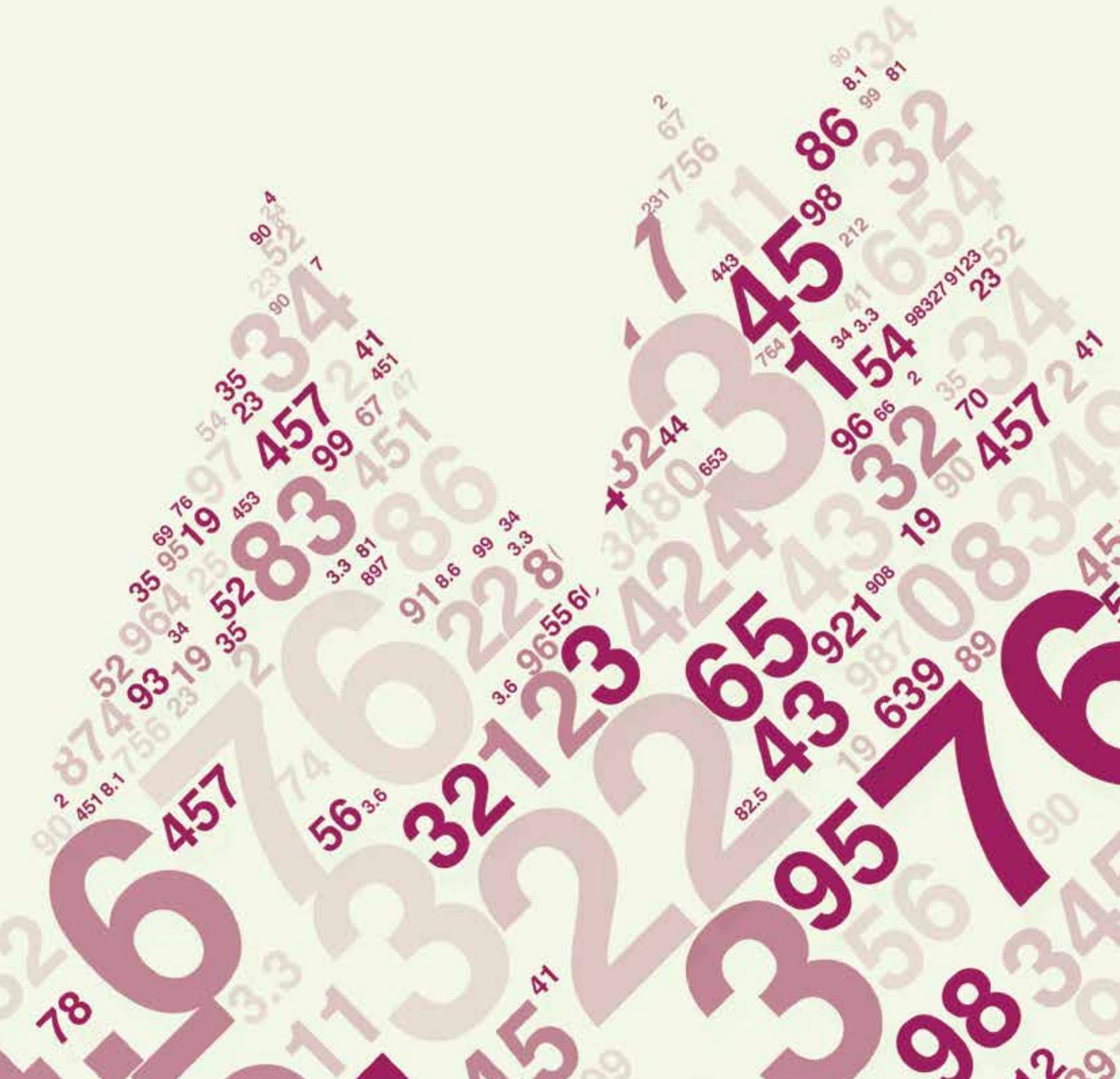
Qatar Economic Outlook

2016–2018

Issue Number 10

وزارة التخطيط التنموي والإحصاء
Ministry of Development Planning and Statistics



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June 2016.

The previous issues of the *Qatar Economic Outlook* have retroactively been numbered from 1 to 9, making this *Qatar Economic Outlook* issue number 10.

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Foreword

This *Qatar Economic Outlook 2016–2018* presents forecasts for the years 2016 to 2018 (Part 1), and reviews activity and economic performance in 2015 (Part 2).

The assessment has been made at a time of sharp adjustments and increased volatility of oil prices, which widen the margins of uncertainty around the central forecasts.

The Ministry of Development Planning and Statistics (MDPS) expects that, despite the decline in international oil prices in 2015, economic growth will remain healthy at 3.9% in 2016 and 3.8% in 2017. Over the projection horizon, the non-hydrocarbon sector will continue to account for most of the economy's expansion. Real growth will be further supported by increased activity in the hydrocarbon sector, which will benefit from added output from the new Barzan gas project. But as infrastructure investments plateau and projects are de-scoped, and as population growth slows, activity in the non-hydrocarbon sector will begin to taper, and overall growth will moderate to 3.2% in 2018.

Consumer price inflation is expected to edge up from the muted levels of 2015. The hikes to petrol prices in January of this year, as well as the removal of water and electricity subsidies in late 2015, will push up domestic prices a little. The introduction of a range of taxes and the further removal of subsidies will maintain domestic pressure on prices in the near term. A slight pick-up in global commodity prices and an anticipated softening of the US dollar (to which the Qatari riyal is pegged) will push imported inflation up further in 2017 and 2018.

On the fiscal side, given lower oil and gas revenues and large expenditure outlays, the fiscal balance is anticipated to register its first deficit in over 15 years. The external current account balance is also expected to be adversely affected by lower oil prices and will register a small deficit in 2016, but the balance will return to positive territory in 2017 and 2018 as oil prices recover.

The main risk to the outlook is the possibility that oil prices will not track higher in 2017 and 2018, as the forecasts assume.

This *Qatar Economic Outlook 2016-2018* could not have been produced without the generous cooperation of other agencies. I would therefore like to thank Qatar Central Bank, Qatar Petroleum and the Ministry of Finance for their unstinted cooperation in sharing information and data.

Dr. Saleh Bin Mohammed Al Nabit

Minister

Ministry of Development Planning and Statistics

June 2016

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Qatar—Outlook at a glance

Economic growth—remaining stable, driven by the non-hydrocarbon sector

Despite lower oil prices, real economic growth in 2016 is expected to rise to 3.9%, buttressed by continued vigour of the non-hydrocarbon sector and the boost to upstream hydrocarbon production from the Barzan gas project. However, nominal gross domestic product (GDP) is expected to contract by 2.9%, reflecting the drop in global hydrocarbon prices.

In 2017 and 2018, hydrocarbon production will again plateau, but solid expansion in non-hydrocarbon activities will sustain overall economic momentum. Services will be the largest contributor to growth, followed by construction. As attention turns towards completing current projects rather than starting new ones, and as population growth eases, growth in the non-hydrocarbon sector is expected to moderate.

In 2015, real GDP expanded by 3.7%, but the fall in oil prices during the year led nominal GDP to decline for the first time since 2009, by 20.6%.

Inflation—rising somewhat on domestic and foreign pressures

Annual inflation, as measured by the change in Qatar's consumer price index, is forecast to average 3.4% in 2016, and to nudge up to 3.6% in 2017 and to 3.8% in 2018. It is expected to pick up in 2016 moderately, given the recent hikes to petrol prices in January this year, and the removal of water and electricity subsidies in late 2015. The first four months of 2016 have already seen a pronounced acceleration in inflation, averaging 3.1%. The introduction of a range of taxes and the removal of further subsidies will maintain domestic pressure on prices in the near term. Beyond 2016, global commodity prices could rise and the momentum of the strengthening US dollar could wane.

In 2015, consumer prices remained muted, and inflation levels averaged 1.8% over the 12 months. Foreign inflationary pressures were absent, given soft global food and commodity prices and an appreciating US dollar. A slowdown in non-traded categories also contributed to the muted rate for the year.

Fiscal balance—in deficit this year and remaining there in the outlook period

The latest data updates suggest that, for the first time in 15 years, there will be a fiscal deficit in calendar year 2016 that will remain through 2017 and 2018. The deficit in 2016 is estimated at 7.8% of GDP, with it staying almost constant in 2017 and recovering somewhat to 4.2% in 2018.

Preliminary data for calendar 2015 put the government's overall surplus at QR21.3 billion, equivalent to 3.5% of estimated nominal GDP. Though contracting from 2014's level, the fiscal balance remained in surplus, despite the steep fall in oil prices, because investment income—largely the financial surplus of Qatar Petroleum—accrues to the budget with a lag, and in 2015 budget revenues were shielded to some extent by the relatively higher oil prices of 2014.

Qatar—Outlook at a glance

	2016	2017	2018
Real GDP growth (%)*	3.9	3.8	3.2
Nominal GDP growth (%)	-2.9	9.0	9.1
Consumer price inflation (%)	3.4	3.6	3.8
Fiscal balance (% of nominal GDP)	-7.8	-7.9	-4.2
Current account balance (% of nominal GDP)	-0.4	0.9	2.8

* In constant 2013 prices.

Source: Estimates from the Ministry of Development Planning and Statistics (MDPS).

External balance—remaining in surplus, yet gradually declining

The current account of the balance of payments is expected to register a small deficit of 0.4% of GDP in 2016, but modest surpluses seem likely in 2017 and 2018. The key factors are Qatar's dependence on hydrocarbon exports and the lower prices expected for them in 2016. The forecast recovery in global oil prices in 2017 and 2018 will support export growth.

Import demand may see some further reduction as projects' capital-equipment needs are scaled down, but should stay supported by demand for materials and rising consumption demand.

Qatar's trade surplus fell by half in 2015 from its 2014 value to 29.2% of nominal GDP. The current account posted a lower surplus, estimated at 8.2% of nominal GDP. The fall in the surpluses was led by lower merchandise export proceeds, which plunged by 39% on lower hydrocarbon prices, although 2015's fall in imports provided a buffer.

Risks to the outlook—mainly from international oil price movements

Most risks to the outlook are grounded in international oil price movements. If oil prices rise more quickly than the forecasts in this *Qatar Economic Outlook*, there will be better outcomes for realised nominal income growth and for fiscal and external balances. But if they remain low for an extended period, the fiscal and external accounts deficit will be more pronounced, requiring funding efforts. The continued volatility in global financial markets spilling over into the domestic economy and squeezing liquidity may imply a higher cost of funding on international markets for Qatari institutions. Other downside risks include delays or cost overruns (or both) in the delivery of key infrastructure projects and a slower than anticipated pace of fiscal reforms.

Part 1—Outlook for 2016–2018

Capsule outlook

Qatar's real GDP growth is forecast to average 3.6% over 2016–2018, on the back of continued expansion in the non-hydrocarbon economy, which although moderating, remains strong. (The non-hydrocarbon economy encompasses all economic activity other than upstream oil and gas production and other mining activities.) Construction will continue to expand through to 2018, though its pace of growth will ebb as existing projects are completed and no additional new assets are built. The service sector will continue to post solid growth and is expected to be the largest contributor to growth, but its pace of expansion, too, will slow, if the foreseen moderation in population growth comes about in 2017 and 2018.

In 2016 and 2017, real GDP growth will be supported also by the hydrocarbon economy, which is expected to grow over the three years. The new gas field Barzan, after some technical delays, is now set to come on stream in the latter half of this year and reach full capacity in 2017. The new Ras Laffan II condensates refinery, set to become operational in late 2017, will add to hydrocarbon output in 2017 and 2018. But despite the uptick to overall growth over the near term, the contribution of the hydrocarbon sector to real growth, which is already low, will continue to diminish.

Consumer price inflation is expected to pick up in 2016 moderately, given the recent hikes to petrol prices in January this year, and the removal of water and electricity subsidies in late 2015. The first four months of 2016 have already seen a pronounced acceleration in inflation, averaging 3.1%. The introduction of a range of taxes and the removal of further subsidies will maintain domestic pressure on prices in the near term. A slight pick-up in global commodity prices, and a forecast softening of the US dollar (to which the Qatari riyal is pegged) will push up imported inflation further in 2017 and 2018.

Risks to the outlook are centred on the movement of international oil prices. If oil prices—already heavily downgraded since the *Qatar Economic Outlook (QEO) 2015–2017 Update* of December 2015—recover faster than forecast, nominal income growth and fiscal and external balances will benefit. But if they remain low for an extended period, the fiscal and external account deficits will be more pronounced, requiring greater funding efforts. The continued volatility in global financial markets spilling over into the domestic economy and squeezing liquidity may imply a higher cost of funding on international markets for Qatari institutions. Other downside risks include delays or cost overruns (or both) in the delivery of key infrastructure projects and a slower than anticipated pace of fiscal reforms.

Table 1.1 provides a summary of the latest forecasts on key macroeconomic indicators for 2016, 2017 and 2018, and box 1.1 looks at some reasons why they vary from forecasts made in the *QEO Update*. The revised forecasts take into account the impact of disruptive events in global energy markets, which is one reason why the margin of uncertainty around the *QEO* point forecasts is greater than in the past. Other revisions to forecasts for 2016 and beyond reflect the latest data releases and revisions, as well as updated assumptions. The forecast methodology and assumptions are outlined in box 1.2.

Table 1.1 Qatar, latest forecasts of key indicators

	2016	2017	2018
Real GDP growth (%)*	3.9	3.8	3.2
Nominal GDP growth (%)	-2.9	9.0	9.1
Consumer price inflation (%)	3.4	3.6	3.8
Fiscal balance (% of nominal GDP)	-7.8	-7.9	-4.2
Current account balance (% of nominal GDP)	-0.4	0.9	2.8

* In constant 2013 prices.
Source: Estimates from the Ministry of Development Planning and Statistics (MDPS).

Box 1.1 Persistence of lower oil prices continues to weigh on the outlook

The box table presents the forecasts made in the *QEO Update* of December 2015 alongside the most recent scenario. Over the intervening period, oil prices have been volatile, but remained suppressed, with Brent averaging $37.6 per barrel over the first five months of 2016.

The impact of lower oil prices is seen most immediately in the forecast for nominal GDP and in the fiscal and external balances. For given production volumes, lower oil prices drag down value added in the hydrocarbon sector and nominal GDP.

Given the sharper than anticipated decline in oil prices observed in 2015, nominal GDP growth fell further than foreseen, by 20.6% (see *GDP growth* in Part 2). With a rebound in oil and gas prices anticipated from 2017, nominal GDP is seen returning to positive territory, having endured two consecutive years of contraction.

As revenues that accrue to the state are highly dependent on royalties and taxes on oil and gas, on investment income from hydrocarbon enterprises and on corporate taxes paid by hydrocarbon entities, lower oil prices depress fiscal revenues and narrow the surplus. Lower oil prices also curtail the value of Qatar's export revenues. On the other hand, slower import growth is now seen as aiding the current account balance, enhancing the outlook from that forecast last December.

The timing and size of these impacts are subject to some uncertainty. They also depend on the actual oil price in 2016–2018. Again, it is worth emphasising that the margin of uncertainty around these estimates is large (see *Oil and gas consensus forecasts*). The estimates for real GDP growth, anchored on broadly known production volumes of oil and gas and related products, are believed to be more solid.

Box table Forecast revisions

	2016[a]	2016[b]	2017[a]	2017[b]
Real GDP growth (%)	4.3	3.9	3.9	3.8
Nominal GDP growth (%)	-0.3	-2.9	9.8	9.0
Consumer price inflation (%)	1.5	3.4	2.0	3.6
Fiscal surplus (% of nominal GDP)	-4.8	-7.8	-3.7	-7.9
Current account surplus (% of nominal GDP)	-3.9	-0.4	-2.8	0.9

a = Forecast made in December 2015's *QEO Update*.
b = June *QEO 2016–2018* forecasts.
Source: Estimates from MDPS.

Box 1.2 Forecast methodology and assumptions

The *QEO*'s forecasts are derived from an internally consistent numerical representation of Qatar's economy, based on standard economic accounting and consistency checks. The framework is based on a flow-of-funds model of the economy in which all sources of funds from the various sectors equal their total uses of funds. The framework has been calibrated and updated with known outcomes for 2015 and data revisions for 2012, 2013 and 2014.

All GDP data forecasts are made on the basis of 2013 prices, following the current practice of the Statistical Directorate of MDPS.

The main forecast assumptions are based on the best assessment of the future made by MDPS and draw on expert opinion as published in a wide range of sources. Those on Qatar's interest rates are based on the declared policy of the Qatar Central Bank (QCB) and expert opinion about the future trajectory of US dollar interest rates. Given expected rate hikes by the Federal Reserve in the near term and the nature of the monetary policy under the QCB's commitment to the exchange rate peg, a gradual increase in the QCB overnight deposit rate is assumed.

Data on budgetary outcomes and prospects are based on Ministry of Finance estimates. Data for the years beyond the budget year are obtained through looking at historical budget trends, and modifying them based on signals about intended policy direction and spending. Assumptions about the external environment are anchored on forecasts from the *World Economic Outlook (WEO)* of the International Monetary Fund (IMF) and from the World Bank. The major assumptions are in the box table.

Box table Forecast assumptions

	2016	2017	2018
Qatar			
QCB's overnight deposit rate (%)	0.75	1.00	1.25
Qatari riyal/$ exchange rate	3.64	3.64	3.64
Total budget spending (QR billion)	211.07	205.96	205.02
Current	161.57	156.29	153.89
Capital	49.50	49.67	51.13
External environment			
Global growth (%)	3.16	3.54	3.64
US LIBOR, 6-month (%)	0.88	1.52	..
Average crude oil price, $ per barrel*	37.88	45.49	48.91
Japanese liquefied natural gas (LNG) price, $ per million British thermal units (mmBtu)	8.00	8.20	8.40

... = not available. * Simple average of Dubai Fateh, West Texas Intermediate (WTI) and Brent.
Source: Consolidated from various sources including QCB, Ministry of Finance, IMF and World Bank.

Economic prospects

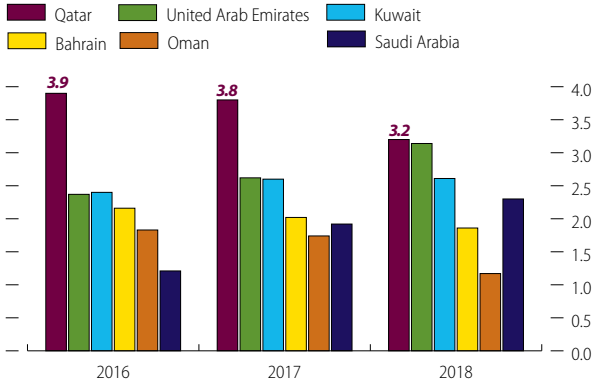
Real economic activity

Volume GDP growth, measured in constant 2013 prices, is expected to grow by 3.9% in 2016, 0.2 percentage points faster than in 2015. Much of this acceleration is attributable to output from the Barzan gas field, which is set to come on stream later this year. Barzan is expected to add about 21% to pipeline gas production. Manufacturing will also grow, as the additional gas output will provide a step increase for the year. Strong momentum in the non-oil and gas sector will be sustained by capital spending on infrastructure and by relatively strong population growth this year.

In 2017 and 2018 real growth will moderate to 3.8% and 3.2%. The expansion of capacity from Barzan will have been completed and the new Ras Laffan II condensates refinery, also set to become operational in 2017, will add to hydrocarbon output over both years. The refinery will produce jet fuel and gas oil to be sold domestically, and export other products including diesel to Asian markets. While robust and broad-based expansion of the non-hydrocarbon economy is expected to continue, it will taper in these two years as government infrastructure spending is expected to peak and as population growth slows.

Despite the lower forecast volume growth rates for Qatar, it is still anticipated to outperform its Gulf Cooperation Council (GCC) peers in the outlook period (figure 1.1).

