**; reflecting the drop in lending activities. The gradual path to normalization in interest rates stemming from the United States monetary policy should bode well for the domestic banking system if credit demand picks up.

Chart 5.34: Contribution to Revenue on Funds



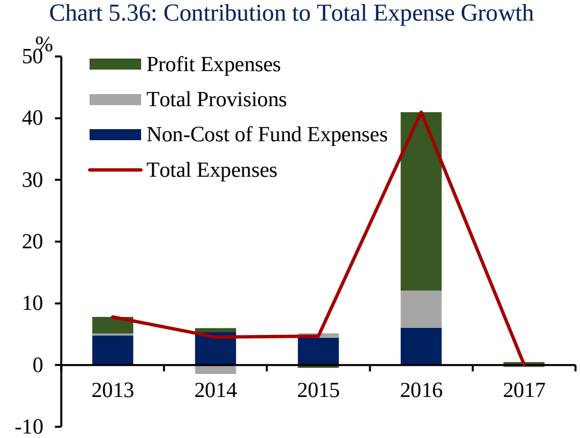
Other sources of revenue for the banking system reflected the general economic slowdown. While the main contributor to the banking system's revenue stems from lending activities, fee income remains, albeit small, the traditional source of revenue generation. **Chart 5.35** displays the drivers of growth of total revenue generating activities. The slowdown in economic activity is reflected in the continued negative contribution of fee-based revenues, which include administrative fees, in addition to costs associated with off balance sheet facilities mainly Letters of Credit facilities. The persistence in revenues from revenue generating assets primarily stemmed from sources other than lending activities.

Chart 5.35: Contribution to Total Revenues Growth



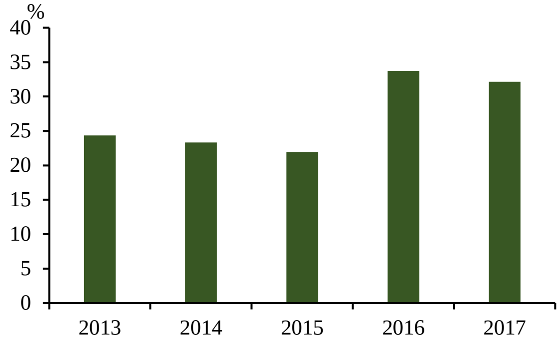
The double impact from both provisions and profit expenses have tapered off by the end of 2017. The banking system's reduced provisioning during 2017 is a reflection of ample provisions taken during the past year **(Chart 5.36)**. Provisions for the year mainly stemmed from corporate related exposures, while retail provisions decreased. As for interest expenses, they recorded a marginal increase at 0.5 percent in terms of contribution to total expenses, while the remaining items booked a slight decrease. Despite the sustained decrease in interbank rates, this was not reflected in the interest expense.

Chart 5.36: Contribution to Total Expense Growth



Expenses constitute a higher portion of revenues relative to recent trends. Revenues for the year grew at a faster rate, relative to expenses, which contributed to bringing the ratio of expenses to revenues to a slightly lower level by the end of 2017. However, it remained higher relative to 2013-2015 **(Chart 5.37)**.

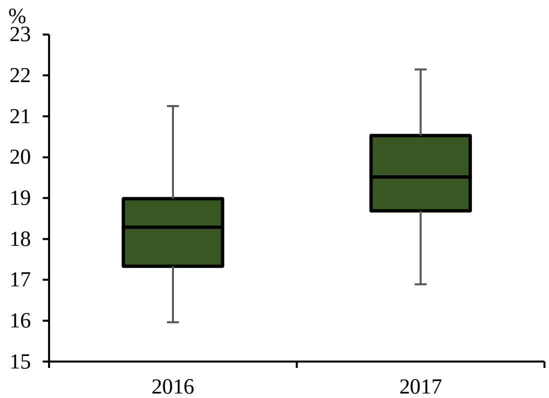
Chart 5.37: Cost of Funds to Revenues on Funds Ratio



5.7 Capitalization

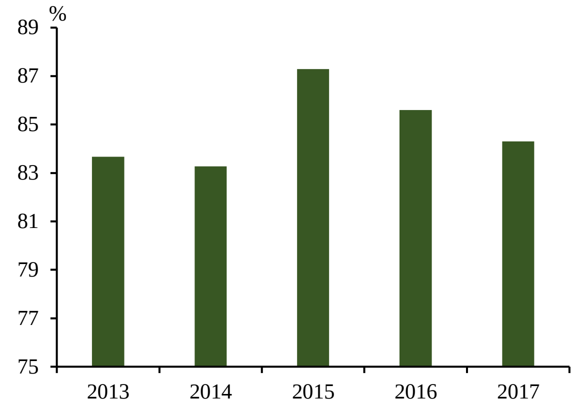
Capitalization improved in the banking system by the end of 2017. There has been a notable shift in the capitalization of the domestic banking system **(Chart 5.38)**. The range of capitalization rates also indicated a comfortable buffer that all banks within the system fall into.

Chart 5.38: Distribution of Capital Adequacy Ratio



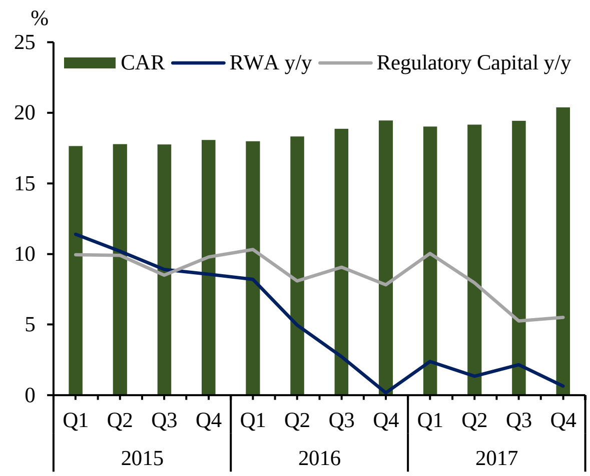
Despite the sluggish growth in assets, Risk-Weighted Assets (RWA) as a portion to total assets continued its decreasing trend in 2017 (Chart 5.39). A factor contributing to this decreasing trend is that a portion of RWAs have been shifting to zero risk-weighted assets due to the increasing exposure to domestic sovereign debt. In addition, risk-weights for retail real estate exposures was reduced from 100 percent to 75 percent as mentioned earlier.

Chart 5.39: Risk-weighted Assets to Total Assets



High capitalization rate has been kept steady. The main contributors of CAR stem from regulatory capital and changes to total RWAs. It can be noted in **Chart 5.40** that RWAs have almost halted to 0.65 percent growth by the end of 2017; while growth in capital recorded 5.5 percent. The sluggish growth in RWAs can partially be attributed to a slightly higher exposure to retail mortgages, sovereign exposures, and most notably a contraction in credit. Growth in capital levels bode well for the banking system, as it managed to increase its capital during a period of negative credit.

Chart 5.40: Drivers of Total CAR



Box 5.2

Stress Testing of the Banking Sector in Saudi Arabia

As part of its risk assessment toolkit, SAMA conducts macro stress testing of the Saudi banking sector on an annual basis. This Box provides an overview of SAMA's credit risk stress testing model, its assumptions, and its main results.

1. Objectives of the Exercise:

The main objective of the stress testing exercise is to assess the resilience of the Saudi Banking Sector to absorb macroeconomic shocks. It also aims to identify weaknesses in the banking system or in the individual banks to enable SAMA to design appropriate supervisory responses to proactively address such weaknesses.

2. Scope and Coverage:

The focus of the stress testing exercise is to stress test the banking sector against the credit risk. The exercise has been carried out using bank level data of NPLs, provisions, income components and Risk-Weighted Assets (RWAs) covering periods from 2000 to 2017. Total credit and NPLs are used at subsector levels. There are 12 subsectors used in this exercise i.e. Banks and Other Financial Institutions, Agriculture and Fishing, Manufacturing, Mining and Quarrying, Electricity Water and Gas Health Services, Building and Construction, Commerce, Transportation and Communication, Services, Consumer loans and Credit Cards and Other Loans.

3. Stress Testing Methodology:

The following methodology has been used to conduct the stress testing exercise:

i. **Step 1 -** three stress-testing scenarios are defined which are based on SAMA's macro-economic forecasting model and expert judgments. The scenarios assume shocks in several macroeconomic variables including 1) oil prices; 2) government spending growth; 3) implicit lending rates; 4) SAIBOR; and 5) Tadawal All Share Index (TASI) growth rate.
ii. **Step 2 -** various "satellite" models are constructed to investigate the underlying relationship between macroeconomic and banking sector variables.
iii. **Step 3 -** based on the underlying scenarios, projections of changes in major banking variables (such as NPLs, provisions, and profitability) are obtained.
iv. **Step 4 -** based on projections in step 3, the stressed levels of bank capital are projected.

