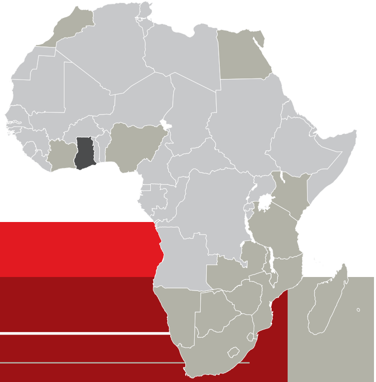
# ghana



## Demographics

| | |
|---|---|
| Population | 25 758 108 (July 2014 est.) |
| Population: world ranking | 49 out of 240 countries (CIA) |
| Life expectancy (years) | Total population: 65.75; male: 63.38; female: 68.19 (2014 est.) |
| Main ethnic groups | Akan 47.5%, Mole-Dagbon 16.6%, Ewe 13.9%, Ga-Dangme 7.4%, Gurma 5.7%, Guan 3.7%, Grusi 2.5%, Mande-Busanga 1.1%, other 1.6% (2010 census) |
| Business language | English, Asante |
| Urban population | 52.5% |
| Population below national poverty line | 28.5% (2006 est.) |

Sources: CIA, World Bank

## Geography

| | |
|---|---|
| Area in sq km | 238,533 |
| Area: World ranking | 82 out of 252 countries (CIA) |
| Climate | Tropical; warm and comparatively dry along southeast coast; hot and humid in southwest; hot and dry in north |
| Natural resources | Gold, timber, industrial diamonds, bauxite, manganese, fish, rubber, hydropower, petroleum, silver, salt, limestone |

Sources: CIA, World Bank

## Sovereign ratings

| | |
|---|---|
| S&P | B/Negative |
| Fitch | B/Negative |
| Moody's | B1/Negative |

Source: NKC Research

## Economy in 2013

| | | | |
|---|---|---|---|
| Nominal GDP (US$bn) | 43.95 | Total government debt as % of GDP | 59.02 |
| Nominal GDP: World ranking | 86 out of 188 countries (IMF) | Total external debt as % of GDP | 28.51 |
| Real GDP (% change y-o-y) | 6.28 | Consumer price inflation (average, %) | 11.65 |
| GDP growth: World ranking | 42 out of 189 countries (IMF) | Current account balance as % of GDP | -12.98 |
| GDP per capita (US$) | 1,696.61 | Equity market: Size in US$ | US$3.89bn |
| Agriculture as % of GDP | 21.97 | Equity market: Listed companies | 32 primary listings |
| Industry as % of GDP | 28.58 | Bond market size | US$6.03bn* govt bonds outstanding in domestic market |
| Services as % of GDP | 49.45 | | |

Sources: IMF, NKC Research, BoG, Bloomberg

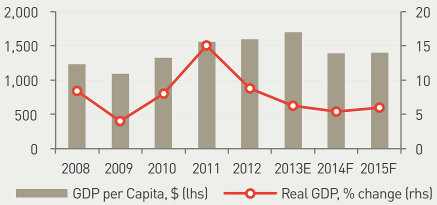
*(end Dec-13)

| Political environment | |
|---|---|
| Government type | Constitutional democracy |
| Head of state | President John Dramani Mahama |
| Head of government | President John Dramani Mahama |
| Ruling political party | National Democratic Congress (NDC) |
| Main opposition parties | New Patriotic Party (NPP), People's National Convention (PNC), Convention People's Party (CPP) |
| Elections | Election last held on 7 December 2012 (next to be held in December 2016) |

Source: NKC Research

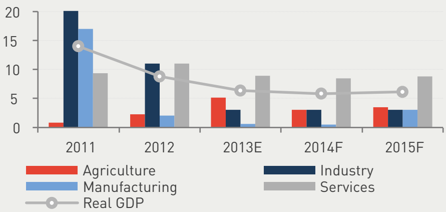
## Economic outlook

### GDP per capita vs real GDP




Source: NKC Research

### Real GDP by sector (% change pa at factor costs)




Source: NKC Research

The commencement of oil production in December 2010 led to Ghana recording one of the highest growth rates in the world in 2011 (15%). Excluding the oil sector, real GDP expanded by 8.4% in 2011 at factor cost.