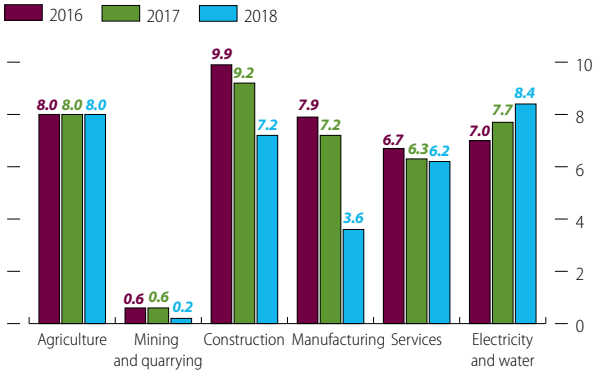
Figure 1.1 Real GDP growth forecasts, GCC (year-on-year change, %)



Note: Forecasts for Qatar are based on the projections of the *QEO 2016–2018*
Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

Construction is expected to lead growth in 2016 and is projected to expand by 9.9% (figure 1.2). Although it will continue expanding through 2017 and 2018, its pace of growth will slow, with the emphasis moving to completing existing investments rather than starting to build new assets. A new integrated power and water

Figure 1.2 Sectoral growth in the economy in constant 2013 prices (%)



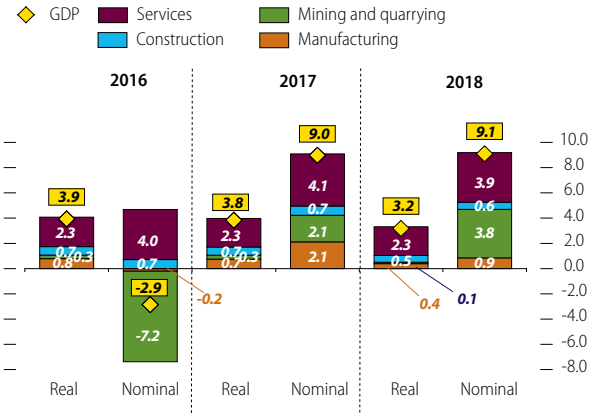
Source: MDPS estimates.

plant (Umm Al Houl) is expected to start operations in 2017 and reach full capacity in 2018, which will add to growth in the utilities sector.

Manufacturing will grow fast, at just under 8% in 2016, as an increase in feedstock from Barzan lifts the production of refined products, fertilisers and petrochemicals. Growing demand for cement and metals from construction and infrastructure projects is expected to sustain momentum in other manufacturing activities. Ras Laffan II will account in large part for manufacturing's vigorous growth in 2017. In 2018, the expansion of capacity from Barzan and Ras Laffan II will have been completed and without any additional planned downstream projects in the near term, manufacturing will grow more slowly.

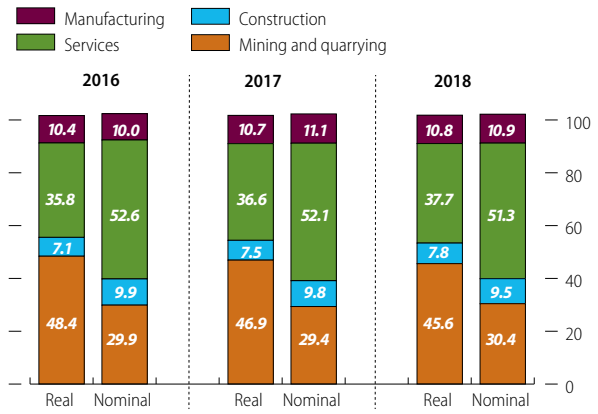
The service sector is expected to continue to post solid growth in the outlook period, and to be the largest contributor to growth. Its share in real aggregate output will continue to rise (figures 1.3 and 1.4). Financial, real

Figure 1.3 Contributions to GDP growth (percentage points)



Note: Rounding errors are attributed to agriculture, imputed bank services (FISIM), import duties and electricity and water, which are not shown in the figure.
Source: MDPS estimates.

Figure 1.4 Share in GDP (%)



Note: Rounding errors are attributed to agriculture, imputed bank services (FISIM), import duties and electricity and water, which are not shown in the figure.
Source: MDPS estimates.

estate, transport and communication, and business services will all benefit from real estate development and infrastructure projects. Trade and hospitality are also seen growing robustly, owing to conference activities and to growth in tourist arrivals, particularly from the region. If population growth comes off a bit, as expected, this will clip service sector growth in 2017 and 2018.

Nominal GDP growth

In current price (or nominal) terms, GDP growth is expected to contract by 2.9% in 2016, reflecting the susceptibility of Qatar's GDP deflator to movements of hydrocarbon product prices, which are set on international markets. (Rising hydrocarbon prices tend to raise the growth rate of nominal GDP relative to that of real GDP, while falling hydrocarbon prices have the opposite effect.)

Having dropped by almost 50% year on year in 2015, the price of Qatar's hydrocarbon basket is expected to fall by a further 25% in 2016. This decrease will register directly in lower income from upstream production and in reduced resources flowing to the state. If, as foreseen, oil and gas prices track back up in 2017 and 2018, nominal GDP growth will resume (see table 1.1).

Inflation

The December 2015 *QEO Update* projection of 1.5% has been revised upward. Annual inflation, as measured by the change in the consumer price index, is now expected to average 3.4% in 2016, and to edge up further in 2017 and 2018.

Average inflation over the four months from January to April 2016 rose sharply to 3.1%. The educational services segment, which has been subdued in the past, has become one of the main drivers of domestic inflation. A media announcement in May that 55 schools in Qatar are expected to raise their fees in the academic year 2016/17 implies that this trend will continue. Countering this trend, the rents segment is forecast to stabilise as population growth plateaus and more housing options become available.

The recent hike in prices of petrol and diesel in January of this year also contributed to pushing up inflation. Furthermore, the recent announcement of a shift to a fuel price formula will add to price pressures, particularly given the gasoline price rally observed in the last two months.

The introduction of a value-added tax (VAT) and the removal of other subsidies will maintain domestic pressure on prices over the outlook period. Qatar has joined the GCC agreement on VAT, which entails a 5% flat rate from 2018, probably pushing up prices further that year.

Foreign sources of inflation will remain muted, but a pick-up in global commodity prices may be seen in 2017 (see *Non-energy commodity markets*). International oil prices are also forecast to recover, and will affect Qatar's domestic fuel price following the formula-driven price scheme. Finally, following its appreciation in 2015 and early 2016, a weakening US dollar may add to imported inflation in 2017 and 2018.

Fiscal outlook

The *QEO* fiscal estimates and forecasts are now made on a calendar year basis. From 2016, the Ministry of Finance is using a calendar year budgeting cycle, allowing for direct comparisons. The *QEO*'s fiscal calculations follow the budget classification of revenues, and thus make no allowance for investment income that accrues to the Qatar Investment Authority or other state funds.

The latest data updates, including those showing lower oil prices, suggest that for the first time in 15 years a fiscal deficit will be seen in 2016 at 7.8% of GDP (from a surplus of 3.5% in 2015). This deficit is more pronounced than that forecast in the December 2015 *QEO Update*, given lower than expected oil prices and thus lower fiscal revenues.

This estimate assumes that the government pares recurrent spending and caps growth of capital spending below previously programmed levels; that there are effective cost reductions in the hydrocarbon sector, which support transfers to the budget; and additional non-oil and gas revenues accrue to the budget. These measures are, however, more than offset by the squeeze on revenues inflicted by lower oil prices and the

consequent reduction in investment income received by government.

Investment income—largely the financial surplus of Qatar Petroleum—accrues to the budget with a lag, and in 2015 budget revenues were shielded to some extent by the higher oil prices that prevailed in 2014. However, this buffer will dissipate in 2016, and the full impact of lower oil prices, which dropped by close to 50% in 2015, will be felt on investment income. In the future, it is expected that the accrual lag will be shortened.

The fiscal balance is forecast to stay in deficit in 2017 and 2018, though reductions in expenditure and a mild recovery in hydrocarbon prices should narrow it relative to 2016.

Balance of payments

The current account of the balance of payments is expected to register a small deficit of 0.4% of GDP in 2016, but modest surpluses seem likely in 2017 and 2018. The key factors are Qatar's dependence on hydrocarbon exports and the lower prices expected for 2016. The forecast recovery in global oil prices in 2017 and 2018 will support export growth. Import demand may see some further reduction as projects' capital-equipment needs are scaled down, but should stay supported by demand for materials and by the consumption demand of a still-increasing population.

With the retreat in the current account surplus, capital and financial outflows will also be pared back. And with tightening liquidity, ongoing activity by the government and banks to raise funds abroad will increase foreign liabilities.

Risks

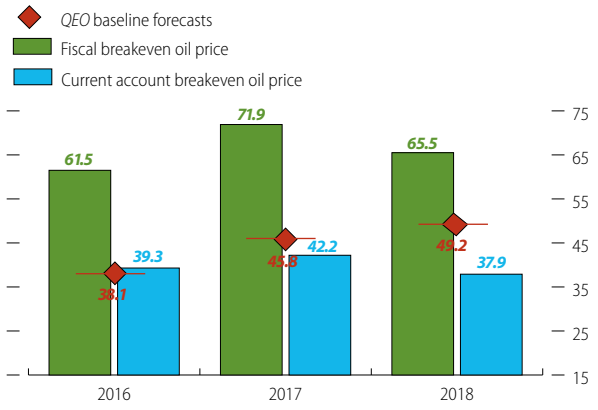
Given Qatar's reliance on hydrocarbon activity, risks to the outlook stem mainly from oil prices: they tumbled in 2015 and the prognosis for oil prices remains highly uncertain (see *Oil and gas consensus forecasts*). If they rise faster than forecast in this *QEO*, realised nominal income growth, as well as fiscal and external balances, will see better outcomes. But if they fall short of projections, the recovery in nominal income growth will be restrained, fiscal balances could deteriorate more sharply and external-payment deficits might occur.

A useful metric for gauging how oil prices have an impact on important outcomes is the "breakeven" price of oil, which can be viewed in two perspectives. Fiscally, it is the price that—for given levels of hydrocarbon output, government spending and non-hydrocarbon fiscal revenues—generates hydrocarbon revenues matching the non-hydrocarbon deficit. In balance-of-payments terms, it is the price needed to cover import costs and the deficit on the income and transfer flows of the current account, given non-oil and gas export revenues.

Figure 1.5 shows the estimated fiscal and current-account breakeven oil prices for 2016–2018 with the baseline oil price underlying this *QEO*'s forecasts. It considers a wide range of channels through which oil prices register on fiscal revenues, including the oil price effect on realised gas prices (which trail oil price movements), investment income and corporate taxes paid by hydrocarbon entities; and takes into account lags in the transfer of those revenues to the government budget.

As these delays can be up to one year, the fiscal balance depends not only on the current oil price but also to some extent the price in the previous calendar year. The calculation of the current account breakeven price depends on factors driving import demand and prices, remittances and transfers, and non-oil and gas exports.

Figure 1.5 Breakeven price of oil under different scenarios ($ per barrel)



Source: MDPS calculations.

For 2016, both sets of breakeven prices are higher than the baseline price assumptions, explaining the deficits anticipated in both accounts for the year. However, the average oil price for the year through to 26 May remains a shade under the *QEO* forecast, at $37.6 for Brent crude.

The difference between the forecast and breakeven fiscal oil price for 2016 is steep at over $20. Nonetheless, this *QEO*'s breakeven oil price is considerably lower than that projected in December, given the government's recent efforts to scale back spending. Nonetheless, oil prices have been on a rising trend since late January (with Brent reaching $49.7 on 26 May), and if they continue prices will average higher than forecast (see *Prospects for energy and commodity markets*).

This *QEO* forecasts that, for the current account to balance, average oil prices need to nudge up by just over $1 from the forecast price for the year, and given recent developments the outcome of a positive current account balance may happen. The forecast of this *QEO* relies on World Bank and IMF forecasts for oil and gas prices, which are in the middle range against others' forecasts for 2016, but at the lower end for 2017 and 2018 (see *Oil and gas consensus forecasts*).

Given the lower oil price forecast for 2016, financial surpluses of hydrocarbon entities and investment income received by the government in 2017 will shrink further. The loss of this income lifts the estimated fiscal breakeven price to $71.9 in 2017—nearly one third higher than the baseline price assumption of $45.8.

Risks of accelerating inflation may materialise if imported inflation gathers pace faster than now forecast. A global commodity supply shock, a sudden further depreciation of the US dollar or an unexpected global demand recovery would add to local price pressures. Recent increases in the prices of utilities, and the phased removal of domestic petrol and diesel subsidies, may push domestic inflation up, particularly in the coming summer months. The potential removal of other consumer subsidies, as part of the state's efforts to rationalise spending, could push consumer price inflation up further.

Finally, domestic liquidity conditions have been tightening and may continue to do so. Government deposits with the commercial banking system have come down, as have deposits with QCB, and the anticipated normalisation of monetary policy in the US could eventually put upward pressure on riyal interest rates. The Qatar Interbank Rate, which has been fairly stable over the past year at just over 0.8%, spiked above 1% in January 2016 and reached 1.3% at end-May. Measures that aim to buttress financial market soundness will help to protect against risks, but will also constrain banks' ability to lend (see Part 2, box 2.1).

Consensus forecasts—GDP and inflation

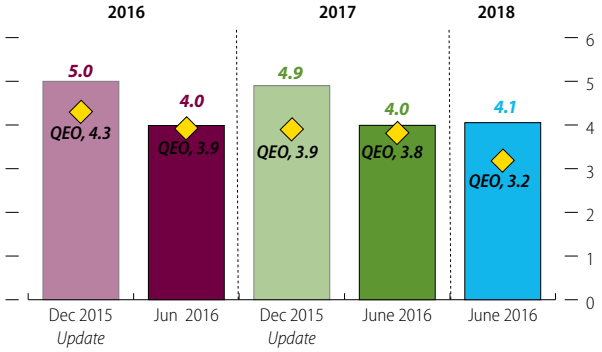
Table 1.2 presents a summary of the latest publicly available economic forecasts for 2016, 2017 and 2018. A consensus view of Qatar's prospects is obtained as the mean/median of all projections polled. The table also includes the consensus (mean) estimate as given in December 2015's *QEO Update* and this *QEO's* forecast.

Since December's *Update*, the consensus real GDP growth forecasts for 2016 and 2017 and nominal GDP growth for 2016 have been revised downwards. In parallel, the consensus inflation forecast is estimated to be a nudge lower as well.

Real GDP growth, 2016–2018

Consensus real growth estimates for Qatar over 2016 to 2018 are more or less stable at around 4%. Most forecasters decreased their real GDP forecast for 2016 and 2017, reflecting the impact of lower oil prices on the real economy through subdued government spending. The updated consensus mean forecast for real growth in 2016 and 2017 is 4.0% for both years, lower than the consensus forecast in December 2015 of 5.0% and 4.9% (figure 1.6). The forecast for 2018 is marginally higher at 4.1%.

Figure 1.6 Consensus and *QEO* estimates of real GDP growth in Qatar, 2016–2018 (%)



Source: MDPS estimates based on forecasts consolidated from various reports and news articles.

The forecasters have a wider range of views on the impact of lower oil prices on the real economy. For 2016 both the standard deviation and the coefficient of variation have increased relative to the December 2015 forecast (from 0.7 to 0.8 and from 15.9% to 19.7%). Citigroup once again provided the lowest real growth estimate of 2.3%, forecasting a sharp drop in activity in the non-oil and gas sector moving forward. The highest growth forecast is from the National Bank of Kuwait at 5.4%, which sees non-oil and gas growth continuing at a fast clip.

The story is a similar one for 2017, where the divergence between forecasters' views has also increased from that in December 2015. The fall in oil prices and consequent decisions to curb government spending, the stress on banking sector liquidity (box 2.1 in Part 2), and general economic sentiment are reflected in a wider dispersion of forecasts. Adding to the climate of uncertainty are the timing and speed of anticipated interest rate increases in the US, among other elements. The variance of forecasts has increased from the earlier December poll, with the increase most pronounced for 2017.

Table 1.2 Poll of economic forecasts for Qatar, 2016–2018 (%)

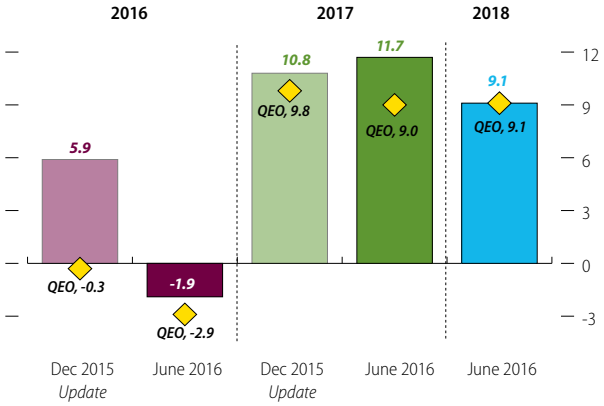
Economic forecaster	Real GDP growth			Nominal GDP growth			Inflation		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
BNP Paribas (May 16)	5.3	4.5	..	..	..	..	2.9	3.0	..
Business Monitor International (May 16)	5.0	4.8	5.3	-0.1	14.2	8.9	2.7	2.5	2.8
Credit Agricole (Apr 16)	4.5	4.5	..	..	..	..	2.7	3.0	..
Citigroup (May 16)	2.3	2.3	..	0.3	21.3	..	1.0	2.0	..
Economist Intelligence Unit (May 16)	3.0	3.2	3.6	-9.2	10.5	..	4.2	4.8	5.5
Emirates NBD (Mar 16)	4.1	5.2	..	..	..	..	1.7	2.5	..
Fitch Ratings (May 16)	4.1	3.4	..	-4.4	13.1	..	3.6	4.0	..
HSBC (May 16)	3.6	3.3	..	-13.8	10.7	..	2.3	1.8	..
IHS Economics (May 16)	4.1	4.8	..	4.5	9.7	..	2.4	2.8	..
Institute of International Finance (May 16)	3.7	3.8	3.6	-0.9	10.3	6.7	3.0	2.2	2.5
IMF (Apr 16)	3.4	3.4	2.9	-7.8	6.1	10.1	2.4	2.7	2.8
JP Morgan Securities plc (May 16)	3.3	3.1	..	..	..	..	3.8	4.4	..
Moody's Investor Service (May 16)	4.1	3.9	..	..	..	..	2.9	2.5	..
National Bank of Kuwait (Mar 16)	5.4	5.1	..	8.4	11.5	..	2.4	3.0	..
Oxford Economics (April 16)	3.6	3.7	4.5	8.1	11.0	11.0	3.3	3.8	4.0
SAMBA (Mar 16)	3.9	4.0	4.2	-1.0	14.3	..	2.5	3.0	3.4
Standard and Poor's (Mar 16)	3.9	4.0	4.3	-6.5	8.0	8.6	2.0	2.5	2.5
Standard Chartered (May 16)	4.5	4.8	..	..	..	..	2.4	3.2	..
Consensus (mean)	4.0	4.0	4.1	-1.9	11.7	9.1	2.7	3.0	3.4
Median	4.0	4.0	4.2	-1.0	10.8	8.9	2.6	2.9	2.8
High	5.4	5.2	5.3	8.4	21.3	11.0	4.2	4.8	5.5
Low	2.3	2.3	2.9	-13.8	6.1	6.7	1.0	1.8	2.5
Standard deviation	0.8	0.8	0.8	6.8	3.8	1.6	0.8	0.8	1.1
Coefficient of variation (%)	19.7	19.8	19.2	-365.2	32.7	18.0	28.3	27.1	32.2
Memo items									
Consensus (mean) (Dec 2015)	5.0	4.9	..	5.9	10.8	..	2.8	3.1	..
MDPS forecasts (June 2016)	3.9	3.8	3.2	-2.9	9.0	9.1	3.4	3.6	3.8

... = not available.
Source: Consolidated from various reports and news articles.

Fewer observations are available for 2018 than for 2016 and 2017, making averages more susceptible to variations between them. The consensus real GDP growth estimate is a shade higher for 2018 than for 2016 and 2017, at 4.1%, with a similar standard deviation estimate but a lower coefficient of variation of 19.2%.

Against this backdrop, the latest *QEO* forecasts show a differing pattern from that presented in the consensus. This *QEO*'s real GDP growth estimates for 2016 and 2017 have been lowered from December's forecasts, at 3.9% for 2016 and 3.8% for 2017. For 2018 the *QEO* growth estimate is 3.2%, placing the *QEO* estimates below the consensus mean for all outlook years (see figure 1.6). The reasoning behind the revisions to the *QEO* forecasts are set out elsewhere (boxes 1.1 and 1.2).

Figure 1.7 Consensus and *QEO* estimates of nominal GDP growth for Qatar (%)



Source: MDPS estimates based on forecasts consolidated from various reports and news articles.