4. Data Collection:

In order to complete the stress testing exercise for December 2017, the following data have been collected:

i. **Bank level data:** A time series of quarterly data from January 2000 to December 2017 on *Non-Performing loans, Total Credit, Provisions, Net Interest Income, Net Other Income, Net interest Expense, Dividend payments, Total Regulatory Capital and Tier 1 Capital and Risk Weighted Assets*;
ii. **Macroeconomic data:** A time series of a quarterly data from January 2000 to December 2017 on *Oil Prices, Government Spending, SAIBOR, TASI, Implied Lending Rate and Total Credit*.

5. <u>Stress Test Results:</u>

The stress testing results show that Saudi banks can easily withstand various economic shock scenarios. In the **baseline scenario**, the non-performing loan ratio is expected to moderately increase from 1.5 percent to reach 1.54 percent by 2020. The NPL coverage ratio increases through-out the period from 162 percent to 186 percent. Individual banks NPL ratios range from 2.83 percent (the upper percentile) and 0.93 percent (the lower percentile). The capital adequacy ratio (CAR) would increase throughout the stress period reaching around 20 percent by the end of 2020.

Under the **moderate scenario**, the results show that the projected non-performing loan ratio is expected to moderately increase on a weighted average basis to roughly 2 percent. Individual banks NPL ratios would range from 2.92 percent (the upper percentile) and 0.71 percent (the lower percentile). Consequently, the projected coverage ratio would decrease to reach 168 percent by the end of 2020. The Projected Capital Adequacy Ratio (CAR) decreases on a weighted average basis from 20 percent to reach 18 percent by 2020.

Under the **severe scenario**, non-performing loans (NPL) increase to 2.3 percent by 2020. Individual bank NPL ratios range from 3.9 percent (the upper percentile) and 0.83 percent (the lower percentile). The coverage ratio decreases from 180 percent to reach 154 percent by 2020. The sector's CAR drops to around 15.3 percent.

The stress test results using all three stress scenarios suggest that the banking sector will remain well capitalized under large shocks. Banks capital adequacy ratios are still comfortably above the Basel minimum requirement of 8 percent and more importantly, above SAMA's threshold of 12 percent minimum CAR requirement.

6. Developments in Finance Companies

6.1. Finance Companies Assets

Finance companies have not grown in 2017. Total assets of this sector decreased by 1.5 percent (SAR 38.2 billion compared to SAR 38.7 billion in 2016) **(Chart 6.1)**. Real estate and non-real estate assets accounted for 30 percent and 70 percent of total finance companies' assets, respectively. These assets stood at 1.5 percent of GDP and 2.6 percent of the non-oil GDP at the end of 2017, exactly same as the previous year. Moreover, the finance companies' assets accounted for 1.7 percent of total bank assets in 2017.

Chart 6.1: Total Assets of Finance Companies

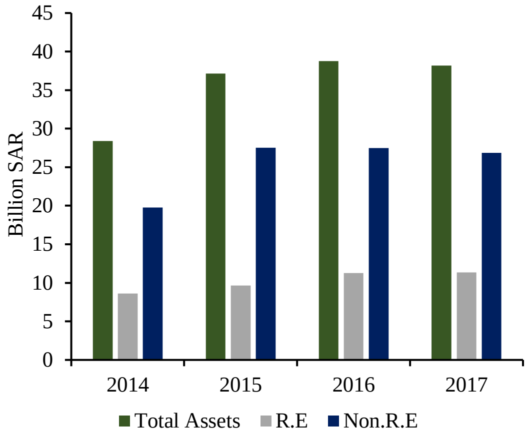


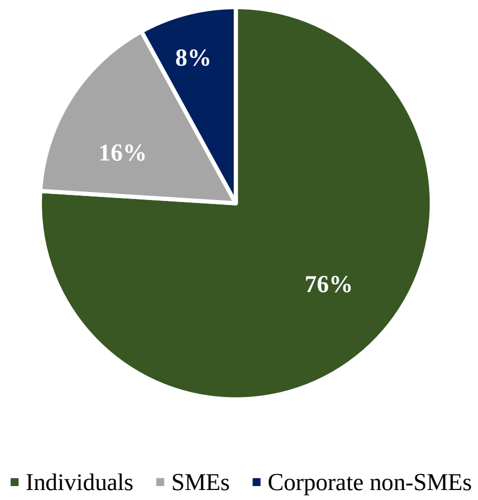
Table (6.1): Development of Finance Companies Sector

	2013	2014	2015	2016	2017
Total number of licensed companies	**3**	**18**	**30**	**34**	**37**
Real estate companies	**2**	**5**	**6**	**6**	**6**
Non- real estate companies	**1**	**13**	**24**	**28**	**29**
Refinance company	**0**	**0**	**0**	**0**	**1**
Micro finance	**0**	**0**	**0**	**0**	**1**
Total capital (Million SAR)	**1,650**	**7,401**	**11,250**	**12,470**	**14,158**

6.2 Financing Assets by Sector

Loans granted by finance companies are divided into the following main sectors: individuals, small and medium-sized enterprises (SMEs) and corporate non-SMEs. In 2017, loans granted to the individuals represent 76 percent, which was the major portion of total net financial assets. While the SME sector accounted for 16 percent and corporate non-SMEs was only 8 percent **(Chart 6.2).**

Chart 6.2: Financing Assets by Sector



6.3 Sources of Funds

One of the main risks facing the finance sector is the limited sources of funds and the nature of their long-term assets. The capital structure of finance companies is traditional and is mainly limited to: debt, paid up capital, factorization (portfolio selling), reserves and provisions. In 2017, the portion of finance companies' debt was 39 percent of the total sources of funds, while capital reached 36 percent and the total reserves amounted to 25 percent of the total sources of funds **(Chart 6.3)**. The concentration on debt sources leaves finance companies exposed to higher rates stemming from interbank developments, this would ultimately translate to higher financing rates for households and companies that rely on finance companies as a source of credit.

Chart 6.3: Capital Structure

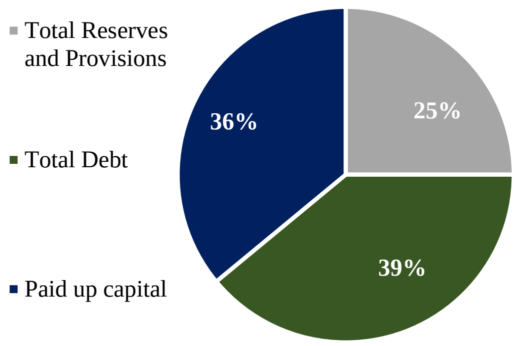
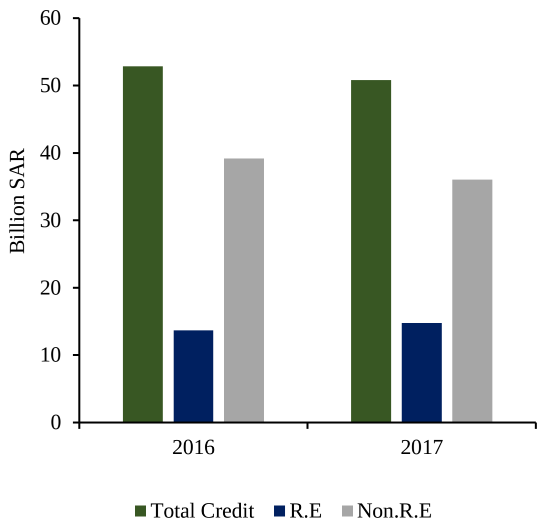


Chart 6.4: Credit by Business Line



6.4 Credit Performance of Finance Companies

Credit growth by finance companies marginally grew by 2017. There was a notable slowdown in credit growth in the finance companies sector, with credit reaching SAR 51 billion in 2017. The subdued growth, largely reflects the slowing economic environment. Growth has come to a standstill as indicated by non-oil GDP, and possibly the pool of clients with acceptable levels of risk has decreased.

In contrast to trends in total credit, real estate credit indicated some positive developments. The real estate components were at SAR 14.7 billion in December 2017, expanding by 8 percent, whereas, non-real estate declined by 8 percent reaching SAR 36 billion. While real estate credit increased, the decrease in non-real estate credit is similar to trends noted in the banking sector, therefore the credit demand dynamics are across the financial sector as a whole. Real estate and non- real estate accounted for 29 percent and 71 percent, respectively of total finance companies credit. Furthermore, the total credit extended by this sector compared to the credit extended by the banking sector was small during 2017. The total credit (On-balance and off- balance sheet credit) accounted for approximately 3.8 percent of the total banking sector credit **(Chart 6.4),** it is equivalent to 2 percent of GDP, and 3.5 percent of the non-oil GDP in 2017.