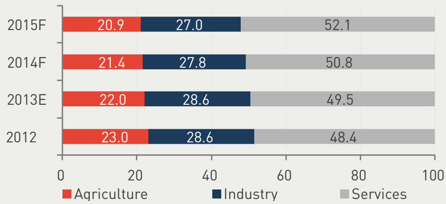
Ghana's impressive economic growth performance, with average real GDP growth of 7.9% per annum achieved during 2005-12, has coincided with an improvement in development indicators. Ghana is ranked 135$^{th}$ out of 187 countries in the 2013 UN Human Development Report, placing it in the 'medium development' category. The proportion of the Ghanaian population that lives on less than US$2 a day (purchasing power parity adjusted) declined from 63.3% in 1998 to 51.8% in 2006 (latest available data).

However, the short to medium-term outlook for Ghana's economic performance is less promising than was seen in recent years. A substantial fiscal slippage in 2012 and insufficient consolidation in 2013 have pressurised macroeconomic stability. Weak fiscal finances have contributed to a widening current account deficit, a depreciating currency, increasing levels of inflation, high interest rates, and an increase in tax rates. All these factors, in addition to ongoing energy shortages, are likely to keep real GDP growth under pressure during 2014-16. We expect real GDP growth to decline to 5.4% this year, before rebounding to 6% in 2015.

Tullow's production at the Jubilee field averaged 102 000 barrels per day (bpd) in the first quarter of 2014.

**Note:** In the graphs above, E and F are the abbreviations for estimate and forecast respectively.

### GDP by sector (% of GDP)




Source: NKC Research

The company expects production to average 100 000 bpd for the entire year, with gas disposal methods being implemented until the gas processing infrastructure is completed. Meanwhile, Tullow has made good progress with the Tweneboa-Enyenra-Ntomme (TEN) project, with first oil expected by mid-2016. We forecast Ghana's oil production at 100 000 bpd for this year (up from 96 200 bpd in 2013), before increasing by 18% next year (as the Jubilee field reaches its plateau output level), and by a further 18.6% in 2016 as new production comes on stream.

## International trade

Ghana's principal foreign exchange earning products are gold, oil, and cocoa. Gold maintained the lead as Ghana's top export earner in 2013, and is expected to keep this position over the 2014-15 period as well, despite struggling since 2013 due to lower output and prices. Crude oil surpassed cocoa as the second-largest export product in 2012.

Ghana's principal imports are fuels, manufactured products, and capital goods. We expect the current account deficit to narrow this year to US$4.8 billion, but to remain in double-digit territory when expressed as a percentage of GDP (13.2%). The narrowing in the shortfall is expected to be facilitated by a decline in the imports of goods and services, which in turn can be ascribed to a slowdown in economic growth, as well as severe forex shortages and a weaker cedi limiting companies' ability to import. A further narrowing in the trade deficit next year, this time due to a strong expected showing by exports, should lead to a further narrowing in the current account shortfall to US$4.5 billion (11.8% of GDP).

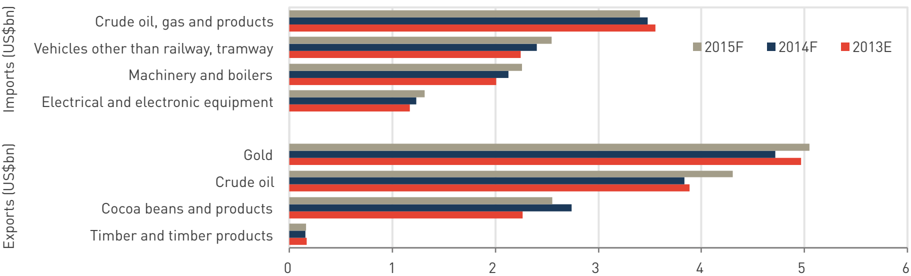
### Foreign trade flows, 2013

| Main exports | (US$ billion) | Main imports | (US$ billion) |
|---|---|---|---|
| Gold | 4.81 | Crude oil, gas, and products | 3.29 |
| Crude oil | 3.83 | Vehicles other than railway, tramway | 2.25 |
| Cocoa beans and products | 2.12 | Machinery and boilers | 2.01 |
| Timber and timber products | 0.16 | Electrical, electronic equipment | 1.17 |

Source: NKC Research

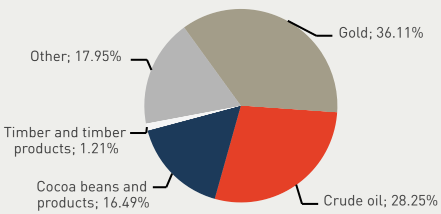
**Note:** In the graphs above, E and F are the abbreviations for estimate and forecast respectively.