Nominal growth 2016–2017

Nominal growth forecasts for 2016 are mostly in negative territory. The consensus estimate is for a contraction of 1.9% (figure 1.7). However, the forecasts present the most divergence observed since the first *QEO* consensus table was published in June 2011, with the standard deviation rising to 6.8 (from 4.0 in December), and the coefficient of variation rising to a staggering -365.2%. While most analysts anticipate a decline in nominal GDP owing to lower oil prices, a handful foresee a recovery in oil prices

sufficient to support an expansion of nominal GDP (see *Oil price consensus below*).

As the impact of lower oil prices on nominal GDP growth is transitory and as oil prices are expected to drift up in 2017 and 2018, consensus forecasts for nominal growth are uniformly positive in those two years at 11.7% and 9.1%. There is also far less dispersion in the estimates for 2017 and 2018, reflecting agreement on the upward trajectory of oil prices.

The present *QEO* forecasts follow the trend observed in the consensus estimates, but with a larger fall in nominal growth than the consensus estimate because, for 2016, it anticipates a steeper decline in the GDP deflator, given a lower oil price forecast and a faster assumed pass-through to oil and gas revenues. It is likely that some analysts have assumed that LNG revenues are more resilient to oil price falls, which implies a lower fall in government revenues than projected in the *QEO*. The *QEO* also projects lower average oil prices in 2016 than the consensus. For 2017 the *QEO* forecast growth rate of 9.0% in nominal GDP also falls below the consensus. In 2018 it is the same as the consensus.

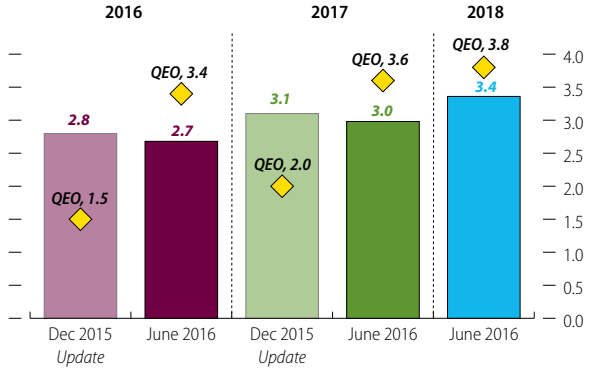
Inflation forecast 2016–2018

Analysts expect a gradual pick-up in consumer price inflation over 2016–2018, from 2.7% to 3.4% (figure 1.8). The consensus forecasts are lower than those reported in December 2015's *QEO* for all outlook years. The strength of the nominal effective exchange rate of the US dollar (to which the Qatari riyal is pegged), subdued global commodity prices, and a possible weakening of demand growth in a context of lower oil prices explain these revisions.

The latest *QEO* forecasts present a similar trend, albeit from a higher base. A 30% increase in fuel and diesel prices in mid-January 2016 and April's announcement of a new oil price formula to determine fuel prices in the future will push inflation upward. Partial removal of subsidies, which began in late 2015, raised utility (electricity and water) prices, and a further rise may be brought in to bring the price paid by consumers closer to fair market value.

The possibility of new taxes, such as a "sin tax" (on items deemed harmful to individuals, like tobacco, fast foods, and soft drinks), and the introduction of the VAT in 2018 will nudge up Qatar's consumer price inflation.

Figure 1.8 Consensus and *QEO* inflation forecasts for Qatar (%)



Source: MDPS estimates based on forecasts consolidated from various reports and news articles.

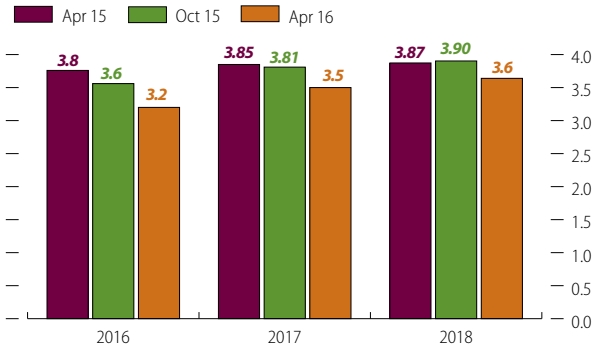
Global economic prospects

In its *World Economic Outlook (WEO)* of April 2016, the IMF, for the third consecutive time, downgraded its global growth forecast for 2016, by 0.4 percentage points from its October 2015 forecast (figure 1.9). This reduction in the prospects for growth in 2016 is driven mainly by a prolonged tardy and disappointing recovery in the global economy, following the crisis that began in 2009.

Advanced economies experienced a slowdown in economic activity in 2015, further dampening their growth outlook. The continued rebalancing of China's economy into a more sustainable consumer-driven economic model will further moderate global growth potential, given its size and influence on the global stage.

Against this subdued backdrop, and the possibility of a natural business-cycle downturn in the near term, levels of uncertainty have risen and imply heightened risks to the baseline outlook. These risks stem from political crises in countries like Brazil, Venezuela, Nigeria and South Africa, and uncertainty in the European Union (with a referendum in the UK on 23 June on whether that country leaves the bloc). The chances of even lower growth outcomes are becoming more plausible (box 1.3).

Figure 1.9 Global real GDP growth projections (%)



Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

Box 1.3 Heightened downside risks dampen the outlook

The *WEO* presents a base-case scenario (on which the *QEO* anchors its projections) along with alternative downside and upside scenarios. The baseline presented in the April 2016 *WEO* has been reduced from that in October 2015, after disappointing global growth in the last quarter of 2015. Further, a perceived escalation of global risk factors has rendered the downside scenario more likely than previously thought.

The increased risks to global growth stem from a slew of mutually reinforcing factors. The first comes from China's economic transition to a more consumer-driven economy, which has led to strong international spillovers in global trade, lower commodity prices, and reduced investor confidence. Lower oil prices have led to fiscal pressures in oil exporters, which are cutting spending as revenues erode fiscal buffers, diminishing demand.

Second, tighter global financial conditions—at a time when emerging markets have reduced their fiscal buffers and when oil exporters are now regarded as carrying higher sovereign risk—are seen dampening the growth outlook. In the European Union, a potential UK exit and persistent low inflation, coupled with remaining debt in periphery countries, are becoming larger concerns. A Greek exit from the Euro remains a possibility, but its repercussions and risks of contagion for other eurozone members will likely be limited.

Finally, a higher rate of terrorist attacks and conflicts in oil-producing countries cannot be discounted.

If any of these risks materialise, the view is that, in an environment of negative interest rates and quantitative easing, countries have little policy space to effectively counter negative economic shocks, implying that a sluggish global economy may be more likely and a recovery to pre-crisis growth levels more elusive.

Nonetheless, the IMF foresees that growth will pick up in 2017, albeit at a slower rate than it previously forecast.

The IMF attributes most of the growth share to emerging markets, where oil-importing economies will benefit from lower oil prices and terms-of-trade gains. The softening of the US dollar from its rally in 2015—as the Federal Reserve at its March policy meeting revised its expectations for the number of interest rate rises for the rest of the year—will alleviate pressure on exchange rates pegged to the US dollar in 2016. For advanced economies, the *WEO* lowered growth rates as the November election weighs on the US, the UK plans for a referendum on staying in the European Union, and Japan implements a consumption tax increase, dampening demand and collectively reducing the OECD growth outlook.

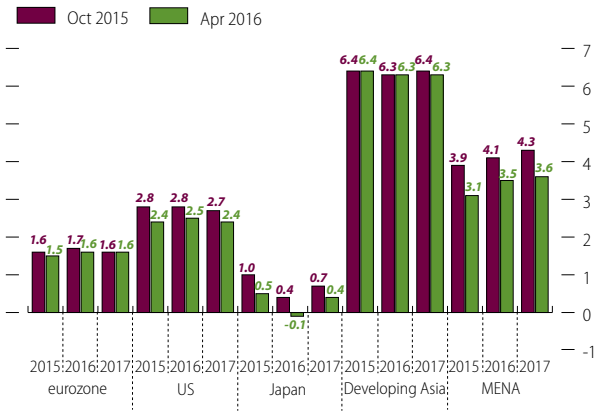
Looking beyond 2017, the IMF expects global growth to pick up, but relies on key assumptions, including China's successful rebalancing, a pick-up in oil prices leading to commodity-exporters regaining growth momentum, and emerging market resilience.

The IMF cut the growth outlook for all major economic regions, except developing Asia, where it kept the outlook almost unchanged (figure 1.10). It expects continued weakness in Europe's growth rate over the medium to long term, lowering the outlook and maintaining it at a tepid 1.5% for 2016 and 1.6% for 2017 and 2018. It sees growth rising in, for example, Germany, France and Italy, while low investment, weak productivity gains, and aging populations, as well as overhang effects on skills from long-term high rates of unemployment, reduce the outlook for Spain, Portugal and Greece. Overall potential growth remains weak in the eurozone after what the IMF terms the "crisis legacies" of high levels of private and public debt, slow factor productivity growth and low capital spending, which when coupled with slow policy action and political turmoil, have been hard to respond to. In the US, higher consumption has sustained faster expansion than in Europe, but the IMF projects a tapering due to sluggish total factor productivity growth.

Forecasts for developing Asia see growth continuing steadily, with only fractional year-to-year variations. With a fast-growing middle class that is pushing up household consumption, the world's most populous region is expected to see the strongest expansion rates globally.

In the Middle East and North Africa (MENA), growth is still expected to be faster than anywhere else but developing Asia, as the IMF sees conditions in energy-importing countries improving over time. But the forecast levels have been cut significantly from those

Figure 1.10 Regional real GDP growth projections (%)

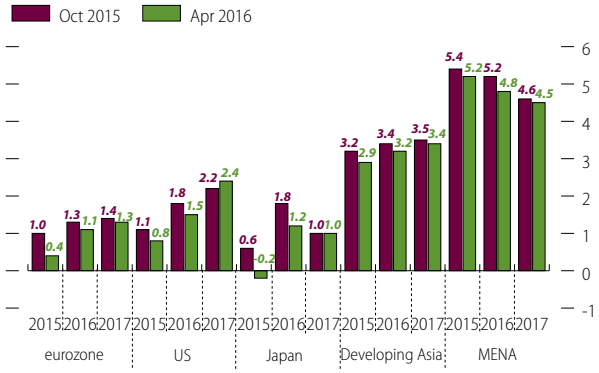


Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

made last October, given the persistence of lower oil prices and the resulting fiscal pressure in oil-exporting countries, where growth is expected to be slower than forecast in October's *WEO*.

The *WEO* lowered most expectations for inflation in 2016, 2017 and 2018 across all regions (figure 1.11), largely owing to weaker oil prices, which also feed into prices of other energy-intensive goods. Inflation in most advanced economies is seen as remaining below central bank targets in 2016, rising gradually in 2017 and 2018.

Figure 1.11 Regional inflation projections (%)



Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

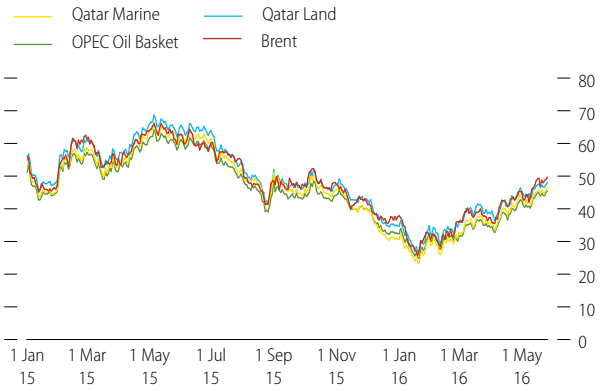
In the eurozone, inflation is expected to pick up following monetary stimulus provided by quantitative easing adopted by the European Central Bank (ECB) in the last few years. In its latest meeting of 10 March 2016, the ECB announced the expansion of its monthly asset purchase program as of April, the introduction of a new series of targeted long-term refinancing operations in June, and lowered all interest rates by 5 to 10 basis points. In MENA the outlook for inflation has improved, and although it remains high relative to other major economic regions, it is seen continuing to decline over the outlook period, reaching as low as 4.5% by 2018.

Prospects for energy and commodity markets

Oil prices

Crude oil prices bottomed in the third week of January 2016 when Brent hit a low of $25.8 per barrel, and reached its 2016 high on 26 May at $49.7. Similarly, the Qatar Marine blend price hit a low of $23.2 in late January and reached its 2016 high in late May, at $46.4 (figure 1.12). Qatar Marine blend prices track Brent prices, which are the most followed internationally.

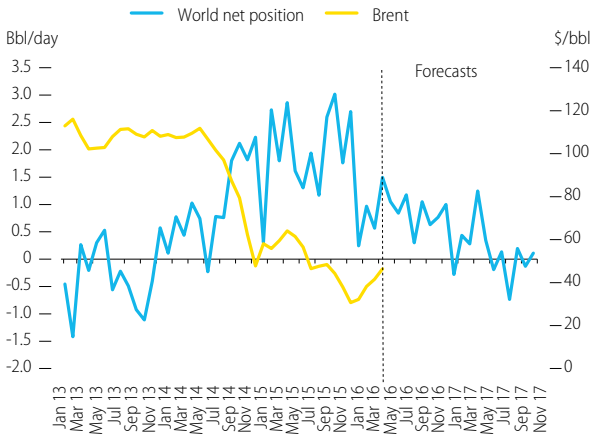
Figure 1.12 Qatari and international oil prices ($ per barrel)



Source: Thomson Reuters EIKON, ICIS Pricing, and OPEC, accessed 29 May 2016.

The global oil price correction was driven by a supply and demand mismatch, in part due to supply disruptions (box 1.4), and anticipation by forward-looking market participants that the oil market would be in balance in late 2016 (figure 1.13).

Figure 1.13 World net petroleum and liquids position (million barrels per day) and Brent ($ per barrel)



Note: World net petroleum and liquids position is equal to total world production net of total world consumption.

Source: US Energy Information Administration (U.S. EIA), International Petroleum and Other Liquids Production and Consumption, accessed 10 May 2016.

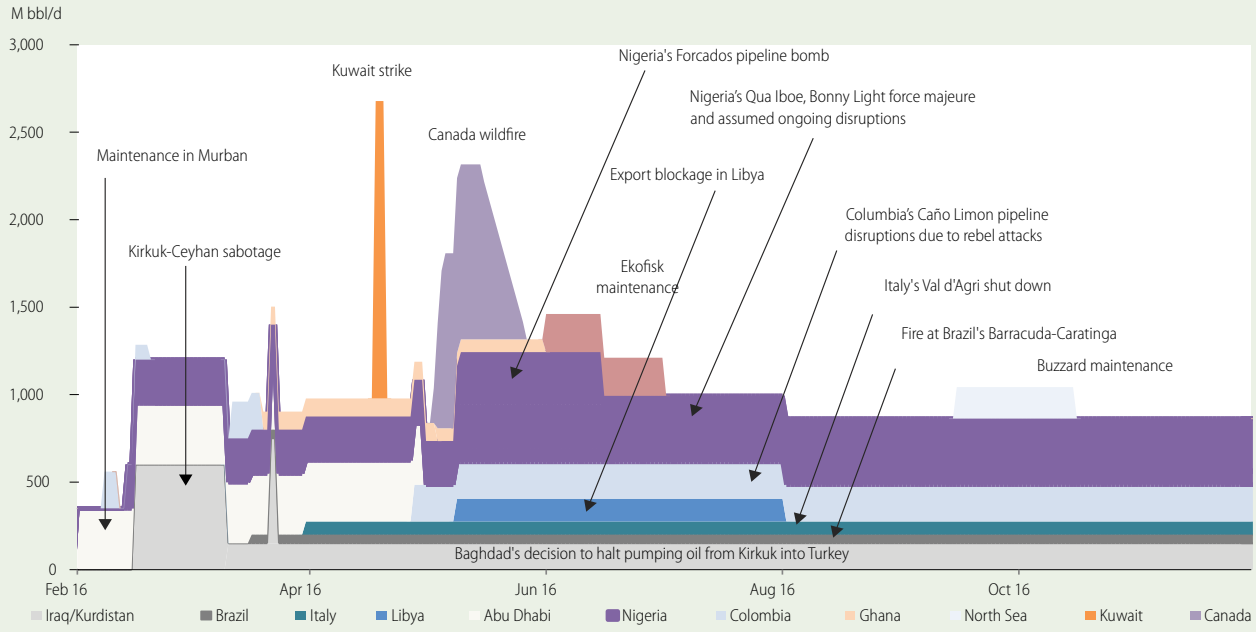
Global liquids production is foreseen to increase by over 1.6 million barrels per day by the end of 2017 from May's estimated levels (figure 1.14). Nearly three quarters of that rise is expected to originate in OPEC countries, which continue to pump at near full capacity. Over 60% of these OPEC gains will be from condensates and natural gas liquids (not crude oil), much of which is to come from Iran. Non-OPEC production, which has been bolstered by US shale production, will increase only marginally, with production levels in the US plateauing (box 1.5).

Despite high inventories in the developed world, global demand in 2016 is foreseen to increase by about

Box 1.4 Supply disruptions lift prices in early 2016

Supply and demand fundamentals, which had been the main driver behind the lower oil price spell of 2015 (following high levels of supply) converged sooner than expected. Elevated production outages led to supply disruptions, which analysts expect to continue throughout the rest of 2016 (box figure). OPEC producers account for the majority of oil outages led by Libya (civil war), Nigeria (pipeline bombing), Iraq (pipeline explosion) and Kuwait (oil workers' strike). Outside OPEC, Ghana has had unplanned maintenance, Canada's production was knocked down a fifth by wildfires in Alberta, and North Sea production is scheduled for multiple periods of maintenance.

Box figure Supply disruptions



Source: Goldman Sachs Global Investment Research, dated 15 May 2016.

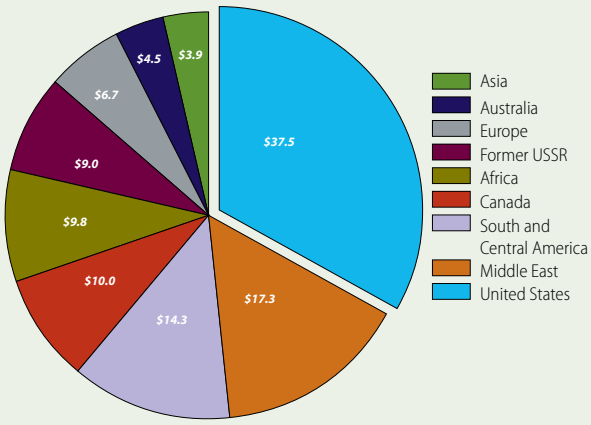
Box 1.5 The US as the new swing producer

In recent years, the US has superseded Saudi Arabia as the world's swing oil producer. But with the majority of drillers dependent on bank and investor financing, a drop in oil prices has tightened credit lines, and over 60 US oil and gas companies have declared bankruptcy since the oil rout began, and more may well do so.

Deals have proven elusive for US producers, despite their efforts to curtail debt by putting on the market assets worth an estimated $37.5 billion in the first quarter of 2016 (box figure). And so they are increasingly locking in future revenue and reducing downside risk by hedging.

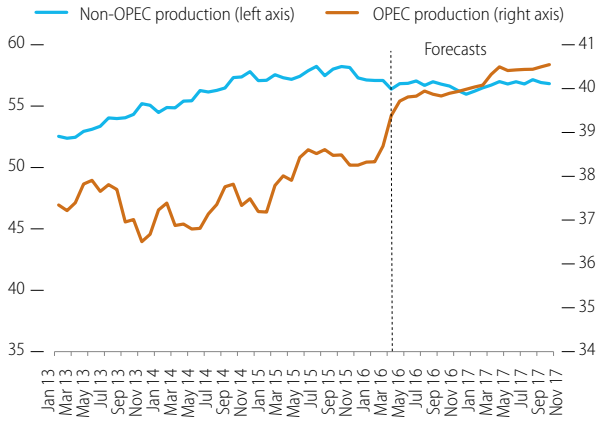
With many shale producers selling forward a large share of their 2017 projected production, and oil close to $50 per barrel, which many producers have identified as the point where they would reinstate production volumes, a palpable reduction of aggregate US oil supply may not materialise in the outlook period.

Box figure Assets being sold, by region ($ billion)



Source: 1Derrick Pty, http://www.reuters.com/article/us-oil-m-a-idUSKCN0Y11RK.