6.5. Risk Outlook of Finance Companies

NPLs continue to rise stemming mostly from SMEs and individuals' consumption. The slowdown of economic growth in 2017 as well as the credit portfolio of finance companies, both have resulted in high NPLs which rose from 9.2 percent in 2016 to 10.3 percent at the end of 2017 **(Chart 6.5)**. The contribution to such increase came mainly from SMEs which might have a lower ability to adjust to the downturn environment. While NPL rates are high within the finance companies, the concentration is quite limited to the overall economy. The relatively high level of credit extended to the real estate sector may constitute another avenue of risk, as the credit to real-estate projects was 33 percent of the total credit in 2017. In terms of the contribution to the NPL ratio from the individuals' sector, it was amounted to 52 percent, while SMEs reached 42 percent and corporate non-SMEs accounted for 6 percent of the overall NPL ratio **(Chart 6.6)**. In addition, SAMA has ensured the sector's readiness for the implementation of IFRS 9, and prudently monitors NPL developments.

Chart 6.5: NPL Ratio of Finance Companies

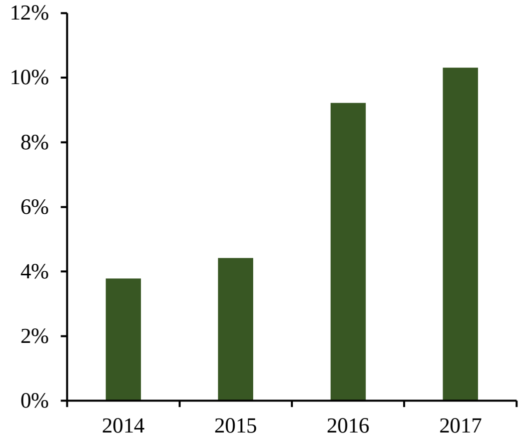
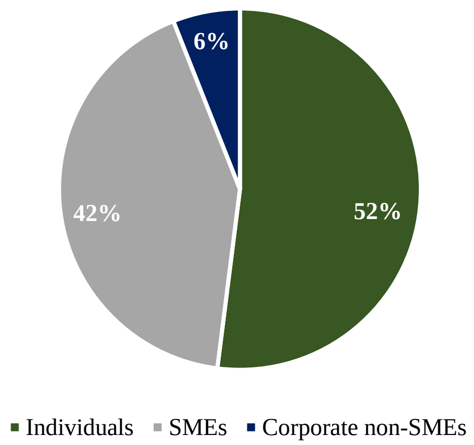


Chart 6.6: NPLs of Finance Companies by Sector

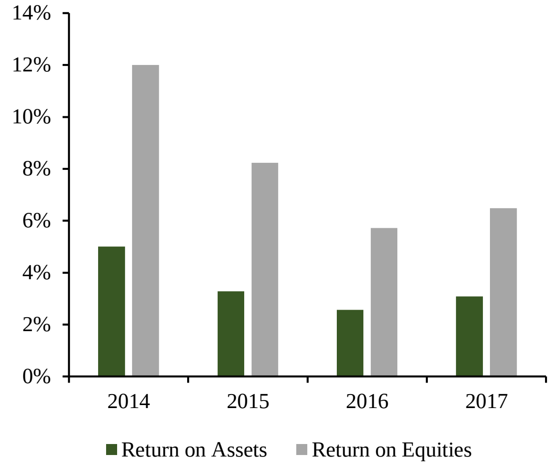


6.6 Finance Companies Resilience

6.6.1 Profitability

Despite the slow economic growth, profitability of finance companies recorded an increase after two years of decline. Profits were up by 18.2 percent from a year earlier reaching SAR 1,176 billion. Correspondingly, at the end of 2017, both ROE and ROA have been positively impacted, amounted for 6.5 and 3.1 percent respectively **(Chart 6.7)**. The upturn in profits resulted mainly from two factors; 1- of the decline in expenses especially marketing expenses; 2- lower funding costs.

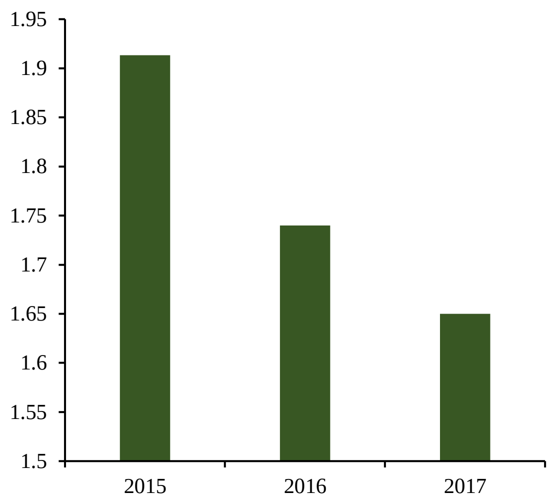
Chart 6.7: Profitability of Finance Companies



6.6.2 Leverage

The leverage ratio position of the finance companies remained sound with a slight decrease since last year. In 2017, the leverage ratio varied between 2.2 percent for real estate companies and 1.46 percent for non-real estate companies compared to 2.13 percent and 1.59 percent respectively in 2016. These ratios remained below the maximum limits allowed by SAMA in their policy framework. Maintaining finance companies' leverage at prudent levels is an important move to ensure stability within the financial sector **(Chart 6.8)**.

Chart 6.8: Leverage Ratio of Finance Companies



Box 6.1
Saudi Real Estate Refinance Company (SRC)

In line with Vision 2030 objectives to improve the performance of the real estate market, increase its contribution to GDP, and raise the rate of homeownership among Saudis, the Saudi Real Estate Refinance Company (SRC) was established in 2017 by the Public Investment Fund (PIF) with the purpose of developing the housing finance market in Saudi Arabia by enabling the originators to offer long term and short-term financing solutions to home buyers.

The company will act as an intermediary access point for investors, aligning the liquidity, capital, and risk management requirements of real estate mortgage companies, with the risk acceptability and return on equity to meet investor targets.

SRC will adopt a strategy of acquiring mortgage funds to increase financial capabilities and broaden the activities of real estate financing companies. It will also work on linking the investment capital of foreign and local investors with the range of opportunities available in the Kingdom's growing housing market.

In addition, the company's activities will include issuing bonds as securities, supported through real estate mortgage contracts over the short and long term, to real estate financing companies.

To regulate securitization in finance companies sector, in 2015 SAMA had issued the rules governing disposal of finance assets or their contractual rights through setting clear controls in respect of the rights of the finance company and the other entity in a stable and sustainable manner, thereby, mitigating risks associated with finance. These rules govern the disposal of finance assets or their contractual rights, whether the disposal takes the form of sale of assets, factoring, pledging, or assignment.

A finance company that intends to dispose finance assets or their contractual rights, shall apply for a no objection letter from SAMA except pledging which require only informing SAMA with a written notification.

Table (6.2): SAMA's Prudential Measures on Securitization – Finance Companies

Instrument	Regulatory Requirement
Disposed finance assets or their contractual rights	The finance companies that intend to dispose finance assets or their contractual rights, shall comply with the following: <u>Real Estate Assets:</u> There need to be a lapse of at least one year from the date of extending credit related to the assets to be disposed of, or six months from the date of first paid installment, whichever comes later. <u>Non-Real Estate Assets- contract maturity not exceeding five years:</u> There need to be a lapse of at least three months from the date of extending credit related to the assets to be disposed of, or three months from the date of first paid installment, whichever comes later. <u>Non-Real Estate Assets- contract maturity exceeding five years:</u> There need to be a lapse of at least six months from the date of extending credit related to the assets to be disposed of, or six months from the date of first paid installment, whichever comes later.