## Ghana top four exports and imports (US$ billion)



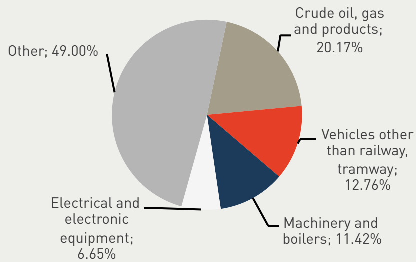

Source: NKC Research

## 2013 exports (% of total)



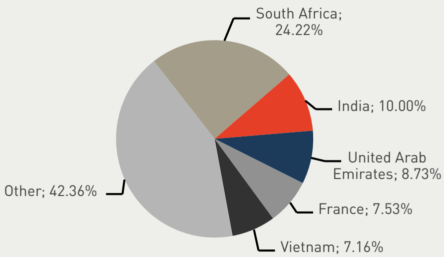

Source: NKC Research

## 2013 imports (% of total)



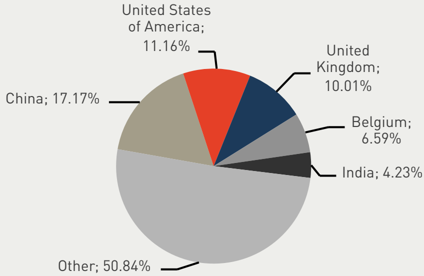

Source: NKC Research

## 2013 top destinations of exports (% of total)




Source: Trade Map

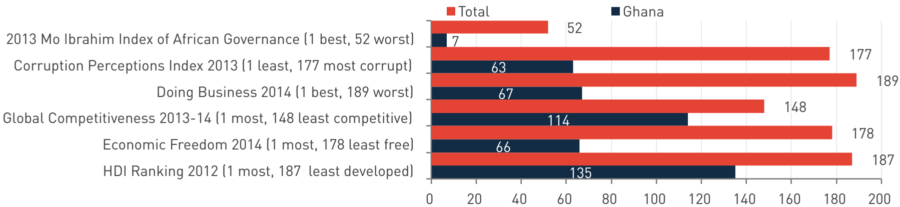
## 2013 top origins of imports (% of total)




Source: Trade Map

**Note:** In the graphs above, E and F are the abbreviations for estimate and forecast respectively.

Business development indicators




Source: NKC Research

## Policy environment

### Monetary policy:

The Bank of Ghana (BoG, the central bank) decided after its Monetary Policy Committee (MPC) meeting on 6 February 2014 to increase its policy rate by 200 basis points to 18% to anchor inflation expectations in the face of a weakening currency. The previous change in the policy rate occurred in May last year, when it was increased by 100 basis points. At its subsequent meeting, on 2 April 2014, the MPC decided to leave its policy rate unchanged, though increased the cash reserve requirement on banks from 9% to 11%, reduced the single currency net open position (NOP) limits of banks from 10% to 5%, and the aggregate NOP from 20% to 10%. The BoG expects Consumer Price Index (CPI) inflation to average 12% this year, higher than a targeted 7.5% to 11.5%, and to return to the target range by the end of 2015 H1. Ghana needs fiscal reform and restraint to address the free-falling cedi and double-digit CPI inflation. Still, in the absence of significant improvements on this front, the central bank would have to keep its policy rate high to do what it can to manage inflation expectations and to maintain credibility.

### Exchange rate policy:

According to the International Monetary Fund (IMF) Ghana 'currently has a multiple currency practice, arising from a special reference rate for certain official transactions, subject to Fund approval.' The BoG calculates a reference rate, which it uses for certain official transactions, but there is no mechanism in place to ensure that this rate does not differ from the market rate by more than 2%.

