

UPDATE ON THE ECONOMIC IMPACT OF THE 2014-2015 EBOLA EPIDEMIC ON LIBERIA, SIERRA LEONE, AND GUINEA

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EXECUTIVE SUMMARY

A year after the onset of Ebola, the <u>estimated GDP losses for the three countries through 2015 total US\$2.2 billion</u> (US\$240 million for Liberia, US\$535 million for Guinea and US\$1.4 billion for Sierra Leone). This is the result of the severe impact of the epidemic which has been exacerbated by the large decline in the world price of iron ore and severe corporate governance issues in mining in Sierra Leone.

Important differences among the three countries are emerging. Liberia is gradually returning to normalcy, Guinea's economy is stagnating, and Sierra Leone is suffering a severe recession.

- This update presents the World Bank's most recent analysis of the economic and fiscal effects of the Ebola epidemic on the three countries. In relation to our January 2015 report it contains:
 - o An updated status for the economies of Liberia, Guinea, and Sierra Leone;
 - A brief description of these countries' Economic Recovery Plans with indicative estimates of their potential impact on growth.
- As of April 2015, the Ebola epidemic has been largely contained but the negative effects on the
 economies of Liberia, Guinea and Sierra Leone loom large amidst continued uncertainty about the
 timing of complete eradication.
- The crisis continues to adversely affect these economies:
 - In Liberia mining is resilient and agriculture is rebounding. 2015 GDP growth is projected at 3% --a welcome increase compared to the 1% GDP growth of 2014, but still well below the pre-Ebola growth estimates of 6.8%;
 - In Guinea mining remains resilient but services and agriculture remained subdued. In 2015 the economy is expected to contract by 0.2%, compared to pre-Ebola expected growth of 4.3%;
 - In Sierra Leone, the mining sector has mostly shut down. In the short run the economy faces an unprecedented contraction of GDP estimated at 23.5%.
- Inflation has moderated below 10 percent in all three countries, helped somewhat by lower international food and fuel prices. However, food insecurity remains a primary concern.
- The fiscal impact remains substantial. A combination of declining revenues and increased Ebola related expenditures, mainly in the health sector, have led to widening fiscal deficits projected at 12.8.% in Liberia, 10.1 % in Guinea, and 4.6% in Sierra Leone in 2015.
- The pace of recovery in these countries will depend heavily on adequate financing and effective implementation of the recovery plans. The most immediate priority remains the eradication of Ebola and enhancement of health care systems—including establishing an effective surveillance capacity. Equally important, however, is the need to facilitate an effective and sustainable resumption of broad-based economic growth. Effective use of additional financing could play an important role in accelerating economic recovery in these countries. If additional resources for recovery could be secured quickly in 2015 and increased through 2017, the rate of GDP growth could be accelerated significantly.

• For example additional financing in the order of 5% of GDP per year (our illustrative hypothetical alternative case) would speed up economic recovery and help place these countries on new growth trajectories that will revert the foregone income suffered during 2014 and 2015.

GDP Growth Projections (2015 - 2017)

Country	Scenario case	2014	2015	2016	2017
Liberia	Base	1.0	3.0	5.0	6.0
	Alternative	1.0	3.7	7.8	8.0
Guinea	Base	0.0	-0.2	3.0	4.5
	Alternative	0.3	1.2	5.0	6.8
Sierra	Base		-23.5	19.7	12.8
Leone	Alternate	7.0	-20.9	20.2	14.0

• Ultimately, Liberia, Guinea and Sierra Leone will need the strong support from the development community over the next years to both make up for the losses incurred during the Ebola crisis and make these economies less vulnerable for the future.

LIBERIA

No new confirmed cases of Ebola Virus Disease (EVD) have been reported since the end of March 2015. Restrictions on movement have been lifted and most of the approximately 5,200 schools have been reopened except for around 500 schools in the most remote areas, which are yet to be provided with Infection Prevention Control (IPC) kits.