7. Developments in Insurance Sector

7.1 Overview

The structure of the insurance sector in 2017 has not changed much from the previous year but some components have changed slightly. For example, the loss assessors and loss adjusters, the insurance advisors and insurance agents' numbers decreased, while the brokers and claims settlement specialists' number increased **(Table 7.1).**

Table 7.1: The insurance sector structure (2013-2017)

Number of	2013	2014	2015	2016	2017
Insurance Companies	33	34	35	35	35
Assessors and Loss Adjusters	13	14	15	16	15
Insurance Advisors	7	8	8	8	7
Actuaries	2	2	2	3	3
Insurance Brokers	72	79	85	92	96
Insurance Agents	70	82	86	95	94
Insurance Claims Settlement Specialists (third-party administration)	9	9	12	14	15

There are 35 insurance companies licensed in Saudi Arabia, which operate at least in one of the three following major insurance lines:

Health Insurance

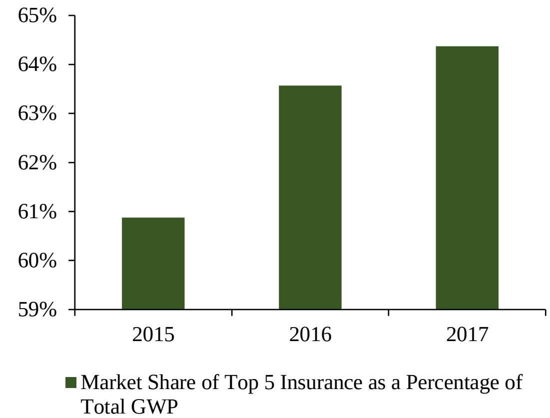
Protection and Savings Insurance

General Insurance, consist of Motor Insurance

- Accident and Liability & Other General Insurance
- Property Insurance
- Marine Insurance
- Aviation Insurance
- Energy Insurance
- Engineering Insurance

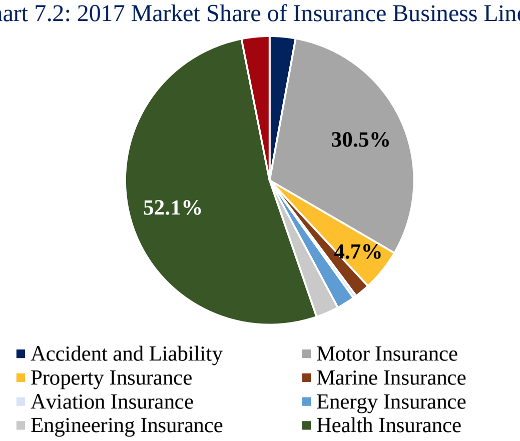
The market share of the insurance sector is dominated by few companies. The results of the last three years showed that only about 15 percent of the insurance companies have on average about 63 percent of the market share. In 2017, the market shares of the big five companies registered a small increase by 0.81 percent from 2016 reaching to 64.37 percent **(Chart 7.1)**.

Chart 7.1: Market Share of Top 5 Insurance as a Percentage of Totals GWP



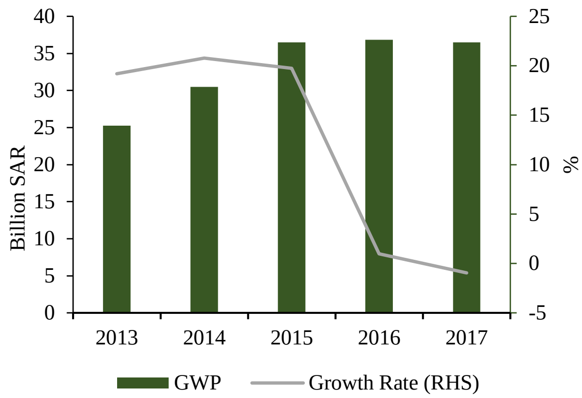
Market share of insurance business is dominated by the two compulsory insurance lines. The health insurance maintained its position as the largest insurance segment holding 52.15 percent, followed by the motor insurance at 30.51 percent. They together accounted for almost 83 percent of the market share, leaving 17 percent for the other insurance sectors **(Chart 7.2)**.

Chart 7.2: 2017 Market Share of Insurance Business Lines



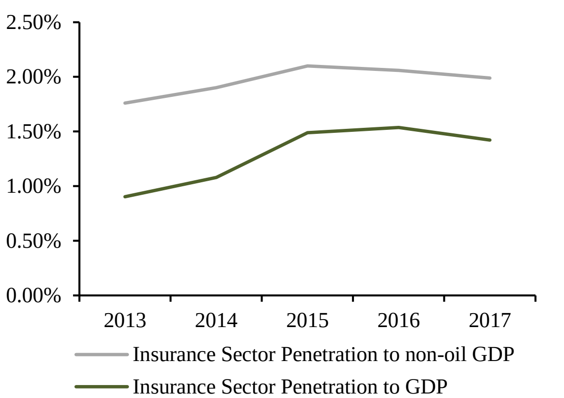
The year of 2017 witnessed a notable decline in GWP. The overall insurance Gross Written Premium (GWP) in 2017 decelerated by SAR 352 million to reach SAR 36.50 billion, compared to SAR 36.85 billion in 2016, representing a negative growth rate of 1.0 percent **(Chart 7.3)**.

Chart 7.3: Gross Written Premiums Growth rate (2013-2017)



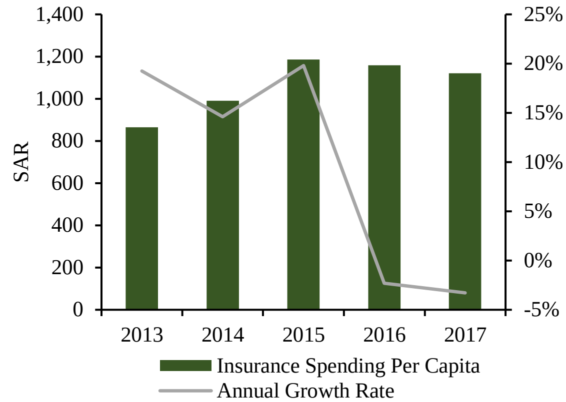
The sluggish growth in insurance, continues to be reflected in its limited penetration. In 2017, the penetration of the insurance sector fell for the second year in a row, achieving 1.99 percent to the non-oil GDP and 1.42 percent to the total GDP **(Chart 7.4)**.

Chart 7.4: Insurance Sector Penetration to GDP vs. Non-Oil GDP



The insurance density or the insurance spending per capita decreased for the second consecutive year reaching SAR 1,121 in 2017 **(Chart 7.5)**. The density fell by 2.3 percent in 2016 and 3.3 percent in 2017.

Chart 7.5: Insurance Density- Spending Per Capita

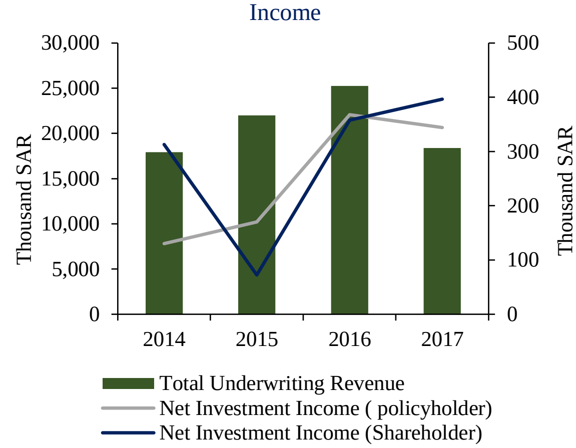


7.2 Market Performance

In general, the insurance market showed a decrease in net investment income and underwriting revenue in 2017. Net investment results have decreased for policyholders from SAR 368 thousand in 2016 to SAR 344 thousand in 2017, while net investment for shareholders increased slightly from SAR 358 thousand in 2016 to SAR 397 thousand in 2017 **(Chart 7.7)**.

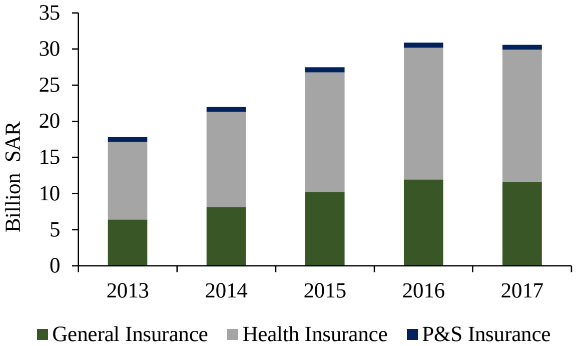
Total underwriting revenue had a significant fall in 2017. Underwriting revenue recorded a decline of around 27 percent. The decrease in net investment income and underwriting revenue was mostly led by the uncertainty about the market and price increases, affecting profit margins and the total value of the GWP **(Chart 7.6)**.

Chart 7.6: Underwriting Revenue and Net Investment Income



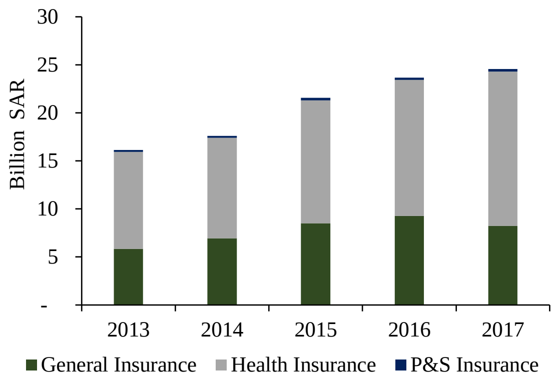
The net earned premiums decelerated in 2017. It decreased by SAR 308 million to reach SAR 30.60 billion, compared to SAR 30.91 billion in 2016, down by 1.00 percent **(Chart 7.7)**.