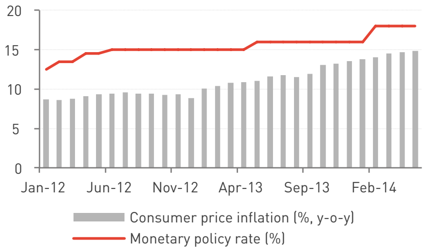
The cedi's value has been eroded by close to 650% since the start of the new millennium, and by almost 115% since the beginning of 2010. The cedi's rapid depreciation is mainly being driven by the government's spendthrift. Cumulative fiscal spending amounted to GH¢53.4 billion during 2012-13, which is more than the previous five years combined. In response to the weakening cedi, the central bank has directly intervened in the market, in addition to announcing various measures to support the local unit. These measures include limiting cash withdrawals from foreign exchange accounts, and requiring exporters to repatriate their earnings within 60 days of shipment. Given that the government has shown that it is not interested in making a U-turn on its current fiscal path, the outlook for the cedi exchange rate is dire.

### Fiscal policy:

The major fiscal slippage in 2012 – when spending soared by 78% – was not followed by sufficient fiscal consolidation. In fact, the fiscal deficit widened by a further 17% last year after widening by 239% in 2012, and remained in double-digit territory as a percentage of GDP. After missing its deficit target significantly in 2012 and in 2013, we expect to see a repeat of this in 2014. It appears that the government is not concerned about the shortfall being at a permanently higher level. While fuel and utility subsidies have been lowered, key concerns include the size of the wage bill and high debt interest costs, both of which will be difficult to bring down. Moreover, the government's revenue projections are overly optimistic, which could result in further spending overruns.

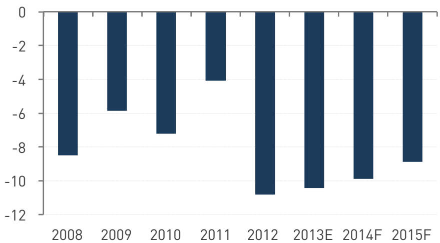
Worryingly, there is another election in 2016, which could again lead to over-spending. Public debt more than doubled between the end of 2011 and the end of 2013 in local currency units. Over the same period, the debt/GDP ratio climbed from 41% to 59%. Our projections indicate that the ratio will continue to increase, reaching a peak of 66.1% in 2016.

**Consumer price inflation and monetary policy rate**




Source: Bank of Ghana, Ghana Statistical Service

**Budget balance (% of GDP)**




Source: NKC Research

## Regulatory and tax environment:

Ghana is relatively open to foreign investment. The only sectors that are not fully open to foreign investment are mining, and oil and gas. There is a minimum investment amount for foreigners in place of US$50 000.

Ghana has one of the most accommodative business environments on the continent, and this, along with the discovery of oil and the presence of other natural resources, has helped to boost foreign direct investment (FDI) significantly. It takes eight procedures and 14 days to start a business in Ghana, compared to the sub-Saharan African (SSA) averages of eight procedures and 29.7 days. The corporate income tax rate is comparatively low at 25% of profit. There is also a tax of 13% on gross salaries for social security contributions. The value added tax rate has been raised by 2.5 percentage points to 17.5%, while capital gains and interest are taxed at 15% and 8% respectively.

## Political environment

Ghana is effectively a two-party state, with the National Democratic Congress (NDC) and New Patriotic Party (NPP) having alternated in government since 1992. The most recent general election was held in December 2012, and the NDC retained Parliament and the presidency through the re-election of John Dramani Mahama, who took over after the death of sitting president, John Atta Mills in July 2012. The NPP unsuccessfully challenged the outcome of the election before the Supreme Court.

There has been some activity on the party political scene in Ghana in recent months: in mid-April, the opposition NPP elected a new national executive. The new national chairman and general secretary seem close to Alan Kyerematen, a businessman and diplomat who could be a strong contender for the party in the 2016 presidential election. We are paying attention to the NPP's chances in 2016 because the current state of governance in Ghana is so dire, and most political risk flows from the poor state of the economy. Inflation, a weakening currency, high interest rates and unemployment are all serious issues, and could lead to crime or more confrontational opposition if trends hold. For the moment, however, no such problems have emerged.