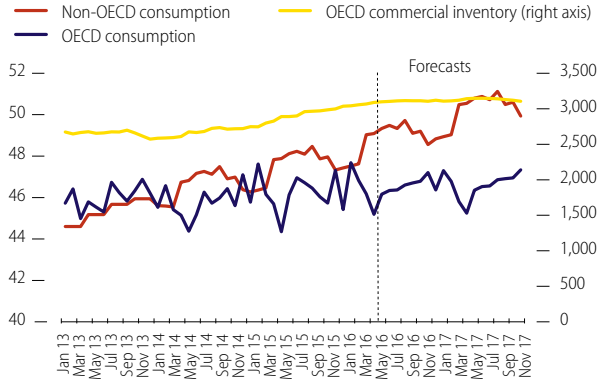
Figure 1.14 Global liquids production (million barrels per day)



Source: U.S. EIA, *Short-Term Energy Outlook*, Table 3a, accessed 10 May 2016.

1.3 million barrels per day over 2015 levels, and will outpace the projected global supply increase by a factor of two (figure 1.15). The overwhelming majority of demand will originate in developing countries, led by India, reflecting rapid economic and population growth.

Figure 1.15 Global liquids consumption (million barrels per day)

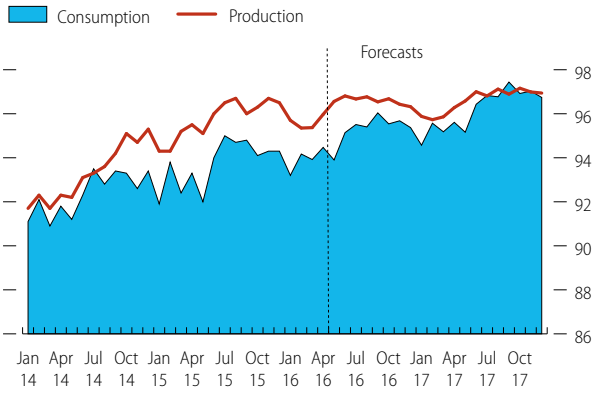


Source: U.S. EIA, *Short-Term Energy Outlook*, Table 3a, accessed 10 May 2016.

Most forecasters are of the view that oil prices bottomed in early 2016 and see them continuing to track up over the rest of 2016 as market fundamentals restore balance (figure 1.16). Driving the decline in global supplies have been cutbacks of over $207 billion in capital expenditure in oil developments globally, concentrated primarily in high-cost deepwater projects (figure 1.17).

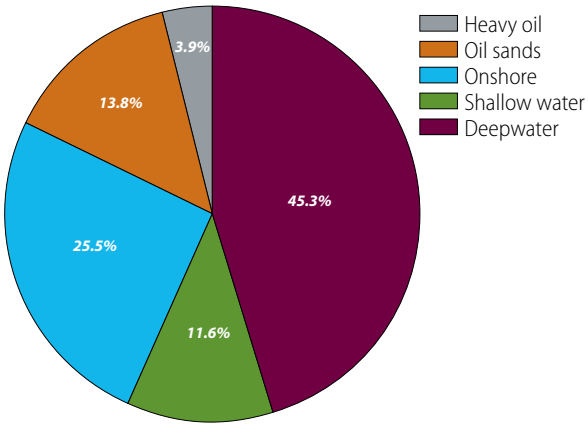
In its May 2016 *Oil Market Report*, OPEC foresees non-OPEC production falling by about 0.74 million barrels per day this year. In addition to the US (where OPEC sees supply dropping by 430,000 barrels per day), declines are expected in China, Mexico, UK, Kazakhstan and Colombia. The International Energy Agency, in its *Oil*

Figure 1.16 International crude oil and liquid fuels, global demand and supply (million barrels per day)



Source: U.S. EIA *Short-Term Energy Outlook* database (http://www.eia.doe.gov/steo/cf_query/index.cfm), accessed 10 May 2016.

Figure 1.17 Delayed oil project CAPEX, by theme



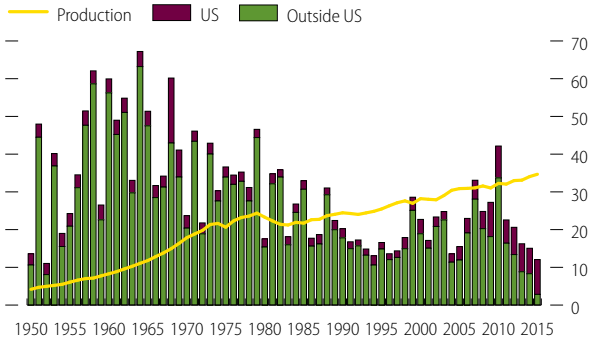
Source: Rystad Energy UCube, dated 25 May 2016.

Market Report of May 2016, noted that global oil demand was growing faster than anticipated in January, with gains coming primarily from India, China and Russia.

The medium-term oil price outlook in 2017 and beyond is less certain. New discoveries of oil deposits in 2015 fell to their lowest level since 1952 (figure 1.18), pointing to a potential significant tightening at the end of the forecast period. Over three quarters of newfound oil deposits in 2015 were in the US, among which the majority were unconventional resources that have sharp annual decline rates (with year one declines often around 70%).

Over 2016–2018, the oil and gas industry is expected to invest close to $40 billion a year in exploration and appraisal, which is less than half the annual amount seen in 2012–2014. Additional OPEC supply could, however, come to the market from Saudi Arabia, Iraq and Libya, as well as from Iran as sanctions are loosened and investments increase. The market outlook will also be

Figure 1.18 Oil liquids: Discovered resources and annual production (billion barrels)

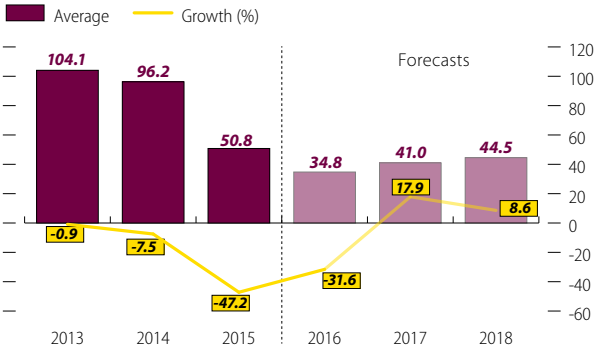


Source: Morgan Stanley and Rystad Energy, http://uk.reuters.com/article/uk-oil-exploration-idUKKCN0YE1F4.

heavily influenced by demand prospects in China and the rest of developing Asia.

Largely in line with this outlook, the IMF's April 2016 *WEO* expects average crude oil prices to reach $34.8 per barrel in 2016, increase by 17.9% to $41.0 in 2017 and rise a further 8.6% to $44.5 in 2018 (figure 1.19).

Figure 1.19 Average crude oil price ($ per barrel)



Note: Simple average of three spot prices: Dated Brent, WTI and Dubai Fateh.
Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

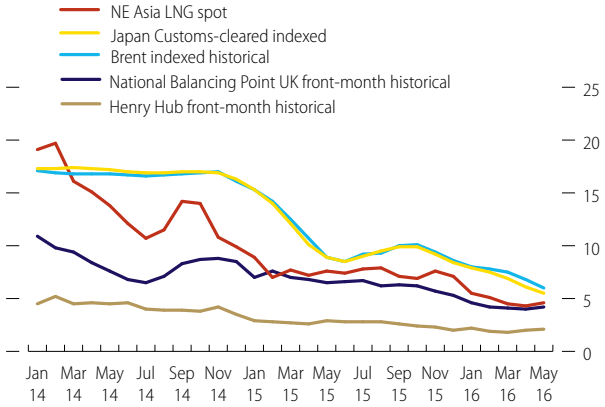
These forecasts do not reflect any production ceilings or price targeting strategy that may be agreed to in OPEC's June 2016 biannual meeting. Despite the breakdown in talks in Doha centred on an output freeze in April 2016, and a subsequent rise in prices due to supply disruptions, several OPEC members are keen for more aggressive measures to stem supplies further, which may lead to some sort of agreement.

Gas prices

Gas prices are more important to Qatar than oil prices, given that the value of gas exports exceed those of crude oil. In fact in 2015 the value of LNG exports alone exceeded all other hydrocarbon products, accounting for an estimated 46% of total merchandise exports. Around a quarter of Qatari LNG is sold at spot prices, the rest under long-term oil-indexed contracts (with a lag). As a share of LNG exports, nearly two thirds went to Asia in 2015, where higher prices prevailed.

Global LNG prices have fallen sharply over the past six months owing to overcapacity in the industry (figure 1.20). Qatar has kept its production capacity since 2011, but new exports from Australia and the US have started to come online. With the majority of those from Australia going to Asia, coupled with Japan resuming operations of some nuclear plants, prices in Japan have dropped the most, but are still the highest regionally. Japan Customs-cleared indexed prices fell by 40.1% between 1 November 2015 and 1 May 2016. US Henry Hub–linked prices have inched down by only 8.5% over the period. Lower prices are typically seen in the US, where most gas is sold spot, and are highest in Japan, where gas is sold under long-term contracts indexed to Japan Customs-cleared crude prices.

Figure 1.20 LNG prices ($/mmBtu)



Source: Thomson Reuters EIKON, accessed 23 May 2016.

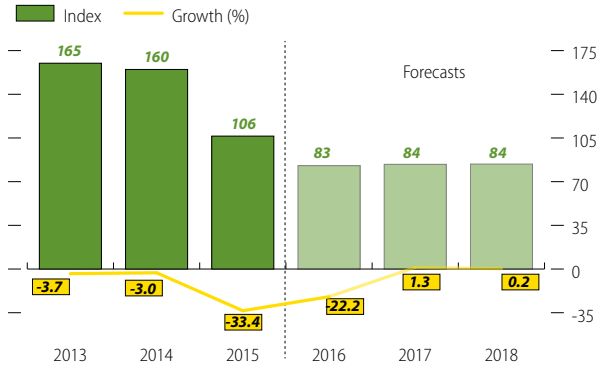
The band separating US and Japanese natural gas prices has narrowed a lot over the past few months, reaching $5.9 in April 2016.

In a context of surplus shipping capacity and a looming glut in global LNG supplies, Qatar intends to consider and follow innovative marketing policies to protect its market share, while continuing to favour long-term supply agreements for its LNG exports.

With LNG spot prices fetching less and a projected oversupply of LNG, the IMF's April 2016 *WEO* revised down its forecast for average natural gas prices in 2016—a weighted average of Japanese, US and European prices—by 10.8% relative to the *WEO* forecast

in October 2015. It sees prices in 2017 and 2018 staying largely flat (figure 1.21).

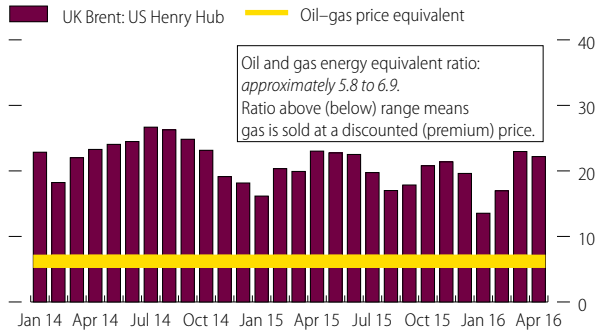
Figure 1.21 Natural gas price index (2005 = 100)



Note: The index is a weighted average of European, Japanese and US prices.
Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

Natural gas continues to be sold at prices below the energy equivalent parity with oil, which is about six (figure 1.22). In the first four months of 2016, the oil–gas price discount wavered, and the oil to natural gas price ratio averaged 18.9, similar to the ratio a year earlier. It registered its lowest recent rate in six years in January 2016, but shot up as oil prices recovered.

Figure 1.22 Spot price ratios: Crude oil to gas



Sources: World Bank Commodity Markets database (http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21574907~menuPK:7859231~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html) and U.S. EIA *Short-Term Energy Outlook* database (http://www.eia.gov/dnav/pet/pet_pri_spt_s1_m.htm), both accessed 10 May 2016.

Lower natural gas prices are expected to stretch throughout the forecast period, as a result of numerous LNG projects set to come online worldwide. With LNG markets oversupplied until the end of this decade, spot prices are not likely to pick up much, if at all. Energy companies have historically signed 25-year gas supply contracts with buyers, which have acted as a guarantee to finance capital injections in excess of the $10 billion needed to support the construction of new LNG facilities.

Recent price shifts, however, have given impetus to buyers, who are increasingly looking to either renegotiate long-term deals or simply buy on the spot market. The spot LNG price in May—$4.24 per million BTU in Asia—was 42% lower than a year ago.

In contrast, LNG prices under long-term contracts indexed to oil prices are expected to recover and exceed spot prices. Qatari LNG export contracts with key east Asian clients have not been renegotiated in recent months, and therefore attained prices in the forecast period are likely to be higher than elsewhere.

Oil and gas consensus forecasts

The vast majority of forecasting agencies have revised down their forecasts for oil prices in light of the price drop through January, with Brent consensus projections down 29.0% for 2016 and 18.1% for 2017 from those reported in December. Yet prices have since recovered strongly, leading many analysts to revise prices up again.

Over the longer term, however, fundamentals remain the driving force as both demand and supply respond to real prices. With lower prices, an estimated $290 billion of projects have been cancelled or deferred worldwide as of May 2016. This curtailment in investment will translate into lower available supply, while demand is expected to continue expanding.

Short-term forecasts of the oil price have rarely proven accurate. Given the complex and often unpredictable mix of factors that can have an impact on short-term price movements, the average absolute forecast error as a proportion of the average price (one month ahead) was 9.0% between January 2014 and April 2016 (figure 1.23).

A wide range of institutions publish their views on the future trajectory of oil and gas prices (table 1.3).

Expert forecasts of oil prices diverge widely for 2017 and perhaps inevitably more so for 2018: the spread between forecasts for Brent spans $47 in 2017, stretching to $52 in the following year. The most bearish price forecasts for Brent are $38.0 per barrel in 2017 and $43.0 in 2018. The World Bank and IMF price forecasts are notably below the consensus mean and median.

The price difference between Brent and WTI is expected to increase over the forecast period. Before 2010, WTI traded at a premium to Brent. This premium was subsequently reversed as large quantities of crude from North Dakota and Canada flowed into Cushing, the major trading hub for oil cargoes in the US. The consensus is that the premium on Brent will rise to $1.13 per barrel in 2017 and further to $1.81 in 2018, from an

Table 1.3 Poll of oil and gas prices, 2016–2018

Forecaster	WTI ($/bbl)			UK Brent ($/bbl)			Natural Gas (US Henry Hub, $/mmBtu)		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
ABN AMRO (May 16)	45.0	60.0	65.0	45.0	60.0	65.0	2.8	3.3	
Banco Português de Investimento (May 16)	40.0	45.0	55.0	42.0	47.0	57.0			
Bank of America (May 16)	45.0	59.0	67.0	46.0	61.0	70.0			
Bank of Nova Scotia (Mar 16)	40.0	55.0	60.0	41.0	56.0	62.0	2.2	2.7	3.5
Barclays (May 16)	42.0	59.0		44.0	60.0		2.5	3.1	
Bernstein (May 16)	48.0	68.0	78.0	50.0	70.0	80.0			
BMO Capital Markets Corp/Toronto (May 16)	40.1	51.0	61.0	42.4	55.0	65.0	2.4	3.3	3.3
BNP Paribas (Apr 16)	37.0	46.0		39.0	48.0		2.3	3.2	
Business Monitor Inernational (Apr 16)	46.0	57.0		46.5	57.0		2.3	2.8	
Cantor Fitzgerald LP (Jan 16)	40.0	53.8					2.5	2.9	
Capital Economics Ltd (May 16)	40.0	53.0	63.0	41.0	53.0	63.0	2.2	3.0	
CIBC World Markets Corp (Nov-15)	61.3			67.3					
Citigroup (May 16)	42.0	57.0	61.0	43.0	60.0	64.0	2.1	3.2	3.0
Coker & Palmer Inc (Apr 16)	42.0	53.0	55.0				2.3	2.5	3.0
Commerzbank (May 16)	41.0	57.0		42.0	57.0		2.5	3.0	
Cowen & Co LLC (Jan 16)							2.3	2.8	3.0
Credit Suisse (May 16)	36.9	52.9	65.0	37.8	54.3	67.5			
CRISIL (May 16)	34.5	41.5	46.5	35.5	42.5	47.5			
Danske Bank (Mar 16)	41.0	52.0		41.0	52.0				
Deutsche Bank (May 16)	40.8	52.0	65.0	42.5	55.0	70.0			
DZ Bank AG (Apr 16)	38.6			38.1			2.4		
Deloitte (Mar 16)	44.0	50.0	57.2				2.1	2.7	2.9
DNB Markets (May 16)				48.0	65.0	70.0			
Economist Intelligence Unit (May 16)	39.3	54.1	65.5	40.2	55.5	67.5			
EmiratesNBD (Feb 16)	37.4	49.6		39.4	55.0				
First Energy Capital (May 16)	40.4	55.0	66.3	42.2	57.5	69.3			
Fitch Ratings (May 16)				35.0	45.0				
Goldman Sachs (May 16)	38.0	58.0	60.0	39.0	60.0	63.0			
HSBC Holdings (Jan 16)	44.0	59.0	74.0	45.0	60.0	75.0	2.3	3.0	3.5
IHS (May 16)	43.5	49.8	56.6	44.0	52.1	59.2	2.3	2.7	3.0
Incrementum AG (Mar 16)	50.0	82.0	90.0	54.0	85.0	95.0			
Institute of International Finance (May 16)				43.0	49.0	50.2			
Intesa Sanpaolo SpA (Apr 16)	36.7	43.4	48.7	38.2	44.3	49.2	2.0	2.3	2.6
Itau Unibanco Holding SA (Mar 16)	44.0	52.3	52.9	45.5	55.0	55.0	2.3	2.7	2.7
JBC Energy (May 16)	40.0	50.5	66.5	40.7	52.6	69.1			
Jeffries (Jan 16)				43.0	57.8	71.8			
JP Morgan Chase & Co. (May 16)	40.4	52.0		41.1	52.0		2.3	3.0	
KLR Group LLC (Jan 16)	46.3	67.5	82.5	47.3	70.0	86.0	2.7	3.8	4.0
LBBW (May 16)	39.0	47.0	60.0	41.0	48.0	60.0			
Lloyds Bank PLC (Mar 16)	42.0	60.0		43.0	66.0		2.4	2.9	
Macquarie (Jan 16)				44.5	61.3				
Moody's (Mar 16)				33.0	38.0	43.0	2.3	2.5	2.8
Morgan Stanley (Feb 16)				30.0	40.5	69.5			
MPS Capital Services Banca per le Impres (Mar 16)				36.0					
National Australia Bank Ltd (May 16)	40.8	49.0	55.0	42.8	50.5	56.0			
Natixis SA (May 16)	36.6	46.0	54.0	38.1	48.0	56.0			
Nomisma Energia (May 16)	42.5	51.7	56.0	43.5	52.2	56.1			
Nomura Securities Co., Ltd. Tokyo (Apr 16)				40.0					
Norddeutsche Landesbank Girozentrale (Mar 16)	39.0	46.0		38.0	46.0				
Nordea Bank Norge ASA (Mar 16)				41.0	60.0				
Oxford Economics (May 16)	38.0	42.1	49.8	38.4	42.5	50.4	2.0	2.1	2.3
Prestige Economics LLC (Mar 16)	41.0	49.3		43.2	50.5		2.1	2.3	
Promsvyazbank PJSC (Apr 16)				44.0	47.5	54.0			
Raiffeisen Bank International AG (May 16)	38.0	54.0	60.0	39.0	55.0	62.0			
Raymond James & Associates Inc (May 16)	50.0	75.0	70.0	53.0	79.0	75.0			

Continued on next page

Table 1.3 Poll of oil and gas prices, 2016–2018 *(continued)*

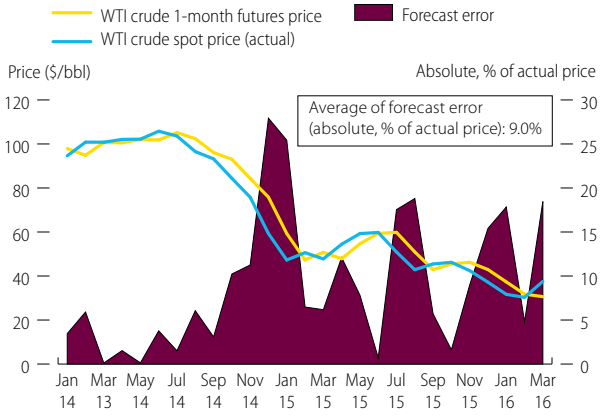
Forecaster	WTI ($/bbl)			UK Brent ($/bbl)			Natural Gas (US Henry Hub, $/mmBtu)		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
RBC Capital Markets (Apr 16)	41.4	56.8		42.7	60.3		2.2	2.9	
Samba (May 16)				40.0	60.0				
Santander (May 16)	39.5	50.0	57.0	40.0	52.5	60.0	2.5	2.8	2.9
Scotiabank (Apr 16)	42.0	53.0		43.0	54.0		2.5	2.8	
Societe Generale (May 16)	36.2	50.5	61.5	38.1	52.5	65.0	2.4	3.5	4.0
Standard and Poor's (Jan 16)	40.0	45.0	50.0	40.0	45.0	50.0	2.5	2.8	3.0
Standard Chartered (May 16)	45.0	72.0		50.0	78.0				
TD Securities (Feb 16)	41.8	58.5					2.4	3.3	
Thomson Reuters (May 16)	41.5	50.0		43.0	51.0				
Toronto-Dominion Bank/Toronto (May 16)	46.0	63.0		47.0	62.0		2.2	3.3	
UBS (Mar 16)	40.0	55.0		42.5					
UniCredit Markets & Investment Banking (Jan 16)	37.0	45.0		37.0	45.0				
U.S. Energy Information Administration (May 16)	40.3	50.7		40.5	50.7		2.3	3.0	
Wells Fargo Securities (Apr 16)	39.4	50.0	55.0	40.9	51.8	57.0			
Westpac Banking Corp (Apr 16)	38.0	41.0	51.0	37.0	41.0	51.0			
Consensus (mean)	41.4	53.7	61.2	42.1	54.9	63.0	2.3	2.9	3.1
Median	40.4	52.3	60.0	42.0	54.2	63.0	2.3	2.9	3.0
High	61.3	82.0	90.0	67.3	85.0	95.0	2.8	3.8	4.0
Low	34.5	41.0	46.5	30.0	38.0	43.0	2.0	2.1	2.3
Standard deviation	4.2	8.1	9.5	5.3	9.2	10.7	0.2	0.4	0.5
Coefficient of variation (%)	10.3	15.0	15.5	12.5	16.7	17.1	7.8	12.6	15.2
Memo items	Crude oil[a]						Gas ($/mmBtu)		
Consensus average (UK Brent and WTI)	41.8	54.3	62.1						
International Monetary Fund (Apr 16)	34.8	41.0	44.5				2.1	2.5	2.6
World Bank (Apr 16)	41.0	50.0	53.3				2.5	3.0	3.5

Note: Blue = new forecaster.

a = Average of WTI, Brent and Dubai Fateh spot prices. For gas prices, the table presents US Henry Hub prices, which are set on a liquid spot market as opposed to long-term oil-linked contracts as in most of Europe and Asia.