Chart 7.7: Net Earned Premiums (NEP)



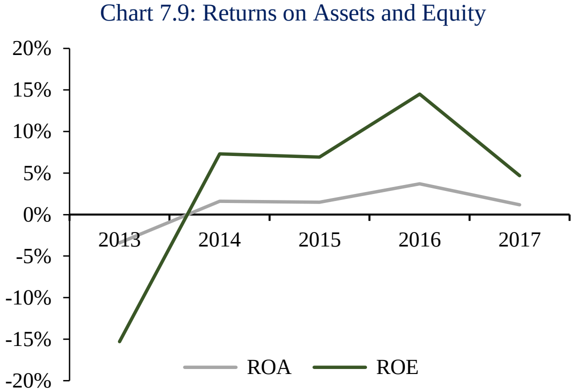
On the other hand, the Net Claims Incurred (NCI) increased in 2017. NCI increased by SAR 893 million recording SAR 24.563 billion, compared to SAR 23.670 billion in 2016, which represents a growth rate of 3.8 percent **(Chart 7.8)**.

Chart 7.8: Net Claims Incurred (NCI)



ROE and ROA decreased in 2017 compared to 2016. The ROE in 2017 recorded around 4.67 percent compared to 14.5 percent in 2016. Also, the ROA registered around 1.16 percent in 2017 compared to 3.7 percent in 2016 **(Chart 7.9)**.

Chart 7.9: Returns on Assets and Equity

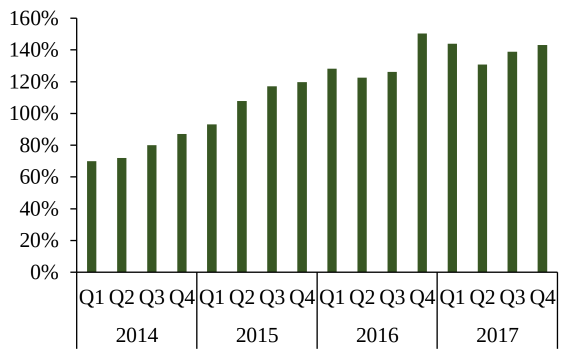


7.3 Insurance Risk

7.3.1 Market Risks

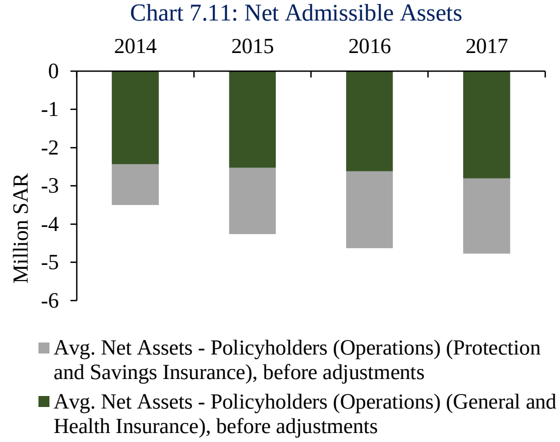
Solvency margins continued to show an upward trend, despite the low rate of premiums in 2017 compared to previous years. This is primarily due to SAMA's corrective adjustments and policies that have contributed to improving the solvency margins. The solvency margin in 2017 was about 143 percent, as compared to 150 percent in 2016 **(Chart 7.10)**. While the ratio recorded a lower rate in Q4 2017 compared to Q4 2016, the ratio overall continues to show a consistent improvement. In addition, the sector was able to maintain a solvency margin above the 100 percent requirement.

Chart 7.10: Quarterly Solvency Margins (%)



The admitted assets results showed an increase in both the net assets of the policyholders and the net assets of the shareholders in 2017. The net admissible assets are an indicator of liquidity and availability of assets to pay claims, as and when necessary. The 2017 results showed an increase of 3.14 percent and 7.61 percent respectively **(Chart 7.11)**.

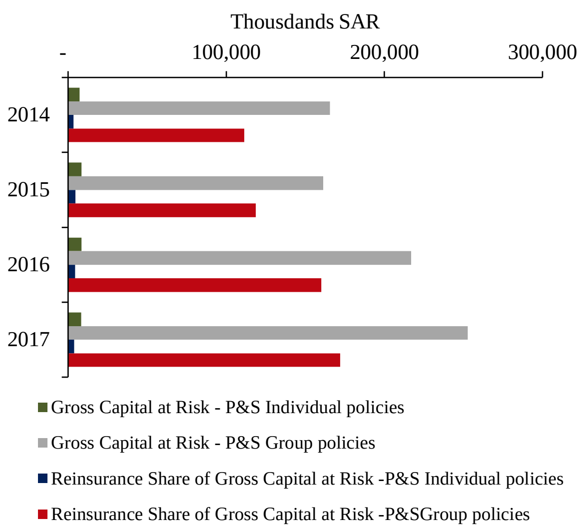
Chart 7.11: Net Admissible Assets



There have been different developments in gross capital at risk between individuals and groups. The gross capital at risk for individuals has decreased in 2017 by 2.65 percent, while the gross capital at risk for groups has increased in the same year by 16.44 percent. On the other hand, the reinsurance share of the individuals' capital at risk has decreased by 11.79 percent, but the reinsurance share of the groups has increased by 7.41 percent **(Chart 7.12)**. This means improved reinsurance coverage for individuals' capital at risk while worse reinsurance coverage for groups' capital at risk.

Overall, the coverage ratio of the reinsurance for the capital risks was 67.43 percent in 2017 compared to 72.99 percent in 2016.

Chart 7.12: Gross Capital at Risks



The strong technical reserve contributes to the stability of the insurance sector, reducing the risk of market volatility. Over the past five years, the policies in force have contributed to strengthening the technical reserves.

In 2017, technical reserves (funds set aside from profits to cover claims) increased by 1.6 percent to SAR 30.187 billion from around SAR 29.727 billion in 2016 **(Chart 7.13).** In addition, the quarterly technical reserve showed a steady increase since the third quarter of 2015 **(Chart 7.14).**

Chart 7.13: Technical Reserve

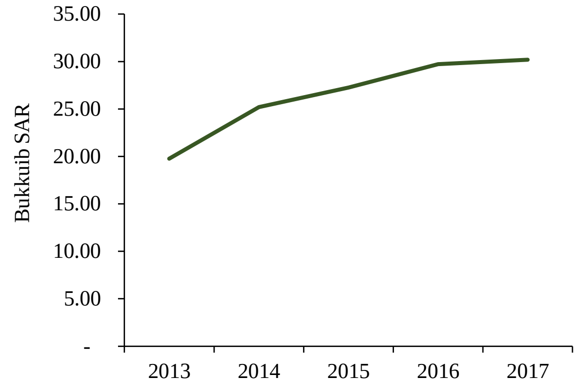
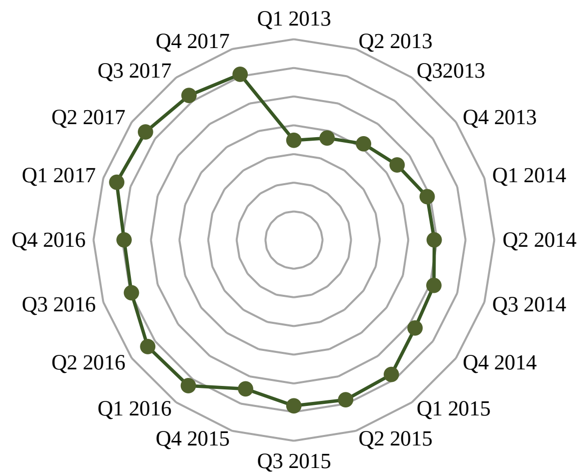


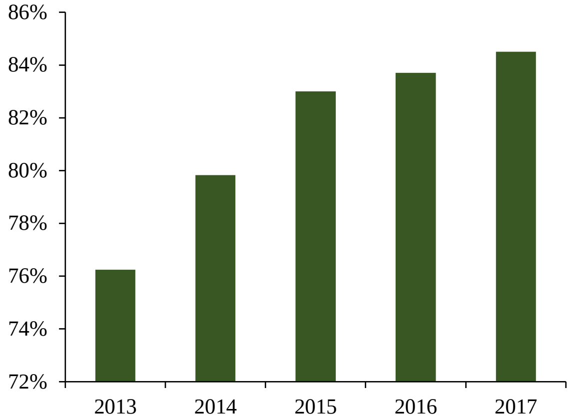
Chart 7.14: Quarterly Technical Reserve (2013-2017)



7.3.2 Financial Risks

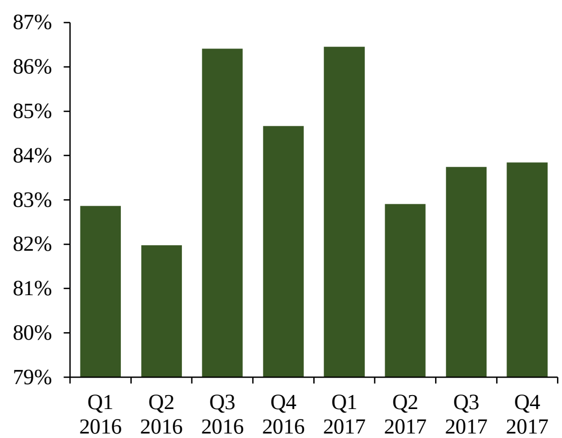
The Saudi insurance market bears most of the risks related to the market. This is demonstrated by the high and growing annual retention ratio. The retention rate in 2017 was 84.5 percent vs. 83.7 percent in 2016 **(Chart 7.15)**. The retention ratio continued to rise at a Compound Annual Growth Rate (CAGR) of 2.08 percent. This enabled the insurance companies' on bearing the shocks of the market instead of transferring them to local or global reinsurance companies.