**Note:** In the graphs above, E and F are the abbreviations for estimate and forecast respectively.

## Economic environment

### Ratings:

All of the three major rating agencies currently have Ghana's sovereign credit rating on a negative outlook. On 16 May, Standard & Poor's (S&P) affirmed Ghana's 'B' rating with a negative outlook, which means there is a 33% likelihood that S&P will downgrade the rating in the short term. The rating is constrained by the government's weak finances and external vulnerabilities. Fitch Ratings announced on 28 March that it had changed the outlook on Ghana's 'B' rating to negative following continued worsening of the fiscal position, and a weakening in policy credibility following two consecutive years of double-digit and larger-than-expected budget deficits. Fitch warned on 9 June that increased central bank financing of the fiscal deficit in the first quarter of 2014 'illustrates the financing challenges the government faces given surging yields and a deteriorating maturity profile'. Finally, Moody's Investors Service rates the sovereign one notch higher than the other rating agencies at 'B1' (with a negative outlook). Moody's changed the outlook on the rating from stable to negative in December last year.

| Key indicators to watch | |
|---|---|
| **Public finances** | The major fiscal slippage in 2012 was not followed by sufficient consolidation, and it appears as though the government is not concerned about its deficit being at a permanently higher level. Wages and debt interest payments consume the majority of the budget, while over-optimistic revenue assumptions are concerning. Principal Eurobond repayments are due in 2017 and 2023. |
| **Forex reserves and exchange rate** | The cedi is under notable pressure due to a sharp increase in fiscal spending and a structurally wide current account deficit. Foreign reserves have fallen sharply, and in this context the substantial external financing requirement for 2014 is concerning. |
| **Monetary policy and inflation** | CPI inflation is elevated due to central bank financing of the deficit, as well as higher utility and fuel prices, and a sharp depreciation of the cedi. Any monetary policy action in the absence of fiscal reform will not be effective. |

Source: NKC Research

| Key vulnerabilities | What is the government doing to address this? |
|---|---|
| **Export earnings dominated by primary commodities, rendering the economy vulnerable to fluctuating commodity prices and external demand.** | If Ghana can get its local oil refineries in order and exploit the commercial potential of its natural gas, it would diversify export earnings. Local content laws are aimed at developing domestic industry. |
| **The fiscal deficit deteriorated sharply last year, pushing up public debt levels and harming the government's credibility.** | The government scrapped fuel subsidies in May 2013, raised utility tariffs in September, and raised taxes, but the deficit remains very wide due to elevated wage and debt interest payments. |
| **Import cover remains quite low as a result of a large import bill and drawdown in international reserves.** | The central bank introduced capital controls in February 2014 to support the local unit – these were eased in June. Fiscal consolidation has been too slow. |

Source: NKC Research

| Market participation | |
|---|---|
| **Foreign investors** | Foreign investor participation in the debt market is limited to long-term instruments. Foreign residents may hold foreign exchange accounts in Ghana. |
| **Local investors** | Participation dominated by the banking sector, the Social Security and National Insurance Trust (SSNIT) Pension Fund, as well as a very active retail investor market. |

Source: NKC Research

# Financial market

## Foreign exchange

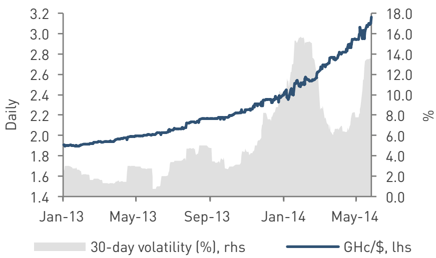
| Security | Average size of a single transaction | Average daily turnover range | Bid/offer spread | Tenor/ maturity | Quotation/ settlement | Reuters page | Additional information |
|---|---|---|---|---|---|---|---|
| Spot | US$0.25m to US$0.5m | US$10m | 25 bps for US$0.25m | - | T+2 | GHS= | Main cross is US$/GHS |
| Forwards (deliverable) | US$0m to US$5m | US$0m to US$5m | 150 bps to 300 bps | Liquid up to 1 year | T+2 | GHS-FWD= | Main benchmark is US$/GHS |
| Forwards (non-deliverable) | US$1m to US$2m | US$0m to US$5m | 150 bps to 300 bps | Limited immaterial of tenor | T+2 | - | Main benchmark is US$/GHS |
| Swaps | US$0m to US$5m | US$10m to US$20m | 150 bps to 300 bps | Liquid up to 1 year | T+2 | - | Main benchmark is US$/GHS |