Domestic aversion behavior has abated significantly in Liberia and most businesses have re-opened. The adverse impact of the crisis on the economy in 2014 has been substantial, with real GDP growth estimated at about 1 percent, down from the nearly 6 percent growth projected before the on-set of the crisis. Growth is expected to recover to around 3 percent in 2015, driven mainly by the recovery in the agricultural and services sectors. It is also expected that increased domestic demand for manufactured products including cement (for the nascent construction recovery) and beverages for the hotel sector will make contributions to the growth recovery.

An incipient economic recovery has taken root and employment is improving. The World Bank's most recent cellphone survey (round 5) covering the period of March 12-18, 2015 suggests a generally slow return towards the level of employment to before the crisis. The return to wage and self-employment has been faster in the urban areas than the rural ones, perhaps reflecting the return to work of furloughed civil servants, as well as the increased activities in the hotel and restaurant sectors driven by demand from the health response teams. However, women continue to be disproportionately impacted by EVD related job losses. ¹ Prior to the outbreak, female household heads, and women in general, worked disproportionately more in non-agricultural self-employment (mainly trading), which is the hardest hit sector (due to the closing of markets as well as the borders). Among the self-employed, men had a 63 percent likelihood of working, according to the most recent survey, compared to only 17 percent for women, controlling for age and location. With the lifting of curfews, travel restrictions and the re-opening of borders and markets, mobility has increased markedly as indicated by the sharp rise in petrol sales (Figure 1). The uptick in demand for petrol also reflects the activities of the international response teams as well as lower global fuel prices. Diesel sales on the other hand are improving but much more slowly, suggesting an ongoing weakness in the commercial transport sector.

The agriculture sector appears to be recovering. According to the 5th round of the World Bank cellphone survey, most agricultural households reported a smaller harvest for 2014 than the previous year. However for 2015, based on initial harvest assessment by the FAO and the Ministry of Agriculture, a bumper crop of rice is expected with yield increasing to 1.3 tons per hectare, up from 0.97 tons per hectare for the previous season in primary agricultural areas including Bong, Lofa and Nimba. With the re-opening of

¹ The Socio-Economic Impacts of Ebola in Liberia, *Results from a High Frequency Cell Phone Survey, Round 5, April* 13, 2015

4

markets, production of cassava and vegetables have also recovered to normal pre-crisis levels. The agriculture sector is expected to recover to post a 2 percent growth in 2015.

In the mining sector, production is continuing at current capacity but investments in capacity expansion remain uncertain. Iron ore production has remained resilient in spite of the Ebola crisis as well as the 55 percent reduction in international iron ore prices between January 2014 and March 2015. For 2015, production from the largest mine (Mittal) is estimated at 4.5 million tons. However, planned investments to raise production to approximately 15 million tons per year are on hold. The coming on-stream of the largest commercial gold mining project—the New Liberty Gold Project—in the North-Western part of the country in May 2015 is expected to have a positive impact on the performance of the mining sector and on overall GDP growth.

The performance of the services sector, while improving, is mixed. The surge in international support which increased demand for hotel and restaurant services from October is now drawing down. However, some foreign contractors are returning. More airlines are also returning but Liberia remains far less connected with the region and globally than before the epidemic. Brussels Airlines has maintained two flights per week, and in April, Air Maroc increased its frequency to 5 flights per week, Air Cote d'Ivoire to 4 flights, and Kenya Airways has restarted its thrice-weekly service to Ghana. There are some signs of an emerging recovery in the construction sub-sector, particularly private construction, as reflected in the uptick in cement sales since October 2014 (Figure 2). Construction at the Mount Coffee hydroelectric plant remains on hold, but road construction has re-started. For 2015, the services sector is projected to grow at about 3.5 percent.

Inflation has moderated since September, the height of the crisis, but prices are not back to pre-crisis levels. Food prices, which reached their highest in September, dropped sharply in November as the crisis abated and markets re-opened. In addition, transport costs, which spiked to their highest in August also moderated sharply in December. This perhaps reflects the lower global fuel prices, as well as the loss of the premium from the restricted passenger load imposed during the height of the crisis. Increased road accessibility due to the usual seasonal improvement as the rainy season ended (see Figure 3).