Chart 7.15: Retention Ratio



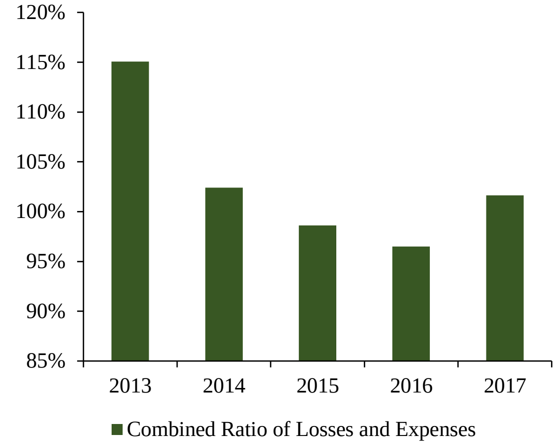
Given the quarterly results in 2016 and 2017, there is a slight variation in the retention ratios within the range of 82 percent to 86 percent. This difference is due to the extent by which the market risk differs from the gross premiums written during each quarter **(Chart 7.16)**.

Chart 7.16: Quarterly Retention Ratios (2016-2017)



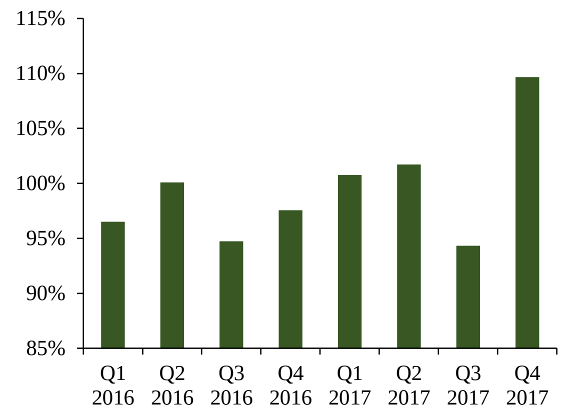
Profitability in the sector was impacted by developments in the combined ratio. The combined ratio is used to measure the profitability of an insurance sector. Unlike the years of 2015 and 2016, the insurance sector returned in 2017 to record a combined rate of over 100 percent **(Chart 7.17)**.

Chart 7.17: Combined Ratio



In addition, the quarterly data shows fluctuations within each year. For instance, the ratio recorded in the last quarter of 2017 around 110 percent compared to 94 percent in the third quarter **(Chart 7.18)**.

Chart 7.18: Combined Ratio (Quarterly data)

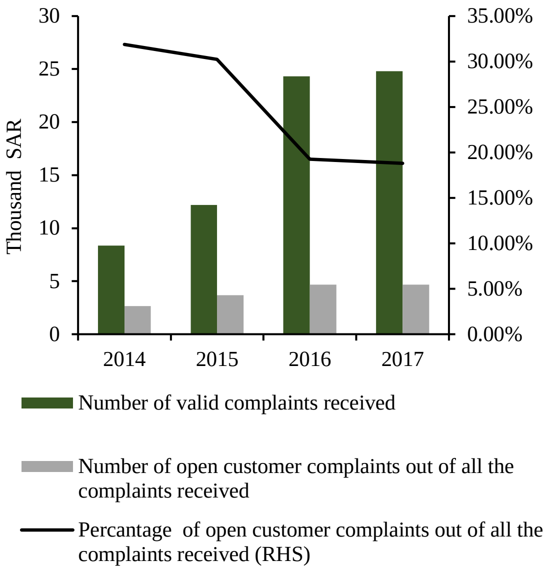


7.3.3 Operation Risks and Efficiency

In 2017, the insurance sector has continued the implementation of its strategic initiatives. The insurance companies have successfully completed 84 projects from the running 141 strategic projects. All strategic projects aimed to improve the operational efficiency and to enhance the services quality in the three key classes in the insurance sector.

By virtue of improved services, the percentage of the open claims in 2017 slightly decreased from 2016 registering 18.8 percent **(Chart 7.19)**.

Chart 7.19: Complaints Received, Redressed and Solved

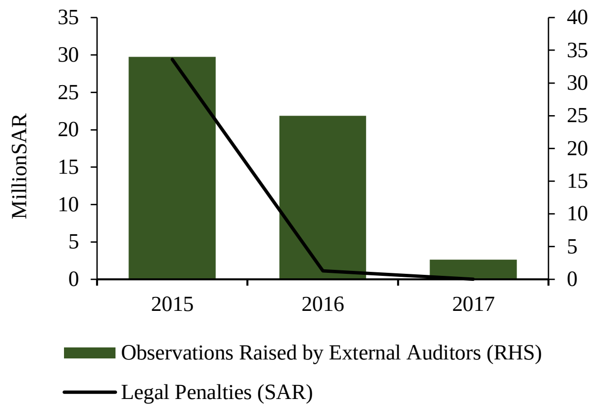


7.3.4 Other Risks

The compliance to the existing laws and regulations in the insurance sector recorded significant developments during the past years. The number of observations raised by external parties decreased rapidly as well as the legal penalties **(Chart 7.20)**.

The improvements in compliance resulted mainly from the oversight of SAMA and CMA as regulatory entities. Implementation of regulatory measures contributed to ensuring the rights of beneficiaries as well as enhancing the stability of the insurance sector.

Chart 7.20: Compliance to Existing Rules, Laws and Regulations



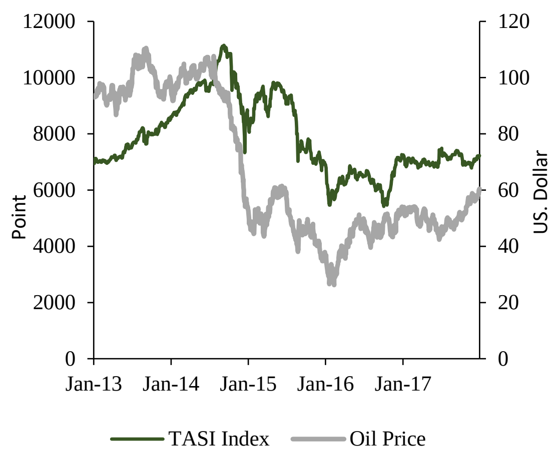
8. Capital Market Stability

8.1 Overview

Major developments and reforms took place during 2017. Some are expected to have a short-term undesirable effect, such as introducing some uncertainty in the market and economy. In spite of these reforms and the slight contraction in economic activities, the capital market is still sound and well-positioned. Stock market index, market capitalization, capital market activities and listed companies' performance improved when compared to 2016.

The index witnessed limited volatility during 2017, where average volatility was 13.50 compared to 21.24 in 2016. Advances and relative stability of oil prices during 2017 had a positive contribution to the index performance **(Chart 8.1)**.

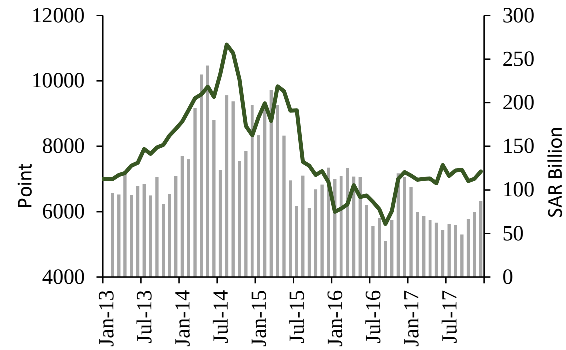
Chart 8.1: TASI & Oil Prices Correlation



Source: Bloomberg

The turnover was very sensitive to the reforms and uncertainty looming in the horizon. It declined by 27.0 percent year-on-year while the market index performance increased by 0.22 percent during 2017 **(Chart 8.2)**.