Source: Consolidated from Bloomberg and Reuters surveys, various reports and news articles.

Figure 1.23 Average monthly crude oil prices: Spot vs futures



Source: Estimates based on data from U.S. EIA *Short-Term Energy Outlook* database (http://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm), accessed 10 May 2016.

estimated $0.74 this year. Some forecasters, including Toronto Dominion Bank and JP Morgan, predict that the difference could be eliminated or even reversed.

The consensus for gas prices is broadly reflective of what the IMF and World Bank are predicting, with forecasters (based on over 30 observations) expecting a recovery in 2017 and 2018. The consensus is based on US Henry Hub prices only, as US gas sales are made on a liquid spot market. The lowest commercial forecast for gas in 2017 is $2.1 per million BTU and the highest is $3.8 per million BTU. For 2018, against consensus, some forecasters remain bearish and expect that the price could remain as low as $2.3 per million BTU (but still 11.2% higher than June 2016 Henry Hub NYMEX futures as of 24 May).

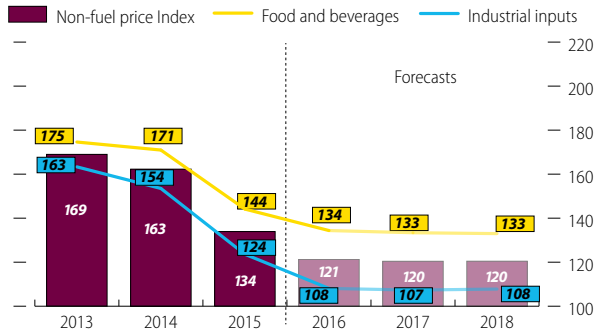
Non-energy commodity markets

Global non-energy commodity prices are seen stabilising after multi-year declines. Food prices are projected to remain broadly stable over the next two years owing to ample supply and slower demand. Lower demand from China for metals is expected to subdue prices, as the country continues its transition to a consumer-driven economy. According to the IMF (*WEO*, April 2016), the non-fuel commodity price index will decline by 9.4% in

2016 relative to 2015. The index is forecast to fall further by 0.7% in 2017 and stay flat in 2018 (figure 1.24).

Food prices are expected to decline by 6.8% in 2016, 0.3% in 2017 and a further 0.3% in 2018, given continued high supply. Industrial and raw materials are also seen falling, by 12.6% in 2016 and by 0.7% in 2017 before marginally growing by 0.4% in 2018. Larger metal supplies are expected to come to market—in part induced by earlier investments when prices were high—at a time when demand is softening.

Figure 1.24 Non-fuel commodity price index (2005 = 100)



Note: Industrial inputs refer to agricultural raw materials and metals.
Source: IMF, *WEO* April 2016 database (https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx), accessed 1 May 2016.

Part 2—Performance in 2015

Capsule summary

In real (volume) terms Qatar's economy expanded by 3.7% year on year in 2015, largely maintaining the general pace of 2013 and 2014. The non-oil and gas sector accounted for all the GDP growth in 2015, led by services and construction. With lower average oil prices, in nominal (value) terms the economy contracted by 20.6%, its first decline since 2009. The share of oil and gas in aggregate output slipped further in 2015 in both real and nominal terms, reflecting the continuing change in composition in the overall economy to one dominated by the non-oil and gas sector.

In 2015 annual average inflation was 1.8%, aided by the lack of foreign inflationary pressures, which resulted in low growth in the price of tradeable items, including food and beverages. A slowdown in non-traded categories, such as education and health, also contributed to the muted rate for the year.

The Ministry of Development Planning and Statistics (MDPS) released a new producer price index (PPI) series in late 2015, which identifies 15 items, up from 11 in the previous one, and is based on 2013 prices. The global slide in oil prices led to a decrease in the PPI of 37.5% from 2014's figure.

Qatar's fiscal, trade and current account balances contracted from 2014 levels—driven by falling hydrocarbon prices—but still remained in surplus in 2015.

Recent data from the Ministry of Finance suggests that the fiscal balance for calendar year 2015 stood at QR21.3 billion, equivalent to 3.5% of estimated nominal GDP.

Qatar's trade surplus fell by half in 2015 from its 2014 value, but still posted a surplus of 29.2% of nominal GDP. The current account posted a surplus estimated at 8.2% of nominal GDP. The fall in the balances was led by lower merchandise export proceeds, which plunged by 39% on lower hydrocarbon prices. However, a fall in imports provided a buffer, helping to maintain both accounts in surplus.

Table 2.1 provides a summary of the latest preliminary outcomes on key economic indicators for 2014 and 2015. The 2014 figures are different from those in the *Qatar Economic Outlook (QEO)* of June 2015, given the change of base year to 2013 prices, which affect outcomes for 2015.

Table 2.1 Qatar, preliminary outcomes of key indicators

	2014	2015
Real GDP growth (%)*	4.1	3.7
Nominal GDP growth (%)	4.0	-20.6
Consumer price inflation (%)	3.4	1.8
Fiscal surplus (% of nominal GDP)	14.1	3.5
Current account surplus (% of nominal GDP)	23.5	8.2

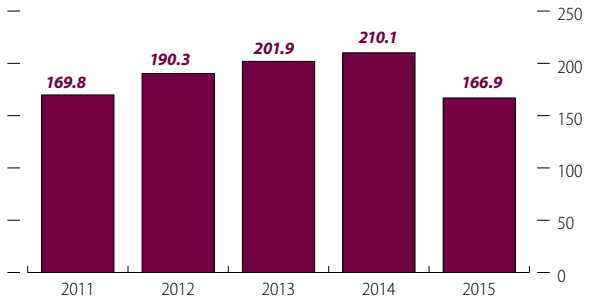
* In constant 2013 prices.
Source: Preliminary estimates from MDPS. Fiscal data from the Ministry of Finance.

GDP growth

Aggregate analysis

In nominal (value) terms the economy contracted in 2015 for the first time since 2009. The 20.6% decline was driven by the fall in hydrocarbon prices (figure 2.1). Per capita income declined further, by 27.2% in 2015 (to $71,481), owing to falling nominal GDP and year-on-year population growth of 9.2%.

Figure 2.1 Nominal GDP ($ billion)



Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 3 May 2016.

In real (volume) terms measured in constant 2013 prices (the base year used for Qatar's national accounts since June 2014), the economy grew by 3.7% in 2015 (figure 2.2), slowing somewhat from the performance of recent years.

Figure 2.2 Nominal and real GDP growth (%)

Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 3 May 2016.

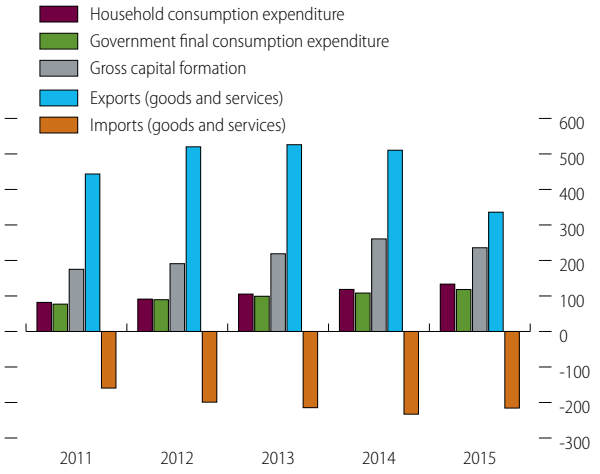
The difference between contracting nominal GDP and increasing real GDP stems from the decline in the GDP deflator—a measure of the price of all goods and services in the economy—by 23.4% from its 2014 level. Sharply lower oil and gas prices dragged down the deflator in 2015, resulting in a contraction in nominal GDP, despite real GDP growth. Sectorally, the deflator that fell the most (43.6%) was mining and quarrying, driven exclusively by depressed hydrocarbon prices, which tumbled by 47.2% in 2015. The manufacturing deflator fell by 24.9%, given the dominance of refining and hydrocarbon-related processing activities. Building and construction (down 2.0%) was affected by the decline in input prices such as steel and aluminium. The deflator for electricity and water—reliant on natural gas—declined only slightly (by 1.9%), as input prices are not based on global benchmarks.

The deflators for the remaining sectors rose, most notably for transport and communications (2.4%), trade, restaurants and hotels (2.2%), government services (2.1%), social services (2.1%), finance, insurance, real estate and business services (1.2%) and household services (1.1%). An increase (or fall) in a sector's value-added deflator occurs when the weighted price of its gross output increases (or falls) relative to the weighted cost of intermediate goods and services used in production. An explanation of movements at sector level therefore requires a detailed, micro-level analysis of changes in the prices of all inputs—domestic and imported—and of all outputs produced by that sector.

Exports, dominated by hydrocarbons, accounted for 55.3% of expenditure-side GDP in 2015 (figure 2.3). The continued dominance of hydrocarbons in exports led to a sharp fall in the share of overall exports in nominal GDP. While paling against that in developed markets, household consumption spending constituted a more substantial 22.0% of nominal GDP in 2015, up from 15.5% in 2014, owing both to fast growth of the category (of 12.6%) and to the drop in exports (of 34.2%).

Gross capital formation—the second-largest expenditure component—accounted for 38.8% of GDP in 2015. Investments included substantial outlays

Figure 2.3 Nominal expenditure-side GDP (QR billion)



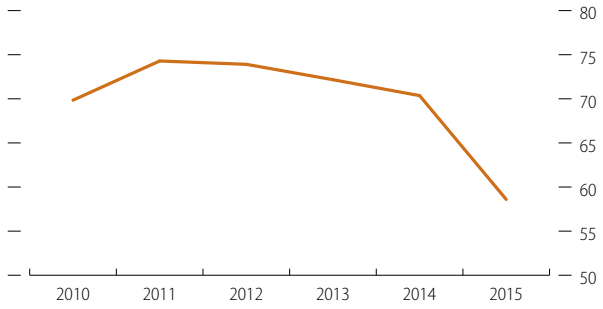
Note: Preliminary estimates for 2015; gross capital formation includes statistical discrepancy.
Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 17 May 2016.

on economic and social infrastructure and major real estate developments, as well as upstream oil and gas production facilities. However, these figures need to be treated with a degree of caution, as measurement errors in expenditure estimates of GDP (equal to the difference between the uncorrected expenditure-side estimates of GDP and MDPS's output-based measures) have been included.

Qatar's imports continued accounting for a sizeable portion of demand in 2015, at 44.3% of final domestic spending (gross capital formation plus household and government consumption). The high level of imports reflects the small, open nature of the economy and its limited domestic production base.

Qatar's aggregate savings rate—the difference between nominal GDP and nominal household and government consumption, measured as a share of nominal GDP—was 58.6% of GDP in 2015 (figure 2.4). While the aggregate rate has come down over the past four years it remains very high, and is the counterpart to a continued trade surplus (see *Trade and foreign currency reserves*) and a high investment rate.

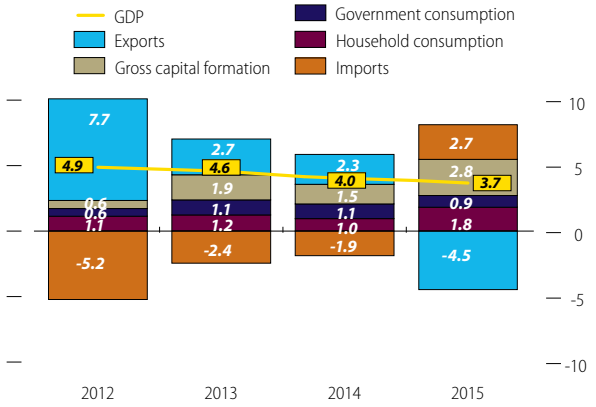
Figure 2.4 Savings rate (%)



Note: Preliminary estimates for 2015.
Calculation: (Nominal GDP – (Private consumption + Government expenditure)) / Nominal GDP.
Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 17 May 2016.

From an expenditure perspective in constant price terms, investment (as identified by gross capital formation) became the largest driver of economic expansion in 2015, taking over from exports (figure 2.5). The second-highest contributor was imports, which fell sharply, and took over the spot traditionally reserved by exports in contributing to GDP growth. The third contributor was household consumption, which climbed quickly over the year on the back of a fast-increasing population. The rate of population increase has started to wane in 2016, however, and may no longer act as a boon to consumption in the future.

Figure 2.5 Contributions to real GDP growth, expenditure (percentage points)

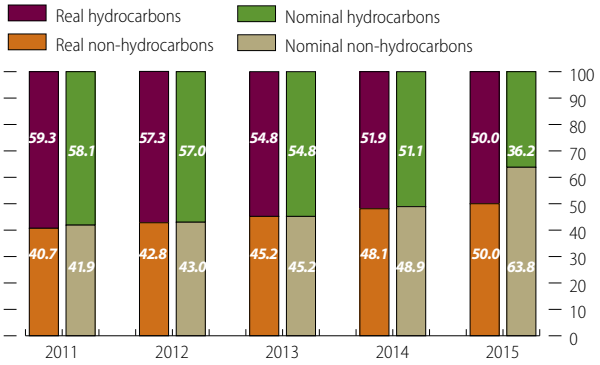


Note: Preliminary estimates for 2015; gross capital formation includes statistical discrepancy.
Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 17 May 2016.

Economic diversification

The share of oil and gas in aggregate output declined further in 2015 in real and nominal terms (figure 2.6). In comparing shares, the stake of hydrocarbons in total real output is significantly higher than the same share in nominal (current price) terms, given the sharp fall in hydrocarbon prices since mid-2014. The calculation in nominal terms provides an alternative barometer of the changing composition of output in the economy: the declining share of hydrocarbons in nominal GDP in 2015 reflects a combination of growth of the non-oil and gas sector, a fall in oil and gas prices, and a marginal decline in oil output.

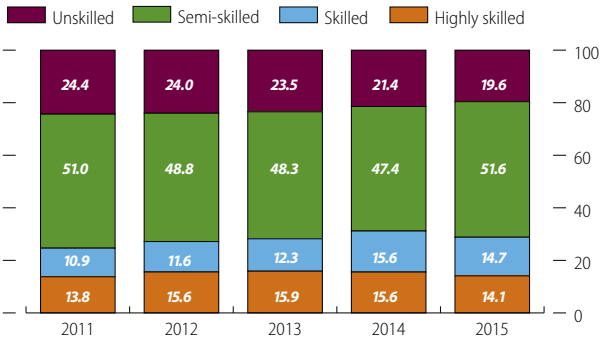
Figure 2.6 Hydrocarbons and non-hydrocarbons, share in real and nominal GDP (%)



Note: Hydrocarbons include crude oil and gas extraction under mining and quarrying.
Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 17 May 2016.

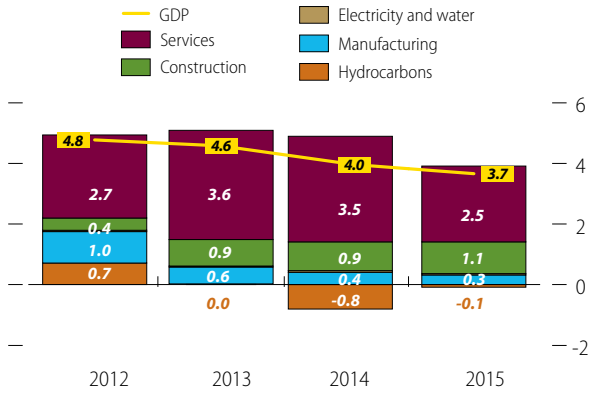
The latest *Labour Force Survey*, which presents data up to 2015, shows that employment is increasingly dominated by unskilled and semi-skilled workers (figure 2.7). While

Figure 2.7 Non-Qatari workers' skills composition (%)



Source: MDPS, *Labour Force Survey 2015*, http://www.mdps.gov.qa/en/pages/default.aspx/GeneralStatistics.htm, accessed 3 May 2016.

Figure 2.8 Contributions to real GDP growth (percentage points)



Note: Hydrocarbons include crude oil and gas extraction under mining and quarrying. Services include trade, restaurants and hotels; transport and communications; finance, insurance, real estate and business services; and government, household and social services.

Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 3 May 2016.

over 2011–2014 the share of highly skilled and skilled workers steadily increased, this trend reversed in 2015. The country's emphasis on infrastructure building has so far favoured lower skilled workers. The bulk of foreign workers in Qatar do not have tertiary qualifications. Promisingly, however, the share of semi-skilled workers hit a peak in 2015, while the share of unskilled workers stood at the lowest level since data collection began in 2008. Yet the 14.1% share of highly skilled workers in 2015, envisioned to be at the forefront of the knowledge-based economy, was the lowest since 2011.

Non-hydrocarbon sector breakdown

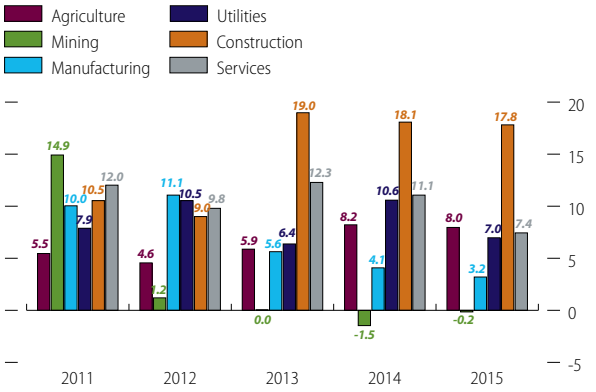
Continuing the trend established the year before, the non-hydrocarbon sector directed economic expansion in 2015, growing at 7.8%, with all subsectors showing growth. As in 2014, services were the major driver of growth, contributing 2.5 percentage points (figure 2.8). Construction contributed 1.1, and manufacturing 0.3, percentage points. Oil and gas GDP contracted marginally, subtracting 0.1 percentage points from overall growth, largely because of a fall in oil production.

The fastest-growing components of the non-oil and gas sector in 2015 were construction (17.8%), agriculture (8.0%), services (7.4%) and electricity and water (7.0%) (figure 2.9). All non-oil subsectors posted slower growth than in 2014.