Sources: Bloomberg, Reuters, NKC Research

The cedi's value has been eroded by close to 650% since the start of the new millennium, and by almost 115% since the beginning of 2010. The cedi's rapid depreciation is mainly being driven by the government's spendthrift tendencies. In response to the weakening cedi, the central bank has directly intervened in the market, in addition to announcing various measures to support the local unit. These measures include limiting cash withdrawals from foreign exchange accounts, and requiring exporters to repatriate their earnings within 60 days of shipment. In addition, the central bank increased its policy rate by 200 basis points in February this year, and in April increased the cash reserve requirement on banks from 9% to 11%. In spite of these measures, by 9 June, the cedi had depreciated by 30.1% y-t-d against the US dollar.

### Exchange rate

**Ghanaian cedi**




Source: Reuters

Given that the government has shown that it is not interested in making a U-turn on its current fiscal path, the outlook for the cedi exchange rate is dire. We forecast that the currency will average GH¢2.9/ US$ this year, 40.1% weaker on average than last year. The local unit is projected to average 12.8% weaker next year at GH¢3.27/US$. Significant upside risk to these exchange rate forecasts exists

## Equities

| Stock market | Listed companies | Liquidity | Total market capitalisation | Settlement | Most liquid sector | Daily trading volume |
|---|---|---|---|---|---|---|
| Ghana Stock Exchange | 32 | Limited | US$3.9bn | T+3 | Financial; Beverages | 1.02m shares |

Sources: Bloomberg, Ghana Stock Exchange

The Ghana Stock Exchange (GSE) remains relatively small and market liquidity is a constraint for many foreign funds. Daily trading values are in the region of US$0.6 million. This is due to there being relatively few listed companies. Meanwhile, institutions such as the Social Security and National Insurance Trust (SSNIT) are large shareholders, but do not trade regularly, adding to liquidity constraints.

'The introduction of the automated trading system has helped to address some liquidity concerns because it has done away with the issuance of share certificates, which took time to trade-in shares', according to the director-general of the Securities and Exchange Commission (SEC), Adu Anane Antwi. The SEC is looking to introduce market making and set up live trading on the GSE in order to boost liquidity levels.

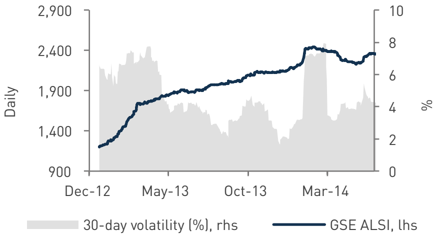
The GSE composite index rose by nearly 80% in 2013, and made a good start to the new year, rising by a further 5.1% in January and 7.3% in February. However, since then, the stock market has come under pressure, falling by 1.4% in March and 5.5% in April. We attribute this to increased macroeconomic risk in the country, including acute exchange rate risk. In addition, the central bank raised its main policy interest rate by 200 basis points in February, and raised the banks' cash reserve requirements in April, which would have tended to dampen liquidity levels. The composite index is still up by around 6.1% y-t-d.

However, the market capitalisation has fallen to US$3.9 billion, compared to US$4.5 billion at the end of last year.

| Top-five listed companies | Market capitalisation |
|---|---|
| Standard Chartered Ghana | US$672m |
| Ecobank Ghana | US$629m |
| Guinness Ghana | US$385m |
| Ghana Commercial Bank | US$385m |
| Unilever Ghana | US$367m |