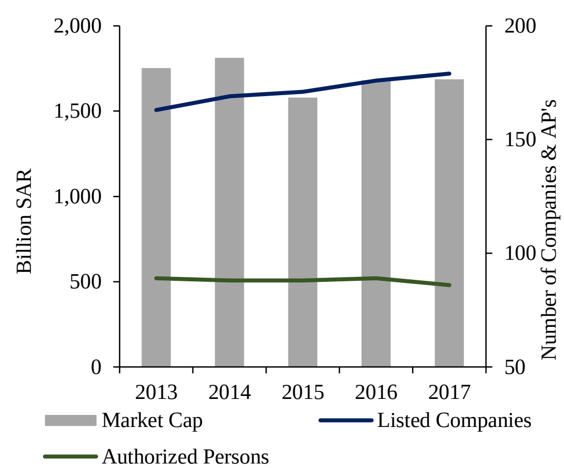
Chart 8.2: TASI & Turnover



Source: Bloomberg

Overall, stock market capitalization edged up slightly to SAR 1.7 Trillion in 2017, representing 67.0 percent of GDP compared to 69.4 percent in 2016. The number of companies listed in the main market increased to 179, and the number of Authorized Persons (APs: brokerage companies, asset management and investment banking) increased to 86 compared to 83 in 2016 **(Chart 8.3)**.

Chart 8.3: Market Size

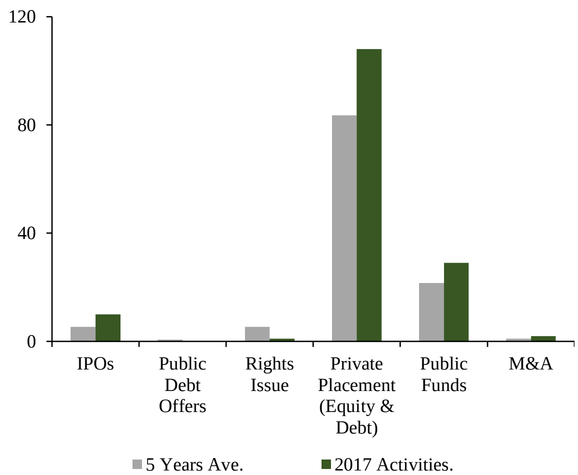


Source: CMA

8.2 Capital Market Activities

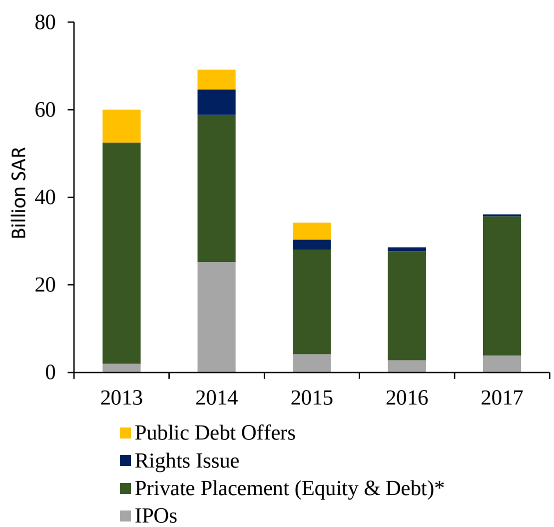
At large, number of Capital market activities in 2017 outperformed the five year averages and their values posted better numbers in all issuance activities compare to 2016 figures. Through 213 financing operations in the market, total value of issuances reached SAR 36.1 billion in 2017, increasing by 26.2 percent as compared to last year, and 20.3 percent below the 5-year average **(Chart 8.4 & 8.5)**. Number of IPOs rose to 10 operations, 9 of them were through the parallel equity market Nomu (see **Box (8.1)**).

Chart 8.4: Capital Market Activities (Number of Activities)



Source: CMA

Chart 8.5: Total Issuance Value

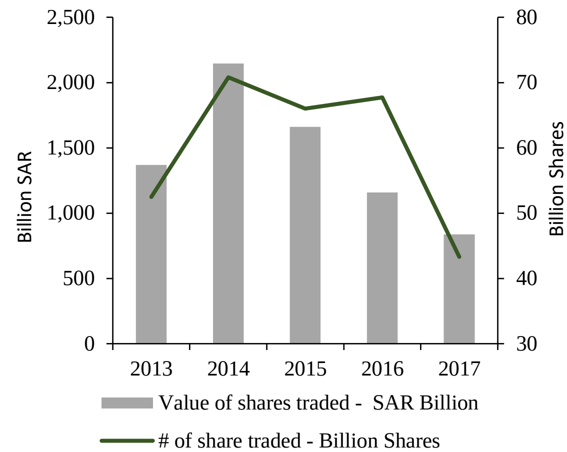


Source: CMA

*Not Including Government Issuance.

There was a notable drop in trading activity. The traded value witnessed a sharp decrease reaching to SAR 836 Billion compared to SAR 1,570 Billion in 2016. Likewise, the total number of share traded in 2017 decreased by 36.0 percent compared to 2016, and below the five years average by 27.9 percent **(Chart 8.6)**.

Chart 8.6: Number and Value of Share Traded



Source: CMA

There was little change in the sectors were trading activity was concentrated in. The trading was concentrated in five sectors that represent 73.1 percent out of the total trading value of the market, which amounts to 611 Billion SAR. The banking sector has the largest percent of the total traded value that reached 23.3 percent which represents SAR 194 Billion out of the total traded value in 2017 **(Chart 8.7)**.

Chart 8.7: Concentration as Percent of Value Share Traded by Sectors

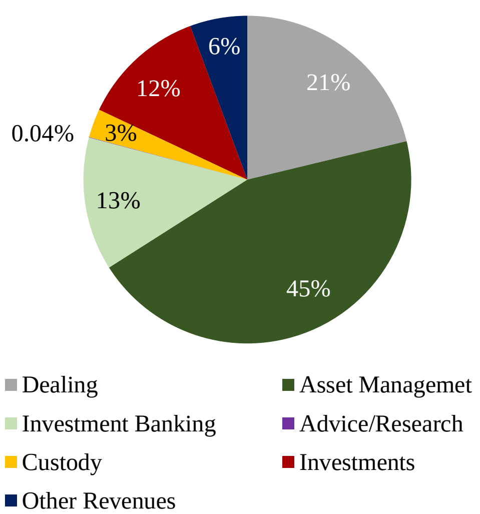
Source: CMA

8.3 Authorized Persons

By all and large, during 2017 capital market went through substantial developments related to the market structures, regulations, and government reforms. However, the APs are still strong and posted robust performance. Moreover, their source of income became more resilient. The CMA licensed three new APs, which increased the total number to 86 at the end of 2017.

At a regulatory level, CMA amended some of its regulations concerning the licensing requirements. The amendments are expected to support the efficiency and enhance the competitiveness in the market. They include reducing the minimum capital requirements for the management activities from SAR 50 million to SAR 20 million and adding two types of activities to the management activities: managing non-real estate investment funds and managing the portfolios of sophisticated investors with managed assets not exceeding SR 1 billion with a minimum paid capital requirement of SR 5 million. The additional activities require the licensed person has a mechanism to control the value of the managed assets to ensure that they do not exceed the maximum limit. Revenues from assets management represent 45 percent of total money generated **(Chart 8.8)**.

Chart 8.8: Revenue distribution



8.3.1 Profitability

Although, the APs' net income continued to decline this year, the industry by large still above prudential standard. Even though the industry reduced its total expenses by around 9.5 percent for the year 2017, the total net income shrank by 7.4 percent to reach SAR 1.6 billion compared to SAR 1.7 billion in 2016. This drop is attributed to the fall in revenues, especially in dealing and other activities that shrank by 21.6 percent and 54.3 percent consecutively. Revenue from Asset management and Custody activities showed a noticeable growth in 2017 by 11.4 percent and 30.6 percent, respectively. Relative to its total assets, the industry's return on assets (ROA) declined in 2017 compared to 2016 to reach 5.6 percent. **(Chart 8.9 & 8.10)**.