Among the service subsectors, the growth streak in the finance, insurance, real estate and business services subsector continued, albeit at a slower pace, expanding by 8.7% year on year in 2015 (figure 2.10). Additional credit was offered in response to demand from real estate developers and contractors working on large infrastructure projects, which also drove high growth on the insurance market.

Expansion in the trade, restaurants and hotels subsector showed a similar trend, at 8.0%, driven by a marked

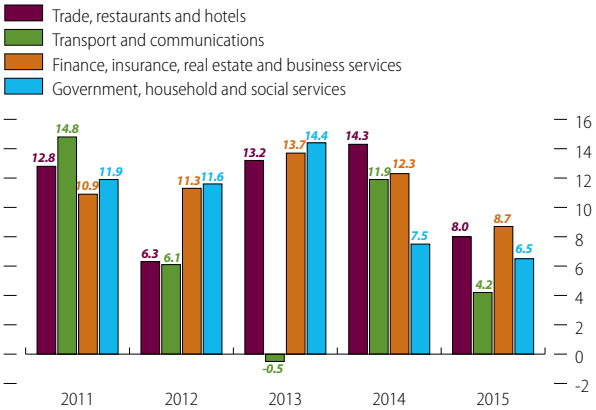
Figure 2.9 Real GDP growth by sector (%)



Note: Excludes imputed bank service charges. Services include trade, restaurants and hotels; transport and communications; finance, insurance, real estate and business services; and government, household and social services.

Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 15 May 2016.

Figure 2.10 Real service subsector GDP growth (%)



Note: Output is measured in constant 2013 prices.

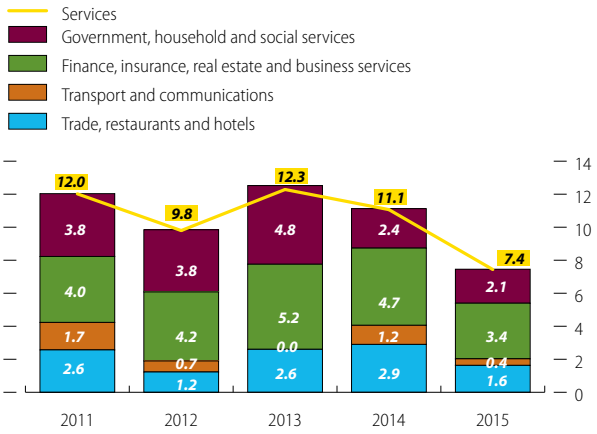
Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 3 May 2016.

increase in physical capacity. The start of operations of the Doha Exhibition and Convention Center in 2015, which is overseen by the Qatar Tourism Authority, is expected to support the Authority's targeted increase of visitors to Qatar by 20% over the next five years. It reported an increase in visitors to the country of 3.7% in 2015, most of whom originated in neighbouring Gulf Cooperation Council (GCC) countries. With 20 new hotels opening in 2015, the average hotel occupancy rate declined to 71% from 73% in 2014.

Government, household and social services growth edged down to 6.5% but stayed healthy thanks to continuing growth of the population. Lastly, transport and communications decelerated to grow by 4.2%, given the cessation of large capacity additions and the dependence on existing fleet utilisation.

The primary driver of services over 2015 was the finance, insurance, real estate and business services subsector, which accounted for nearly half of aggregate services expansion (figure 2.11). Trailing somewhat, government, household and social services was the second largest contributor to services expansion, at 2.1 percentage points. Dropping significantly from its contribution to growth in 2014, the trade, restaurants and hotels subsector was the third-largest contributor.

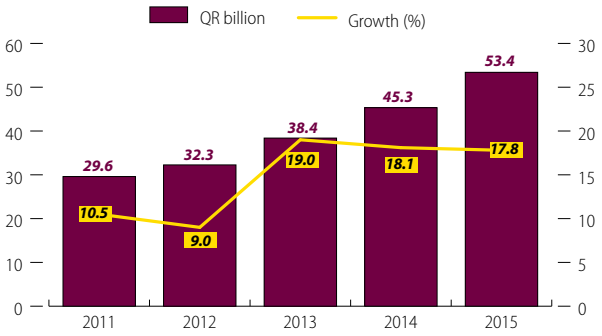
Figure 2.11 Service subsectors' contributions to real GDP growth of services (percentage points)



Note: Output is measured in constant 2013 prices.
Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 3 May 2016.

Buoyed by Qatar's huge investments in infrastructure and real estate, real construction output grew at a rapid 17.8% (figure 2.12). Large projects include Qatar Rail and real estate developments for Lusail City. Eight new shopping malls were also under construction along with a plethora of new hospitals, schools and hotels.

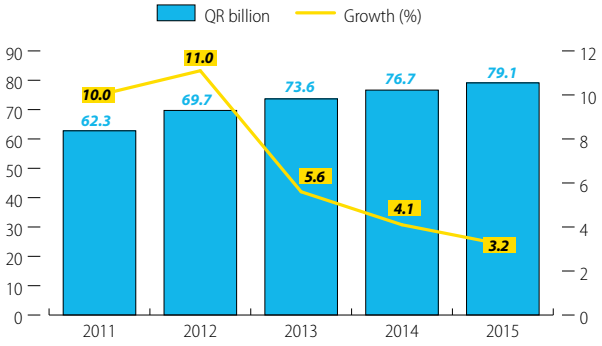
Figure 2.12 Real construction output



Note: Output is measured in constant 2013 prices.
Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 3 May 2016.

Real manufacturing output grew at a tepid 3.2% in 2015 (figure 2.13), partly constrained by the availability of feedstock from upstream production, where supply has largely plateaued. Nevertheless, production across traditional production lines expanded over the year—of refined petroleum products by 4.4% and of petrochemicals by 11.8%. Growth in fertilisers continued to slow appreciably from 2014, with output inching up by just 1.7%. Production of other manufacturing products ebbed in 2015: basic chemicals—primarily petrochemicals and gas-to-liquid products—shrank year on year by 8.9%, and steel output by 6.2%, reflecting a global glut.

Figure 2.13 Real manufacturing output



Note: Output is measured in constant 2013 prices.
Source: MDPS estimates based on data at http://www.mdps.gov.qa/eng/index.htm, accessed 3 May 2016.

Prices

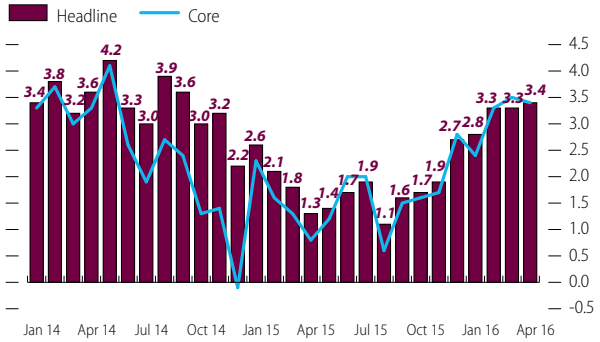
Consumer prices

Headline inflation (the average annualised percentage difference in the consumer price index series based on 2013 prices) stood at 1.8% in 2015. The subdued rate is mainly attributable to a quiescent external environment in 2015, resulting in low growth in the price of tradeable

items, including food and beverages, which have a weight of 12.6% in the index. A slowdown in non-traded categories also contributed to the muted rate for the year.

Underlying core inflation (which removes the transitory and volatile components of utilities and residential rents, as well as food prices) averaged 1.6% in 2015. Core inflation was volatile throughout the year—declining in the first quarter, picking up in the second, then dropping to a 2015 low in August, only to rise through to the end of the year (figure 2.14).

Figure 2.14 Monthly headline and core inflation (year on year, %)



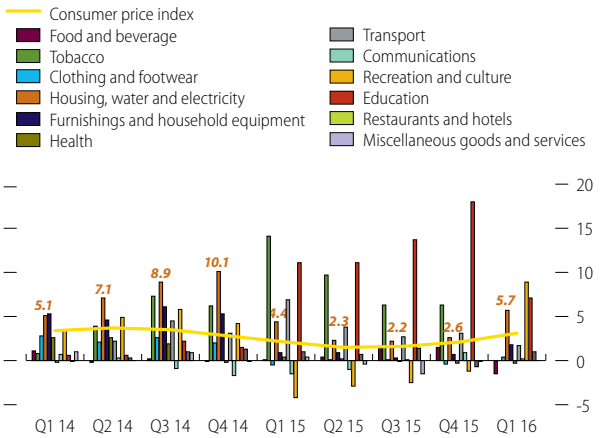
Note: Core inflation is headline less food, beverages, housing, water and electricity.
Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 15 May 2016.

The restraint seen in the first three quarters of 2015 loosened in the final quarter and inflation accelerated through the first four months of 2016 as the impact of reforms curbing consumer subsidies were felt. In September 2015, for example, Kahramaa introduced new electricity and water tariffs. Likewise, fuel subsidies were partially lifted in mid-January 2016.

Education, traditionally a subdued segment, was the main driver of consumer price inflation in 2015, growing by 13.5% on an annualised basis and accelerating through to the last quarter of the year, then easing in the first quarter of 2016 (figure 2.15). Tobacco grew at a fast pace—9.1% year on year in 2015—although it accounts for a mere 0.3% of the consumer price basket. The weightiest component—housing, water and electricity—continued to drive the bulk of inflation, albeit at a more retrenched pace and averaging only 2.9% in 2015, down from 7.8% in 2014. The continued rise of inflation in this component and in education may reflect the pressure that an increasing population places on local services.

The first four months of 2016 show a 3.2% inflation rate relative to the same period last year. The main drivers are recreation and culture (up 8.9%), education (7.1%),

Figure 2.15 Quarterly inflation (year on year, %)



Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 15 May 2016.

and housing, electricity and water (5.7%). The transport segment saw inflation increase by an average of 1.8% in these four months, after a 30% fuel price hike in mid-January. Given the recent announcement of further monthly revisions to fuel prices, the transport segment is likely to be an increasing contributor to inflation.

Consumer prices in Qatar are driven by global and domestic factors. Foreign inflation, caused by price increases of imported goods and services, was muted in 2015. Global commodity and input prices fell on lower demand, leading to cheaper imported goods. Domestic inflation has become the key driver as the population continued to expand quickly, and along with it, demand for goods and services. In addition, the curtailment of utility subsidies led to rising prices in the last quarter of the year.

Producer prices

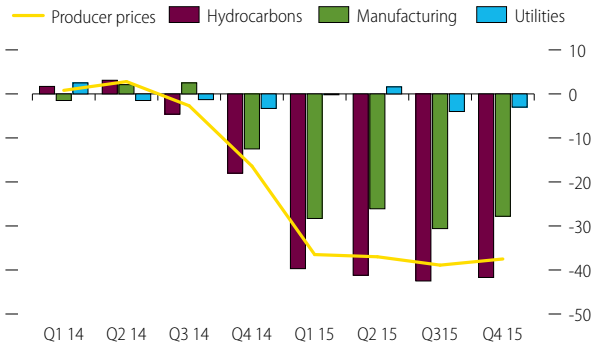
MDPS released a new PPI series in late 2015. With a base of 2013, it draws on an updated sampling frame and new weights. The previous sampling frame dates from 2006, when the Qatari economy was much smaller than today and the range of products made domestically much narrower.

The new PPI series identifies 15 elements in the price basket, up from 11 in the old one, and concomitant changes to weights, reflecting the country's more diversified production base—notably a reduction in the mining category from 77.1% to 72.7%, a cut in electricity and water from 1.9% to 0.5% and an increase in manufacturing from 21.0% to 26.8%. These revisions are based on new information garnered from annual economic and quarterly business surveys. Estimates for individual components can also differ from those that would have been generated by the older sampling frame.

MDPS has re-estimated the PPI for 2014 and 2015 using the new approach, helping to create a "bridge" between the new and old series. Comparisons with earlier *QEO* forecasts of inflation are problematic, however, as these were based on the old PPI series. In reporting producer price inflation outcomes for 2015, the *QEO* will now use the new series.

Based on the new series, the PPI declined markedly in 2015 (figure 2.16). The global slide in oil prices led to a decrease in the overall PPI of 37.5% relative to those in 2014. The crude petroleum and natural gas subcomponent of the hydrocarbon PPI index led the decline, with a drop of 41.2% from 2015. Manufacturing, which is dominated by refined petroleum products and basic chemicals that rely on oil and gas feedstock, also registered a sizeable decrease over the year, falling by 28.2% year on year. Utilities declined by a more moderate 1.4% year on year, given relatively stable feedstock prices.

Figure 2.16 PPI growth (year on year, %)



Source: MDPS estimates based on data at http://www.mdps.gov.qa, accessed 15 May 2016.

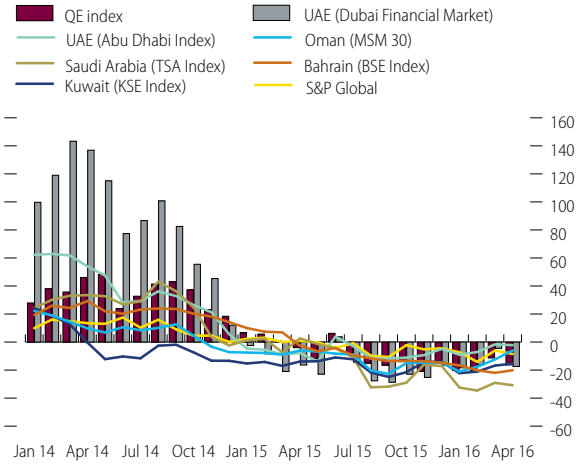
Asset markets: Securities and property

Qatar Exchange

Set against lacklustre performance through much of 2015, Qatar's equity market performed roughly in line with the average of its regional peers' mixed performance. By mid-May 2016, the Qatar Exchange (QE) Index had declined by 4.7% year to date. While some GCC countries' markets were on an upswing, like Oman (up 10.4% year to date) and Abu Dhabi (up 1.9%), others continued their declines, such as Bahrain (down 8.6%) and Saudi Arabia (down 3.1%).

The market capitalisation of the QE stood at QR553.2 billion at end-2015, after dropping 18.3% year on year. The QE Index, a benchmark index of the largest and most liquid 20 stocks, was down 15.1% from December 2014 (figure 2.17), underperforming the S&P Global Index, which was down 4.4%. After a sharp expansion of trading, in value and volume terms, throughout

Figure 2.17 GCC and S&P Global stock price indices (year-on-year change, %)



Sources: Thomson Reuters EIKON, accessed 12 May 2016.

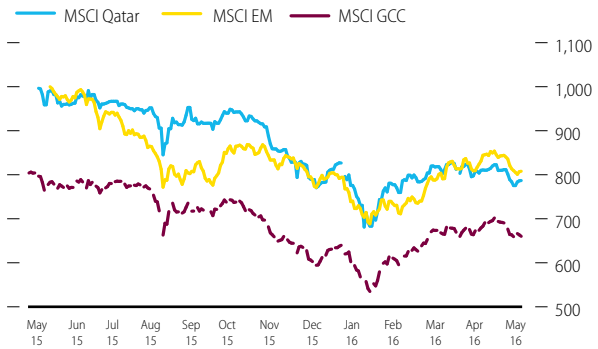
2014, in 2015 the QE's trading value slumped by 52.3% to QR93.7 billion and its trading volume fell by 48.1% to 2.3 billion shares.

Equities listed on Qatar's market are still expensive against those on other regional bourses. As of mid-May this year, QE's price-to-book ratio stood at 1.5, surpassed only by the Saudi Stock Exchange at 1.6. QE's price-to-earnings ratio was 13.2 at the same date, which exceeded all regional peers'.

The performance of regional bourses remains closely tied to the fortunes of the hydrocarbon sector and of public finances. Whereas the MSCI emerging markets index had risen by 1.7% from the start of the year through to mid-May 2016 (figure 2.18), the MSCI GCC has risen by 3.5%, trailing the recovery in the price of oil (Brent is up 22.9% as of early May).

MSCI Qatar is far behind, however, falling by 4.5%. This has been led by the lacklustre performance of the financial sector, which has a heavy weight in MSCI Qatar (68.9% of the total). The earlier sharp slide and subsequent recovery in the oil price led to the QE Index

Figure 2.18 MSCI equity price indices ($ terms)



Source: Thomson Reuters EIKON, accessed 15 May 2016.

registering high volatility, with the standard deviation of daily returns at 23.4% from mid-February to mid-May 2016.

Among the 45 stocks listed on the Qatar Stock Exchange, firms concentrating on transport services posted the largest gains in 2015 (up 4.9%), while telecommunications firms had the steepest losses (down 33.6%).

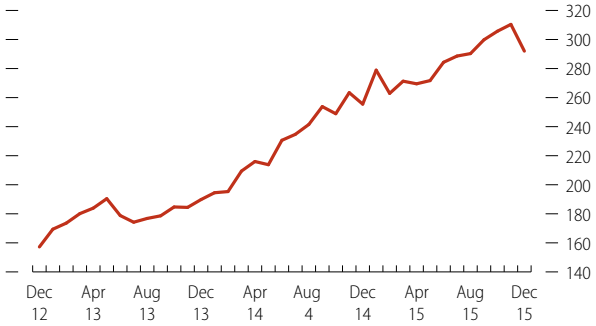
The market for treasury bills remains much shallower than that for equities. While the Qatar Central Bank (QCB) pared down its issuing of treasury bills to only QR2.5 billion throughout 2015, the traded value of all treasury bills over the year declined by 70.9% to QR1.15 billion, with only 15 registered trades.

Likewise, the secondary market for government bonds was thin, with just one issue responsible for 30% of all trades in 2015. QCB issued just under QR14 billion of treasury bonds during the year, which were traded a mere 40 times in the 12 months. In the past, government authorities have sought to increase transactions in these instruments to support wider financial development objectives, but with tightened liquidity conditions (see *Credit*), QCB has tapered issuances sharply.

Real estate

Real estate price growth receded from the heady pace observed in late 2014, as price gains slowed from a peak of 43% year-on-year growth in January 2015 to below 15% in December. According to the QCB real estate price index, transaction prices at end-2015—the latest date for which information is available—were 14.3% higher than a year earlier (figure 2.19). This index removes transactions that are considered outliers or that do not reflect arm's-length transactions, such as property transfers within families. It is adjusted for seasonal variations to arrive at estimates for the non-commercial real estate sector.

Figure 2.19 QCB real estate price index



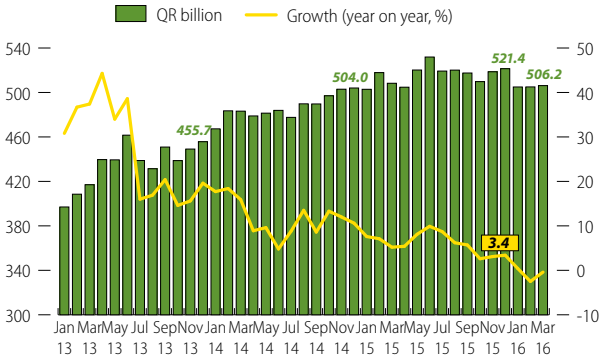
Note: The real estate price index provides data on sales transactions of real estate properties (including land, villas, and residential estates), based on data supplied by the Ministry of Justice.
Source: QCB, http://www.qcb.gov.qa/English/Publications/Statistics/RealEstate/Pages/RealEstatePriceIndex.aspx, accessed 9 May 2016.

With land and villa prices continuing to appreciate, the average index reading for 2015 (285.5) was 48.5% higher than the peak seen in August 2008 (192.2). But the pace of gains started to retreat markedly in November 2015, and December even saw a month-on-month decline, of 5.9%.

Money supply

Growth in money supply—based on its broad definition, M2 (see *Glossary*)—slowed to 3.4% in December 2015 from 10.6% the previous December, continuing the trend observed from the second half of 2013 (figure 2.20). From an average 11.8% in 2014, year-on-year expansion of M2 receded by almost half to 6.1% in 2015.

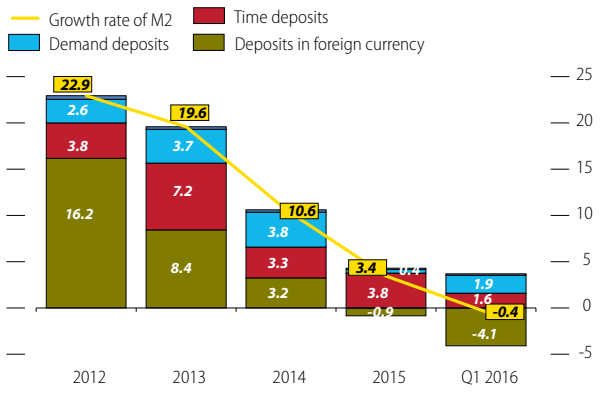
Figure 2.20 Money supply (M2)



Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/Statisticalbulletins.aspx, accessed 1 May 2016.