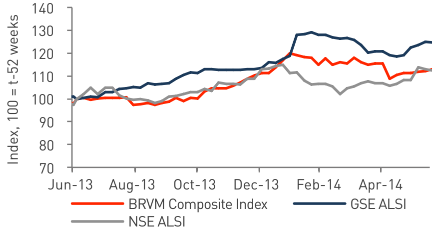
Source: Bloomberg

### Ghana Stock Exchange - Composite Index




Source: Reuters

### West Africa SEs performance indices




Source: NKC Research, Reuters

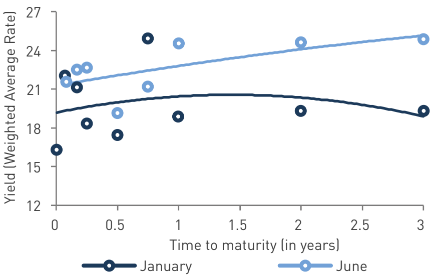
## Fixed income

| Security | Tenor/ maturity | Auction frequency | Liquidity | Quotation/ settlement | Auction participation | Bid/offer spread |
|---|---|---|---|---|---|---|
| Treasury bill | 91, 182 day | Weekly | Limited | Generally T+0 | Licenced primary dealers | 100 bps to 150 bps |
| Treasury bonds | 1 to 2-year Fixed Rate Note (FRN); 3 to 5-year Fixed Rate Bond (FRB) | FRN sold weekly; FRB sold on ad hoc basis | Limited | T+1 (notes); T+2 (bonds) | Licenced primary dealers (foreigners are restricted to a minimum of 3 years on a primary issue) | 50 bps to 100 bps |

Source: Bloomberg, NKC Research

Debt in the local market is mostly issued in order to repay maturing liabilities and to finance the budget deficit. The term structure of the debt market yield curve was lengthened last year with the debut issue of a seven-year bond. Ghana is one of the few countries on the continent that boast having a fully-automated trading process relating to its fixed-income instruments on the GSE, which is accompanied by a GSE Central Securities Depository (GCSD). Non-residents of Ghana are allowed to invest in the domestic capital market, but only at the long end (i.e. with maturities of three years and above). However, towards the end of last year, the BoG noted that it was in discussions with the finance ministry to allow foreign investor participation in one and two-year government securities in order to 'ensure competitive pricing in the market'. In January 2014, foreigners were allowed to partake in the auction of two-year securities, while still being barred from one-year instruments. Foreign investors have snatched up the majority of the three and five-year bonds on offer over the last few years, but the situation has started to change given the tightening of global liquidity expected during 2014-15, as well as increased macroeconomic risk in Ghana. Ghana's debut seven-year local bond issue of August last year attracted GH¢270 million in bids, of which only GH¢102 million were accepted. Foreign investors accounted for 48% of total bids. However, no foreign bids were accepted because they 'were a bit expensive'. Several auctions have been cancelled so far this year due to concerns about rising yields.

### Ghana (benchmark) yield curve




Sources: NKC Research, Reuters

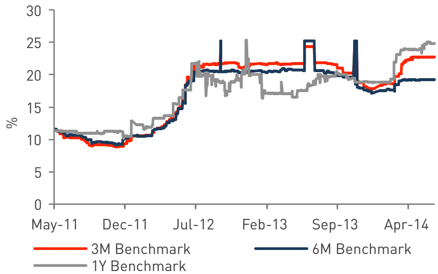
In terms of the holders of Ghana's outstanding domestic government debt (totalling GH¢24.67 billion at December 2013, up from GH¢18.54 billion in December 2012), as percentage of the total:

- Commercial banks – 27.5%
- The central bank – 28.8%
- Social Security and National Insurance Trust – 2.7%
- Insurance companies – 0.2%
- Non-residents – 21.6%
- Others – 23.2%

Ghana's treasury bill and treasury bond yields have increased notably since 2012 due to a sharp widening of the fiscal deficit, which was mostly financed by domestic debt. Yields on short-term paper increased from below 11% at the end of 2011 to around 21% in mid-2012. Yields have remained at these elevated levels for most of the last two years for a number of reasons. Firstly, the budget deficit widened by a further 16.7% in 2013, and in our baseline scenario, we project that it will widen by another 11.4% in 2014.

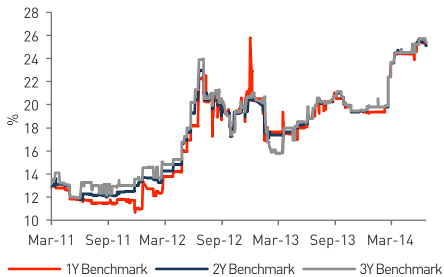
Secondly, both inflation and the central bank's policy rate have increased significantly. Thirdly, Ghana's creditworthiness, as measured by international rating agencies, has deteriorated. The government has on more than one occasion decided this year to cancel long-term bond auctions in order to avoid yields rising by too much. However, given that the budget deficit remains very wide, authorities cannot indefinitely continue to cancel bond auctions.