Chart 8.9: Net Income Growth (%)

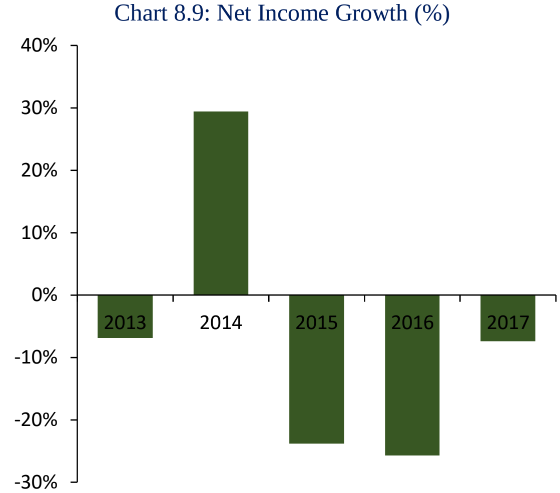
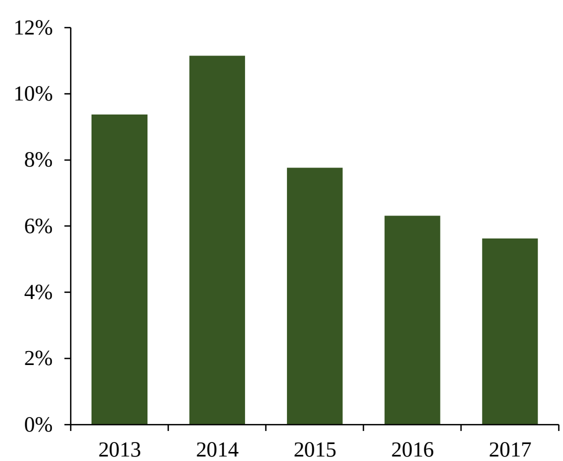
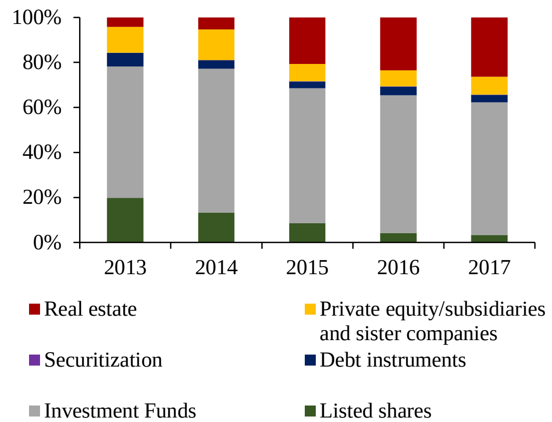


Chart 8.10: Return on Assets (%)



The level of diversification is an important element when assessing the quality of assets. APs' portfolio investments are adequately diversified with a tendency to invest more in the real estate sector over the last three years. The majority of industry capital was channelled through investment funds, reaching 59.0 percent of total investments in 2017. Real estate ranks second and accounts for 26.3 percent in 2017 **(Chart 8.11)**.

Chart 8.11: Breakdown of APs Investments in Various Asset Classes



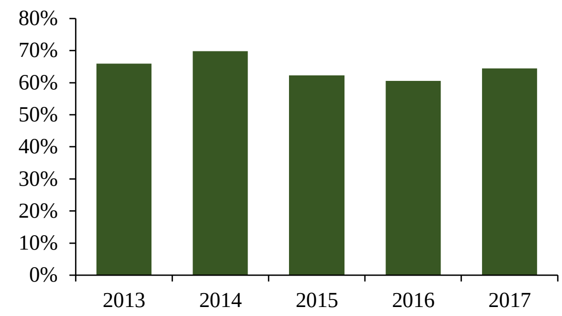
8.3.2 Capital Adequacy

The capital to risk-weighted assets ratio reached 26.9 percent compared with 27.4 percent at the end of 2016, which remains high. Capital adequacy regulations play critical role in ensuring sound and effective business management. According to recent data, APs licensed to conduct dealing, managing and custody activities continued to maintain an adequate level of capital at the end of 2017.

8.3.3 Liquidity

Asset liquidity is an important determinant of the ongoing viability of financial institutions. CMA requires APs to meet a set of minimum liquidity requirements which assist in identifying, measuring and managing the corresponding liquidity risks. Liquidity within the APs, measured by the liquid-assets to total-assets ratio, increased slightly in 2017 to reach 64.5 percent, compared to 60.6 percent in 2016 **(Chart 8.12)**.

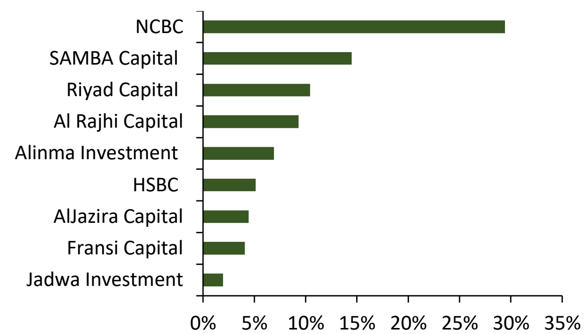
Chart 8.12: Liquid Assets to Total Assets



8.3.4 Concentration and Distribution

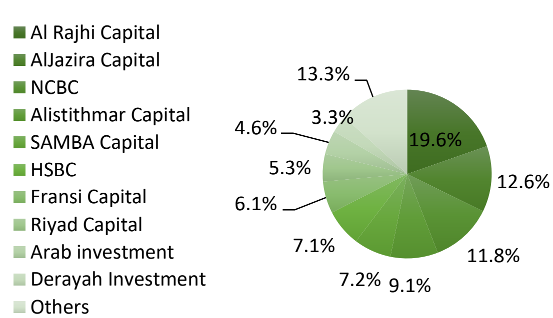
Brokerage and assets management businesses remained concentrated since long. As of 2017, 86.2 percent of the public funds' assets is managed by only 9 APs out of 63 APs licensed as fund managers **(Chart 8.13)**. In-depth analysis of the data shows concentration not only at the level of APs, but also at the level of funds, as one single fund had the largest share, amounting to 29.4 percent of total public funds' assets.

Chart 8.13: Distribution of Public funds' assets by APs



With respect to equity trading, the brokerage activities show a relatively high concentration, with 86.7 percent of trading value executed through 9 APs out of 33 APs licensed to deal as agents **(Chart 8.14)**.

Chart 8.14: Distribution of trading value by APs



Box 8.1

Parallel Market (Nomu)

The Saudi Stock Exchange "Tadawul" launched the Parallel Market -Nomu- on Feb 2017. The main purpose of its launching is to develop the capital market structure in order to be aligned with Vision 2030, which will support the investment diversification and stimulating the economic growth. Nomu could be attractive over the main markets in many aspects as clarified in the following table:

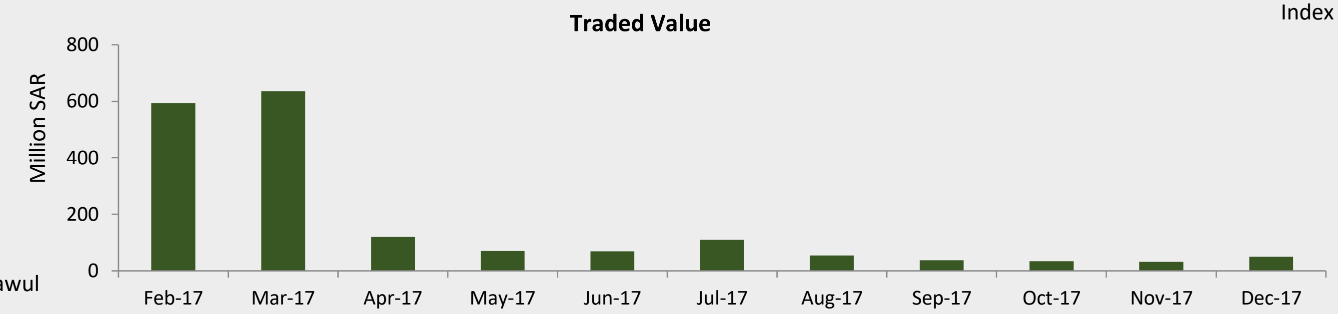
Parallel Market "Nomu"
SR 10 million
20%
Operating for at least one year
Quarterly financial statements within 30 calendar days from the end of the period and year-end financial statements within 3 months from the end of the period
20%
Modified, less stringent application
low
Simpler offering process, similar to a private placement
Financial advisor mandatory, legal advisor optional

By the end of 2017, the number of listed companies in the parallel market -Nomu- reached nine companies that have offered value SAR 752.4 Million, and the total market capitalization SAR 2.6 Billion. Parallel Market – Nomu- Summary During 2017:

	Value of Shares Traded (000,000 SAR)	Transaction	Shares Traded
Total 2017	1,805.96	78.77 (000)	70.64 (000,000)
Daily Ave.	8.6	375.08	336.38 (000)

The highest close position for Parallel Market –Nomu- was 6037 points, where the index closed at 3140.01 by the end of 2017.Nomu is targeting sophisticated investors that obtained the CMA's requirements in order to enter the market, which can contribute to the sustainability of the market.

Index



Source: Tadawul