Money supply growth in 2015 was driven mainly by deposit growth (figure 2.21), which originated in the private sector (individuals and businesses). Time deposits accounted for the bulk of the growth in deposits in 2015 (up 6.6%). Businesses and institutions increased time and savings deposits by 40.3% in 2015, offsetting the decline of personal deposits (by 15.2%).

Figure 2.21 Contributions to money supply growth (percentage points)



Note: Q1 2016 includes year-on-year calculations for end-March data.
Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/MonthlyBulletin.aspx, accessed 1 May 2016.

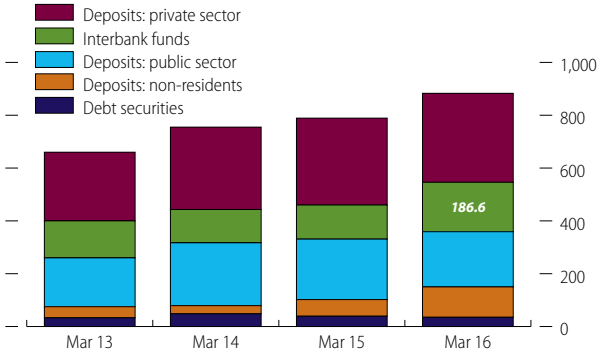
Public sector time deposits grew by 5.0%. This growth was led by government institutions increasing time deposits by 22.3% over the year and semi-government institutions lifting theirs by 8.6%, offsetting the 16.2% decrease of such deposits by the central government.

Slower monetary growth in 2015 was caused by falling public sector foreign currency deposits and demand deposits. The public sector, holding more than 66% of the total foreign currency deposits in December 2015, had drawn them down by QR19 billion over the year. Public sector Qatari riyal–denominated demand deposits fell by 12.7% in 2015. With the government collecting fewer oil and gas revenues in 2015 (see *Fiscal accounts*), there was immediate pressure to draw on existing deposits. It is also possible that a rebalancing of the government's asset portfolio (noted in *QEO 2014–2015*) has kept growth of government foreign currency deposits in check.

The first quarter of 2016 witnessed a monetary contraction of 0.4% year on year. The decline in broad money was led by a withdrawal of foreign currency deposits (down 13.7%, subtracting 4.1 percentage points from aggregate growth). Monetary contraction was tempered by continued expansion in demand deposits (up 8.4%, contributing 1.9 percentage points to M2 growth) and time deposits (up 3.5%, contributing 1.6 percentage points to the aggregate rate).

As public sector deposits declined throughout 2015, the contribution of interbank and non-resident deposits to banks' funds have risen (figure 2.22). Interbank funds—QR186.6 billion as of March 2016—account for nearly a quarter of commercial banks' funding, which is at a four-year high. Non-resident deposits have reached a record high. The increased foreign exposure of Qatari banks allows them to raise capital on attractive terms, but it also represents a degree of risk if international investor sentiment changes.

Figure 2.22 Commercial banks' source of funds (QR billion)

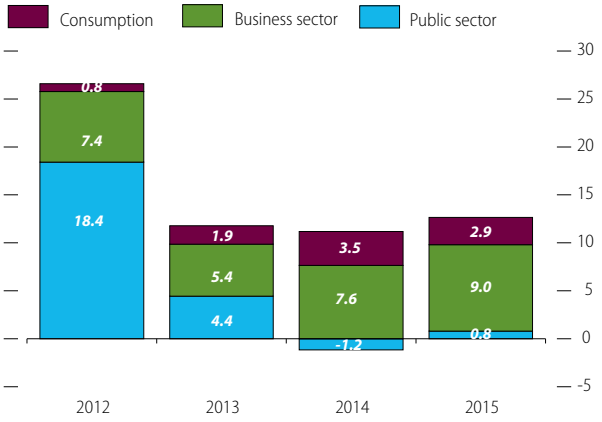


Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/MonthlyBulletin.aspx, accessed 1 May 2016.

Credit

The slowdown in money supply growth in 2015—the result of substantially lower public sector growth contributions—has not been mirrored on the asset side. Domestic credit growth accelerated to 12.7% in 2015 from 10% in 2014 (figure 2.23), as banks broadened their exposure to the public and real estate sectors. With outstanding credit expanding rapidly and deposits expanding far more slowly, commercial banks' loan-to-deposit ratio reached a regional high of 130% in April 2016 (box 2.1).

Figure 2.23 Contributions to domestic credit growth (percentage points)



Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/MonthlyBulletin.aspx, accessed 1 May 2016.

Domestic credit growth expanded on the back of strong demand from the private sector. Reversing its 2014 decline, public sector credit also expanded, led by increased central government credit, which rose 18.7% year on year in 2015, despite a decreasing loan portfolio for both government institutions (down 0.2%) and semi-government institutions (down 25.0%). The contraction for semi-government institutions stems from the increased scrutiny by the Ministry of Finance of new borrowing and, possibly, from further streamlining of its investment plans.

Consumer credit continued to expand buoyantly in 2015, by 16.9% (figure 2.24), in part due to the population rising by 9.2%. Commercial banks continued with their vigorous credit promotion campaigns in the first half of 2015, and increased consumer borrowing may have been used to finance asset acquisitions or to refinance existing obligations (some of which could be offshore) on more favourable terms, as well as to support consumption.

Business sector credit saw a 20.8% expansion in 2015, driven primarily by credit to service businesses and real estate endeavours. Credit to real estate, the largest component of private sector credit (figure 2.25), picked

Box 2.1 Tightened liquidity leads to higher cost of funding for banks

Lower oil and gas revenues have caused public sector deposits in the domestic banking system to shrink, tightening liquidity and driving banks to raise funds abroad. Resident deposits—commercial banks' single largest domestic liability and funding source—dropped by 2.0% year on year in March 2016, when total domestic credit expanded by 13.9% year on year, driven by demand from the real estate and public sectors. This shortfall in domestic financing has taken the net foreign liability position of Qatar's banking system to QR121.7 billion as of March 2016, or 10.7% of the system's asset base, up from 4.0% a year earlier.

Tightening liquidity and fiscal concerns have pushed interbank rates and credit default swaps upwards (box figure). With strong demand for credit from the private and public sectors, banks have sought to furnish loans to clients amid slowing deposit growth, helping to maintain the rise in the loan-to-deposit ratio. In April 2016, the ratio for domestic banks stood at 130%, the highest among the six GCC banking markets.

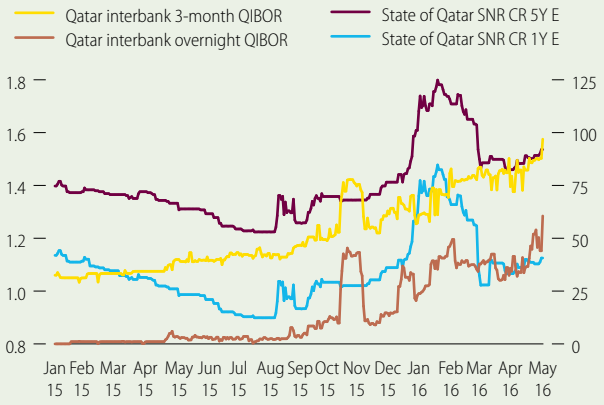
In tandem, the cost of funding has increased. The Qatar Interbank Offered Rate (QIBOR)—a daily reference point for banks borrowing unsecured funds from other financial institutions—has risen sharply over the past year. The overnight QIBOR increased by two fifths year on year as of 11 May, when the three-month QIBOR climbed by a third.

Qatari banks' efforts to raise funds abroad have in part been due to falling public sector deposits, but also to meet Basel III requirements. One regulatory measure announced by QCB in early 2014 was a new loan-to-deposit requirement of 100% by end-2017. Now, the deposit side of the ratio includes only customer deposits and not long-term wholesale funds, which have recently been the primary source of funding. Banks are still in negotiation with regulators to amend the loan-to-deposit formula to include long-term wholesale funds in the denominator. The deadline for compliance may be postponed until end-2018, given liquidity issues faced by Qatar's banks.

QCB has a range of tools to tackle these issues. First, it could reduce the three rates it controls to bring them closer in line with the Federal Reserve's current rate: the deposit rate (0.75%), the loan rate (4.5%) and the repo rate (4.5%). Second, it could continue suspending treasury bond issuances and reinstate the suspension of treasury bills. (After a four-month pause starting in early December 2015, QR1.5 billion worth of treasury bills—traditionally issued on a monthly basis—was issued on 5 April 2016.)

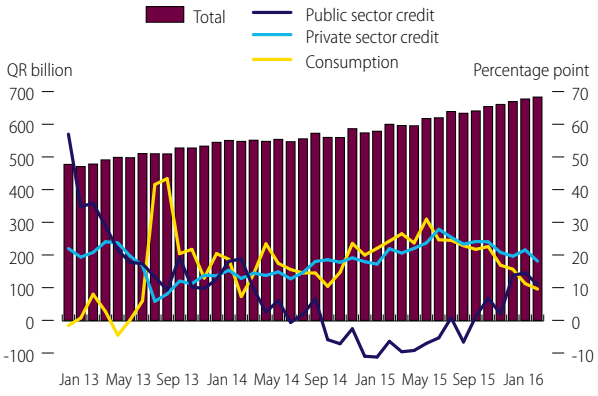
Additionally, it could adopt unconventional measures akin to those used by central banks elsewhere, including the direct purchase of commercial bonds and the acceptance of commercial bank liabilities as collateral for QCB extraordinary loans or equity injections in individual banks.

Box figure Qatari interbank rates against credit default swaps



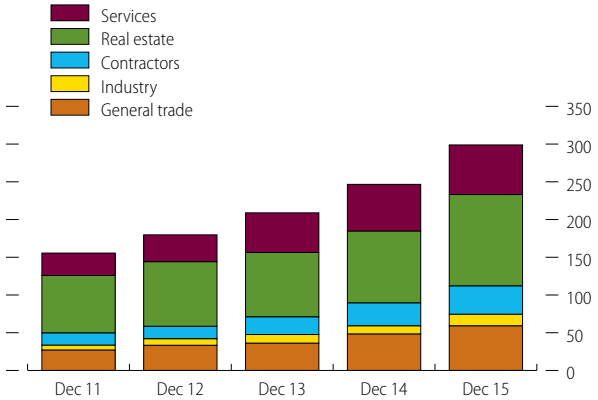
Source: Thomson Reuters EIKON, accessed 24 May 2016.

Figure 2.24 Total credit growth



Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/MonthlyBulletin.aspx, accessed 1 May 2016.

Figure 2.25 Business credit by main components (QR billion)



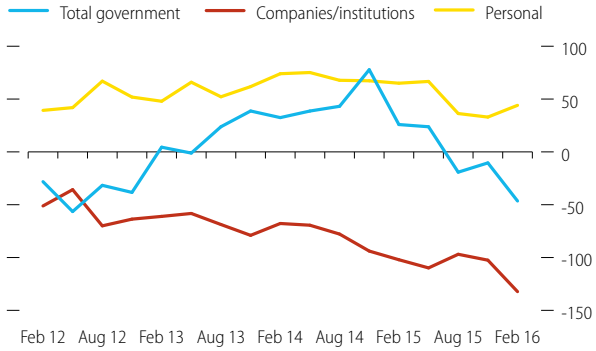
Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/Statisticalbulletins.aspx, accessed 1 May 2016.

up further in 2015, driven by a raft of commercial and residential projects. Credit to services, the second-largest component of private sector credit, grew particularly strongly in the first quarter of 2016 as population expansion continued apace.

The effect of lower oil and gas revenues reverberated throughout the banking system in 2015, with net banking assets shrinking. In the first half of 2015 government was still providing net liquidity to the system, but by July

it became a net debtor as its borrowing outweighed deposits (figure 2.26). Companies and institutions were increasingly large net borrowers and their debtor position increased over the year. The net position for individuals was relatively stable, with credit growth and deposits broadly in balance.

Figure 2.26 Balance of deposit and credits for government, companies/institutions and individuals (QR billion)



Source: http://www.qcb.gov.qa/English/Publications/Statistics/Pages/Statisticalbulletins.aspx, accessed 1 May 2016.

Fiscal accounts

This section assesses Qatar's fiscal performance using preliminary estimates as 30 April 2016 received from the Ministry of Finance on 18 May 2016. But as the government maintains an "open book" accounting system, which allows revenues and spending to be recorded for some time after the fiscal year has ended, these figures will probably be updated.

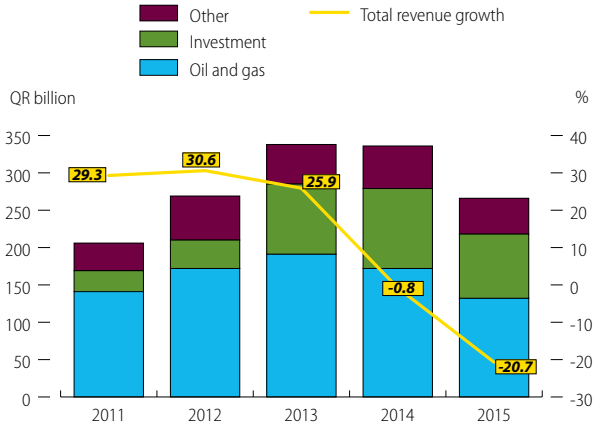
From 2016, the Ministry of Finance will use a calendar year basis for the budget year. The fiscal estimates for the years FY2011/12–2014/15 were therefore converted to a calendar year basis by "shifting" them to the calendar year, i.e. adding an average of one quarter of the previous fiscal year to an average of three quarters of the current fiscal year (e.g. calendar 2012 = 0.25*FY2011/12+0.75*FY2012/13).

The year 2015 is exceptional as it has only nine months—April to December—as a transitional period to allow the change to the budget year. For 2015 therefore, one average quarter of the previous fiscal year is added to the nine months (April to December) of 2015. All years 2011 to 2015 are thus adjusted, or synthetic, calendar years.

Government revenue

Preliminary estimates show a decrease in total revenues of 20.7% in 2015 from the previous year's outcome (figure 2.27). Oil and gas revenues (hydrocarbon-related tax revenues and royalties) shrank by 23.2% as a result of the oil price drop that began in mid-2014. "Other" revenue showed a 15.1% decline from 2014. Preliminary receipts from customs duties and corporate income tax were lower than in 2014, but receipts from public utility fees increased by 42.9% in 2015. Investment income—essentially dividends to government from Qatar Petroleum—decreased by 19.7% in 2015. An upward revision to revenue estimates is expected in line with previous years.

Figure 2.27 Composition of fiscal revenue and total revenue growth

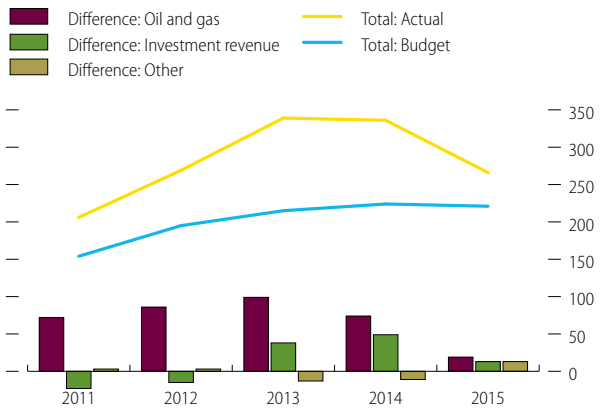


Note: All years are adjusted to a calendar year basis.
Source: Ministry of Finance and MDPS calculations.

Preliminary estimates for 2015 suggest that actual revenue came in 20.6% higher than budgeted. Investment, oil and gas as well as other revenue received exceeded the budgeted figures in 2015. Other revenues came in above budget, having been below budget in the previous two years (figure 2.28).

The preliminary estimate for non-hydrocarbon-related corporate income tax collection is 55.1% higher than budgeted, and for customs duties 51.7% lower. As customs duties have experienced recording delays in the past, additional receipts are still expected.

Figure 2.28 Difference between actual and budget government revenue (QR billion)

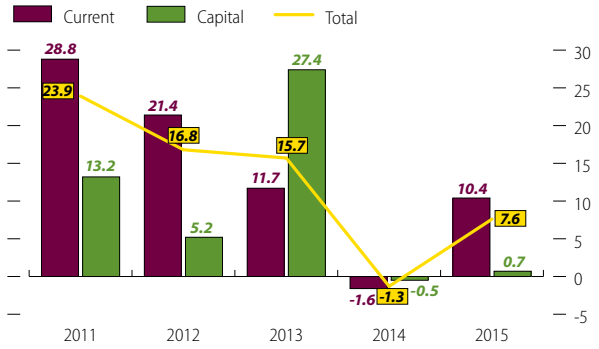


Note: All years are adjusted to a calendar year basis.
Source: Ministry of Finance and MDPS calculations.

Government expenditure

Preliminary estimates of government expenditure for 2015 show a 7.6% increase in actual spending from 2014: 10.4% for current spending and 0.7% for capital spending (figure 2.29). Current expenditure estimates for 2015 are higher than 2014 outcomes across most expenditure categories. The largest increases are observed in defence and security, water and electricity, wages and salaries, and education. Current expenditure estimates declined for health, though. Preliminary data suggest that recorded outlays for wages and salaries were 8.2% higher than the previous calendar year's actuals.

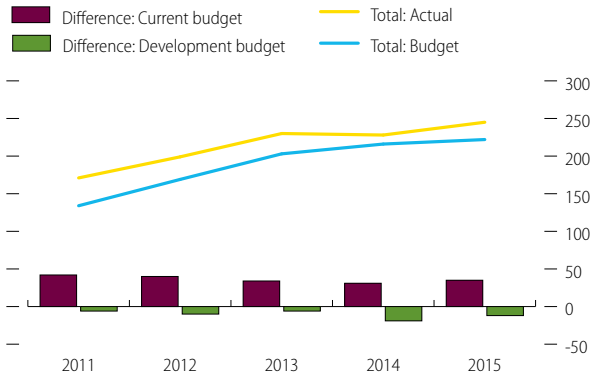
Figure 2.29 Fiscal expenditure growth (%)



Note: All years are adjusted to a calendar year basis.
Source: Ministry of Finance and MDPS calculations.

Preliminary total spending booked in 2015 was 10.4% over budget. This outcome fits into the broadly established pattern of higher than budgeted current spending and lower than budgeted capital expenditure (figure 2.30). Larger (24.2% over budget) current outlays stem mainly from higher than budgeted outturns for defence and security, general administration, water and electricity, and education, with lower actual spending than budgeted on health and grants.

Figure 2.30 Difference between actual and budget government expenditure (QR billion)



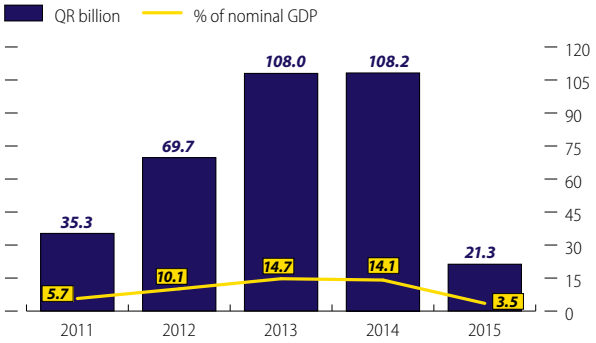
Note: All years are adjusted to a calendar year basis.
Source: Ministry of Finance and MDPS calculations.

Actual capital expenditure was 15.5% lower in 2015 than actual spending in 2014, possibly reflecting delays in implementing projects and in processing payments. If, as in the past, payment processing catches up, the capital spending estimate could be revised sharply upwards. Still, in the past three years actual capital spending has fallen short of that planned by 9–10%.

Fiscal balance and debt

The overall fiscal surplus of the government in 2015 is estimated at QR21.3 billion, equivalent to 3.5% of estimated nominal GDP for the period, and down from the 14.1% surplus recorded at the end of the previous year, given the fall in oil and gas prices and its effects on government income (figure 2.31).