### Ghana treasury bills (secondary market)




Sources: NKC Research, Reuters

### Ghana treasury bonds (secondary market)




Sources: NKC Research, Reuters

This illustrates the Ghanaian government's precarious position: it has a large budget deficit to fund, and a large amount of maturing debt to refinance. At the same time, holding these bonds has become more risky, which has lowered demand.

The combination of lower demand and elevated supply keeps yields elevated. Unless spending levels are cut, the government has no option other than to accept higher yields. But in doing so, the deficit (via higher interest payments) rises even further, which necessitates that more bonds have to be issued. The vicious cycle will continue until decisive measures are taken to bring the wage bill down to more sustainable levels.

## Macroeconomic data and forecasts

| Key annual economic data | 2009 | 2010 | 2011 | 2012 | 2013E | 2014F | 2015F |
|---|---|---|---|---|---|---|---|
| Real GDP (% change) | 3.99 | 8.01 | 15.00 | 8.80 | 6.28 | 5.45 | 5.98 |
| Nominal GDP (US$bn) | 25.80 | 32.19 | 38.75 | 40.52 | 43.95 | 36.71 | 37.86 |
| Consumer price inflation (average, %) | 19.25 | 10.71 | 8.73 | 9.16 | 11.65 | 14.20 | 12.38 |
| Budget balance, incl grants (% of GDP) | -5.86 | -7.21 | -4.08 | -10.81 | -10.42 | -9.90 | -8.90 |
| - Revenue (% of GDP) | 16.65 | 16.80 | 19.68 | 22.24 | 21.11 | 20.78 | 20.88 |
| - Expenditure (% of GDP) | 22.51 | 24.01 | 23.76 | 33.05 | 31.52 | 30.68 | 29.77 |
| Government debt (% of GDP) | 32.91 | 43.01 | 40.96 | 46.83 | 59.02 | 62.65 | 64.74 |
| Current account balance (% of GDP) | -7.35 | -8.60 | -9.14 | -12.12 | -12.98 | -13.16 | -11.77 |
| Trade balance (% of GDP) | -8.55 | -9.20 | -7.88 | -10.39 | -8.76 | -8.17 | -6.57 |
| GHS/US$ | 1.41 | 1.43 | 1.51 | 1.85 | 2.07 | 2.90 | 3.27 |
| Short-term interest rate (%) | 28.80 | 22.70 | 20.60 | 20.70 | 22.30 | 23.60 | 23.80 |
| Foreign reserves (US$bn) | 3.39 | 4.22 | 4.95 | 4.88 | 5.29 | 4.22 | 4.41 |
| Months of import cover | 3.46 | 3.95 | 3.31 | 2.92 | 3.00 | 2.52 | 2.57 |

Source: NKC Research

| Key monthly indicators | End-10 | End-11 | End-12 | End-13 | Mar-14 | Apr-14 | May-14 |
|---|---|---|---|---|---|---|---|
| Consumer price inflation (% y-o-y) | 8.58 | 8.58 | 8.85 | 13.53 | 14.54 | 14.68 | 14.84 |
| Monetary policy rate (%) | 13.50 | 12.50 | 15.00 | 16.00 | 18.00 | 18.00 | 18.00 |
| International reserves (US$bn) | 4.61 | 5.38 | 5.35 | 5.63 | 4.70 | N/A | N/A |
| 91-day treasury bill rate (%, eop) | 11.89 | 10.46 | 21.62 | 17.84 | 22.20 | 22.63 | 22.71 |
| GHS/US$ (eop) | 1.49 | 1.64 | 1.90 | 2.38 | 2.66 | 2.83 | 3.08 |
| Gold (US$/oz, eop) | 1,419.45 | 1,563.80 | 1,674.34 | 1,204.94 | 1,283.64 | 1,291.29 | 1,250.69 |

Sources: Bank of Ghana, Ghana Statistical Service, Reuters

**Note:** In the table above, E and F are the abbreviations for estimate and forecast respectively.