Figure 2.31 Overall fiscal balance



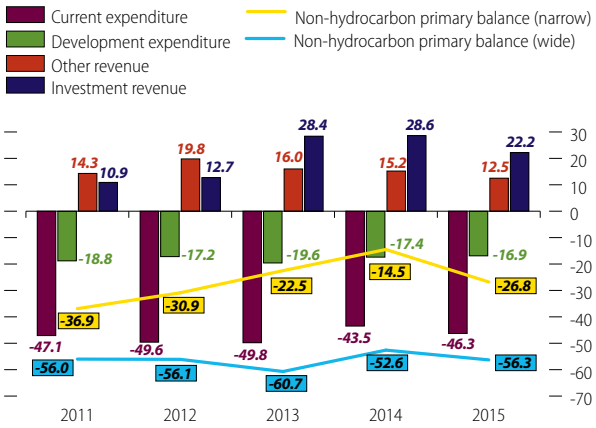
Note: All years are adjusted to a calendar year basis.
Source: Ministry of Finance and MDPS calculations.

The non-hydrocarbon primary balance—the total fiscal balance net of interest payments and income received directly from oil and gas (tax revenues and royalties)—as a share of non-hydrocarbon GDP widened to 26.8% in 2015 from 14.5% in the previous calendar year (figure 2.32). (See *Glossary* for further details.)

This is the result of lower investment income and other revenue, relative to non-hydrocarbon GDP. If investment income is considered as oil and gas–related revenue, the non-hydrocarbon primary fiscal deficit as a share of non-hydrocarbon GDP is far larger, reaching 56.3% in 2015.

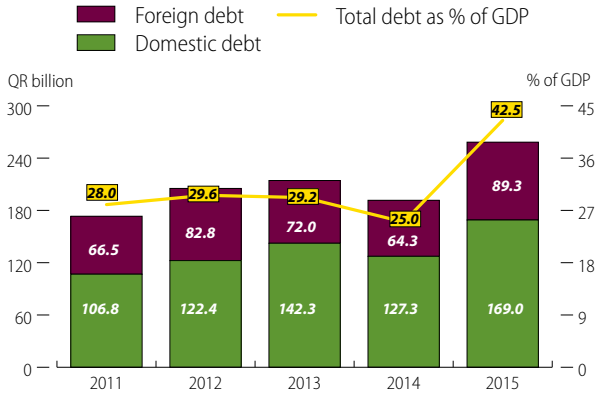
The government's total outstanding indebtedness in 2015 was QR258.3 billion, equivalent to 42.5% of Qatar's nominal GDP in 2015 and an increase of QR66.7 billion from the total debt recorded in 2014 (figure 2.33). Domestic indebtedness was QR169 billion (65% of the total), and external indebtedness QR89.3 billion (35%). Foreign debt increased by QR25 billion and domestic debt by QR41.7 billion from the previous year. Government debt figures do not, however, tell the whole story about the financial position of the State of Qatar.

Figure 2.32 Fiscal primary balance (% of non-hydrocarbon GDP)



Notes: All years are adjusted to a calendar year basis. In MDPS computations, the "wide" definition counts investment income as hydrocarbon revenues and includes a portion of other miscellaneous revenues (corporate income tax) that is thought to be linked to hydrocarbon activity. For more details see *Glossary*.
Source: Ministry of Finance and MDPS calculations.

Figure 2.33 Total government debt



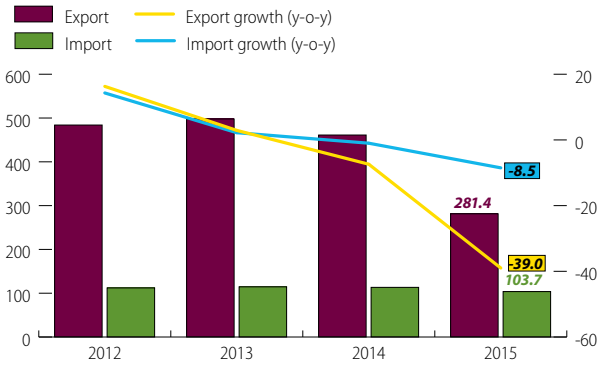
Note: All years are adjusted to a calendar year basis.
Source: Ministry of Finance and MDPS calculations.

The guarantees and borrowing of semi-government institutions are not included in these estimates. For example, outstanding credit to government institutions (100% government owned) and semi-government institutions (more than 50% government owned) in the Qatari banking sector (according to QCB) amounted to QR159.7 billion in February 2016. These borrowings are not captured by the central government debt figures, but should be considered in an analysis of the state's fiscal position. Also, as the estimates are of gross debt, they take no account of the assets owned by the state, but estimates of the state's net asset position cannot be made without reliable information on accumulated investments.

Trade and foreign currency reserves

Driven by a decline in hydrocarbon prices, Qatar's trade balance fell by half in 2015 from its 2014 value, but still posted a surplus of QR177.6 billion (29.2% of nominal GDP). The value of total merchandise exports plunged by 39.0% (figure 2.34), reflecting falling oil prices during 2015 and the delayed impact of the decline in the price of LNG exports.

Figure 2.34 Total trade growth



Note: Export and import data for goods only.
Source: http://www.qcb.gov.qa/English/Publications/Statistics/BalanceofPayments/Pages/default.aspx, data accessed 10 May 2016.

For total merchandise imports in FOB terms, preliminary estimates suggest a decline in value of 8.5% from their 2014 level. The volume of merchandise imports fell because of a drop in imports of drilling platforms on the back of lower oil infrastructure investments, coupled with an intensive effort to de-scope large public infrastructure investments. Continued weakness in global commodity markets and a fall in the unit value of manufactured goods also contributed to lower import prices. For imports priced in currencies other than US dollars, the nominal appreciation of the US dollar in 2015 (to which the Qatari riyal is pegged) reduced import costs for given volumes (box 2.2).

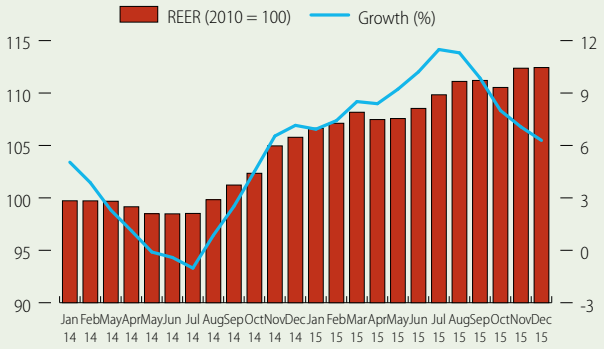
With a solid trade surplus, Qatar's current account remained in the black, posting a surplus of QR50.1 billion in 2015, equivalent to 8.2% of nominal GDP (figure 2.35). The overall surplus was tempered by continued deficits on the income, transfers and services accounts, of QR13.0 billion, QR57.1 billion and QR57.4 billion, respectively. The outflows in the income and transfers accounts are primarily due to continued large remittance outflows (profits and wages). The services deficit narrowed by 6.3% year over year, driven by travel, transportation and "others" categories. Together, these three accounts pulled the overall current account balance to QR129.8 billion below the level seen in 2014.

Box 2.2 Qatar's real effective exchange rate appreciation

The nominal effective exchange rate (NEER) captures movements in bilateral exchange rates, weighted by respective volumes of trade flows. The NEER provides an accurate measure of how the Qatari riyal is valued against the currencies of its major trading partners. The real effective exchange rate (REER) adjusts for differential inflation among its counterparts.

As Qatar's currency is pegged to the US dollar, it has appreciated in both nominal and real effective terms since the middle of 2014, reducing imported inflationary pressures (box figure). Qatar's import bill declined in 2015 in part because the cost of goods and services diminished. But the 12.7% REER appreciation from January 2014 to December 2015 has cut into the competitiveness of Qatari exporters with the country's primary trading partners.

Box figure Qatar's REER index



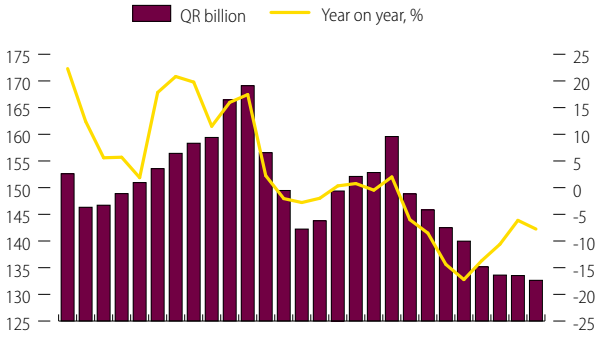
Note: The series and methodology have been revised from those published in the June 2015's *QEO* and previous publications.
Source: MDPS estimates.

Figure 2.35 Current account (QR billion)

Source: QCB, *Quarterly Statistical Bulletins and Balance of Payments Statistics*, http://www.qcb.gov.qa/English/Publications/Statistics/BalanceofPayments/Pages/default.aspx, accessed 10 May 2016.

QCB's gross foreign currency reserves stood at QR135.2 billion at end-December 2015, down by QR14.3 billion (13.7%) from the previous year (figure 2.36). The reduction in official reserves is nevertheless from a high base, and in March 2016 reserves accounted for 5.2 months of total imports. The fall in foreign exchange reserves is due to a marked slowdown of inflows, primarily hydrocarbon exports, alongside continued domestic demand to support goods and services imports. From January 2016, foreign currency reserves began to stabilise.

Figure 2.36 Total international reserves (QR billion)



Source: QCB, *Quarterly Statistical Bulletins*, http://www.qcb.gov.qa/English/Publications/Statistics/Pages/Statisticalbulletins.aspx.

Glossary—Key economic concepts

Gross domestic product

Gross domestic product (GDP) is a fundamental macroeconomic aggregate that plays a central role in macroeconomic analysis, although it has limitations (see below).

What is GDP?

GDP is widely used as a measure of economic output, as it represents the value of final goods and services produced in a given period of time, usually one year. Another way of looking at it is as the sum of value added across all sectors in the economy over a period.

How is GDP measured?

There are three main approaches to measure GDP, which should give the same results.

- Production approach: GDP is equal to the sum of value added across all sectors i.e. the gross output minus the value of intermediate consumption of goods and services summed across all sectors.
- Expenditure approach: GDP is the sum of final consumption of goods and services by the government and private sector; of gross investment (additions to physical stock of capital in the economy, including changes in inventories); and of net exports of goods and non-factor services (exports minus imports).
- Income approach: GDP is the sum of all income generated from the production process. This includes compensation of employees, and the gross operating surplus of enterprises such as profits, rents and interest.

What is the difference between GDP valued at factor cost and at market prices?

GDP at factor cost is the sum of all factor-of-production incomes generated from the production process (such as wages, profits, rents and interest), while GDP valued at market prices is GDP at factor cost plus indirect output taxes, less subsidies to businesses, which creates a wedge between the incomes earned by factors of production and the price paid for output in the market.

What is the difference between nominal and real GDP?

Nominal GDP values economic output using current prices, the prices prevailing over the period during which GDP is measured. Accordingly, changes in nominal GDP will reflect changes in prices as well as changes in the volume of output. Real GDP values output at constant prices by using the prices of a selected year called the "base year". When relative prices change, the choice of the base year can influence measured real GDP growth.

What is the GDP deflator?

This is simply the ratio of nominal and real GDP, and hence it can be considered a measure of the aggregate price level of all domestically produced goods and services in the economy.

What is GDP per capita?

This is total GDP divided by the resident population of the country. While it is commonly used as a proxy for standard of living, GDP per capita is not a measure of personal income nor necessarily of the representative well-being of the population.

What are the limitations of GDP as a measure for economic output and income?

GDP measures do not normally capture the value of goods and services that are not traded in the market, such as volunteer and charitable services and goods and services produced for own use. Similarly, the existence of a large underground economy or black-market activities (which are not that important in Qatar) would result in a GDP measure that underestimates the true size of the economy.

What is final consumption?

This consists of goods and services used by the household and government sectors to satisfy their current needs or wants.

What is investment?
Gross investment is equivalent to the economy's acquisition of fixed assets (or gross fixed capital formation) plus the value of inventory changes. Net investment is equal to gross investment less the consumption of fixed capital (i.e. depreciation) and is equal to the addition to the physical stock of capital in the economy between two periods.

What is national saving?
This is national disposable income less final consumption expenditure.

What is national income?
This is equal to GDP plus factor income receivable from non-residents less factor income payable to non-residents.

What is national disposable income?
This equals national income plus the sum of all current transfers in cash or in kind receivable by resident institutional units from non-resident units and subtracting all current transfers in cash or in kind payable by resident institutional units to non-resident units.

Fiscal concepts

What is the overall fiscal balance?
This is the difference in a given period between total government revenues (including grants) and total government expenditures (current and capital) plus net lending.

What is the primary balance?
This is the overall fiscal balance net of all interest payments and receipts by government. The primary balance provides an indicator of the current fiscal support for aggregate demand since interest payments are linked to stocks of liabilities and assets of the previous period.

What is the non-hydrocarbon (primary) fiscal balance?
This is the overall fiscal balance less oil and gas revenues, which in Qatar is defined in terms of direct revenues (royalties and taxes) received from hydrocarbon production. Investment income from government companies and government-linked companies, which may accrue from hydrocarbons-related activities, is not included in the definition of oil and gas revenues. The non-hydrocarbon fiscal balance provides an indication of the fiscal stimulus to the local economy funded by oil and gas revenues. The non-hydrocarbon primary fiscal balance adds back (nets out) all interest payments from the non-hydrocarbon balance.

What is cash accounting?
Cash accounts record revenue when cash is received and expenses when they are paid in cash, irrespective of when the income fell due or the expenditure commitments were made. Although they are important for understanding what the government contributes to liquidity in the economy and for managing cash, cash accounts may not provide a true picture of the government's financial position.

What is accrual accounting?
Accrual accounts record transactions when the underlying event or commitment occurs, regardless of the timing of the related cash settlement. Revenues are recorded when income is earned, and expenses are recorded when liabilities are incurred or resources consumed. In principle, the difference between cash-based balances and those calculated on an accrual basis should equal "changes in arrears".

What is "quasi-fiscal" spending?
This is expenditure executed by state-owned (financial and non-financial) enterprises. It is in character similar to expenditure normally executed by the government, but is not included in the government budget (or listed under "contingent liabilities" in the budget). Central bank operations that entail implicit subsidies or taxes are also quasi-fiscal in nature.

What is the fiscal year?
The State of Qatar will start its first calendar-based fiscal year in 2016. The previous fiscal period FY2014/15, which ran from 1 April 2014 to 31 March 2015, has been extended to 31 December 2015, a period of 21 months. All revenue and expenditure as budgeted for 1 April 2014 to 31 March 2015 are prorated to 31 December 2015.

What is the difference between the narrow and broad definitions of the non-hydrocarbon primary fiscal balance?
The narrow definition is the overall fiscal balance, plus interest payments, less revenue received directly from oil and gas (tax revenues and royalties on production). Under a broader definition, investment income (dividends to the government from QP) and corporate income taxes paid by hydrocarbon entities are also counted as oil and gas–related revenue.

The non-hydrocarbon primary fiscal balance is an indicator of the stimulus that government spending

provides to the non-oil and gas economy. Cyclically adjusted measures can be used to gauge the fiscal stance of government. A non-hydrocarbon fiscal deficit (inclusive of interest charges) larger than the budgetary resources that oil and gas resources can yield implies future charges on fiscal resources.

Financial concepts

What is a secondary market?

A secondary market is one where investors can trade assets or securities with others, as opposed to simply purchasing them from the issuing entities themselves.

What are second-lien bond offerings?

Second-lien debts are subordinate to the rights of other, more senior debts issued against the same collateral, or a portion of the same collateral. In the event of a default, second-lien debts stand behind higher-lien debts in terms of rights to collect proceeds from the debt's underlying collateral. For this reason, second-lien debt is usually considered riskier than higher-lien debt and often comes with a higher interest rate. Issuing such securities usually points to financing difficulties, meaning the issuer is unable to obtain funds via traditionally established avenues.

Monetary concepts

What is reserve money or M0?

Reserve money is a liability of the central bank. It is the sum of (i) currency issued by and held outside the central bank; (ii) banks' deposits at the central bank to satisfy reserve requirements and for clearing purposes; and (iii) in the case of Qatar, other reserves including bank deposits at the central bank in excess of requirements. Reserve money can also be expressed in terms of the central bank's counterpart assets, which fall into two main categories: net foreign assets, which comprise the net official international reserves plus any other net foreign assets that are less liquid and hence are not included in the net official international reserves; and net domestic assets, which include central bank net claims on government (claims minus deposits) and claims on other sectors.

What is narrow money or M1?

This is currency in circulation plus demand deposits. Narrow money is considered "liquid". Narrow money typically pays zero or relatively low rates of interest.

What is "quasi money"?

This is the less liquid part of the money supply and includes savings deposits and all deposits denominated in foreign currency.

What is "broad money" or M2?

This is the sum of quasi-money and M1.

What are official foreign reserves?

These are the central bank's liquid foreign assets that can be used to secure the country's external payments at any moment. Reserves include gold, foreign exchange, and the reserve position at the International Monetary Fund. Reserves are usually presented in net terms by excluding from the gross official foreign reserves the central bank's foreign liabilities.

What is "credit"?

Credit creation involves the provision of resources by the lender (such as banks or any other financial institution) to the borrower. In this way the lender acquires a financial claim and the borrower incurs a liability to repay in the future. Credit to non-financial sectors (such as government, private businesses and households) is mainly used to finance production, consumption and capital formation.

What is the trailing price-to-earnings ratio?

This is calculated by taking the current stock price and dividing it by a company's trailing earnings per share for the past 12 months. This measure differs from the forward price-to-earnings ratio, which uses earnings estimates for the next four quarters.

What is the price-to-book ratio?

This ratio compares a stock's market value to its book value, calculated by dividing the current closing price of the stock by the latest quarter's book value per share.

Balance-of-payments concepts

What is the trade balance?

This is the difference between a nation's imports and exports of merchandise measured over a specified period (normally a calendar year). The trade balance is part of the wider current account balance.

What is the free on board (f.o.b.) price?

The f.o.b. price of exports and imports of goods is the market value of the goods at the point of uniform valuation (the customs frontier of the economy from which they are exported). It is equal to the cost, insurance, freight (c.i.f.) price less the costs of transport

and insurance charges, between the customs frontier of the exporting (importing) country and that of the importing (exporting) country.

What is the c.i.f. price?

The c.i.f. price is the price of a good delivered at the frontier of the importing country, including any insurance and freight charges incurred to that point, or the price of a service delivered to a resident, before the payment of any import duties or other taxes on imports or trade and transport margins within the country.

What is the income and services balance?

This is the sum of net income received from non-residents and the balance in services trade measured over a specified period. The income account comprises flows derived from labour (wages paid to non-resident employees) and from net investment income. The services balance consists mainly of payments for travel, transport, communications, construction, housing rentals and financial services.

What is the current account balance?

This is the sum of the trade, income and services balances, plus net current transfers, which include cash transfers, gifts in kind and remittances (which are sizeable in Qatar) sent by foreign workers to families back home. It is termed the current account because goods and services are generally consumed in the current period.

What is the capital and financial account balance?

This records purchases or sales of financial assets or transactions related to international borrowing and lending. It also includes capital transfers.

What is the international investment position and the capital account

The international investment position of a country is a financial statement presenting both the composition and value of a country's external financial assets and liabilities. The difference between these assets and liabilities is its net international investment position.

What is external debt?

This is the stock of outstanding contractual liabilities, issued by the public and private sector to non-residents, that have been disbursed.

Exchange rate concepts

What is the bilateral exchange rate?

This is the price of one currency measured in units of another. The nominal US dollar exchange rate for the Qatari riyal is pegged at QR3.64 = $1.

What is the nominal effective exchange rate (NEER)?

Unlike the bilateral exchange rate, the NEER is not a market price but an index number that measures the weighted average of the country's bilateral exchange rate against a basket of trading partners' currencies over a given period. The size of the weights normally reflects their relative importance in the country's international trade or in its overall foreign transactions, including external financial transactions. Movement of the NEER provides an indication of changes in the value of the domestic currency against the currencies in the basket. An appreciation occurs when a domestic currency unit can buy more of the basket of currencies.

What is the real effective exchange rate (REER)?

This is the NEER adjusted for differential inflation rates between a home country (Qatar, for example) and its trading partners. An appreciation of the REER can occur either because the NEER is appreciating or because domestic inflation in the home country (Qatar) is higher than that in its trading partners. Changes in the REER provide a measure of the change in the currency's purchasing power and of the price competitiveness of the country's tradeable goods and services against trading partners' goods and services.