The exchange rate has remained largely stable following some volatility in 2014. A nine percent depreciation in the first half of 2014 was essentially reversed by interventions from the Central Bank of Liberia (CBL), including increased sales of US dollars in the auctions, and the issuing of CBL notes to decrease Liberian dollar liquidity. The exchange rate has remained in the narrow band of LB\$82.5 - 84.5 per US dollar last six months to March 2015. However, falling reserves (from US\$235.8 million in June 2014 to US\$220.3 million in mid-January 2015) in the face of relatively weak exports and a likely slowdown in donor transfers could contribute to exchange rate pressures in the future.

The fiscal impact of the Ebola crisis remain acute. Although revenues have performed well relative to the revised forecast, they are still far below the original forecast, and inadequate to meet the expanded expenditure needs. Total revenues, including grants, are projected at US\$483.8 million in FY2014/15, down from US\$545.2 million the previous year. Tax revenues have been projected to fall from US\$384.7 million for FY2013/14 to US\$326.4 million for FY2014/15, a decline of 15 percent as a result of the tight

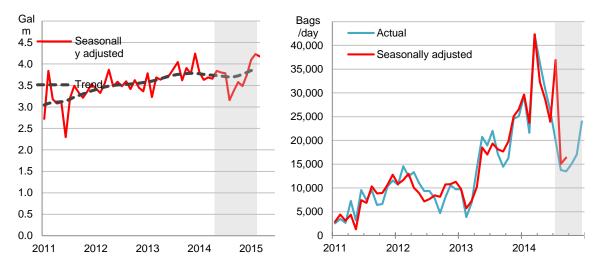
reduction in economic activities and lower tax compliance. Expenditures, largely driven by the health related demands of the crisis are projected to expand from US\$568.4 million (28.5 percent of GDP) in FY2013/14 to US\$745.7 million (36.5 percent of GDP), an increase of 31 percent. The lower revenues and expansion in expenditure are expected to result in a relatively large fiscal deficit of US\$262 million, or about 12.8 percent of GDP, up from a deficit of 1.2 percent of GDP the year before the crisis.

The government has prepared an ambitious recovery plan to stabilize and stimulate the economy. The plan focuses on providing resources to the health sector not only to prevent new cases of Ebola but also begin the process of building more robust health systems. Furthermore, the plan focuses on quick impact strategic investments in agriculture as well as the provision of critical infrastructure including roads, electricity, water and sanitation. This will not only support the economic recovery and provide jobs, but will also be critical for building resilience to future shocks. The total cost of the Ebola recovery plan, covering three fiscal years is US\$1.3 billion, including US\$438.8 million (about 35 percent) for the health sector. The first full year of the plan presents the biggest challenge for the government, both in terms of securing the resources for the funding of the plan and in ensuring that it can effectively implement the proposed interventions in the plan. With the exception of the health sector, the level of additional expenditure over typical GoL expenditure on the other sectors are relatively modest and should not present major implementation challenges.

Over the medium term, Liberia's economic prospects will depend on the declaration of Ebola free status as well as the Government's ability to effectively implement its ambitious recovery plan. New and continuing foreign investments in the extractive and commercial agriculture sectors will hinge not only on the perception of infection risks but also on developments related to the international prices for rubber, iron ore and oil palm—Liberia's key exports which together account for more than 90 percent of total exports. Under the existing—"base"—scenario, with financing for the present expenditure program, the current pace of abatement in domestic aversion behavior and existing levels of international commodity prices for key exports, GDP growth is likely to remain subdued perhaps reaching 6 percent in 2017. Under an "alternative" scenario which assumes no back-sliding on the EVD situation, strong international response in terms of an additional 5 percent of GDP of financing for the recovery plan, and effective implementation of the plan to spur domestic agriculture, construction and a recovery in the manufacturing sector; combined with possible improvements in international commodity prices, Liberia's GDP growth could rebound more sharply to reach 8.0 percent by 2017. This rebound further assumes that additional marginal donor resources beyond what is needed to maintain the zero new case situation will be channeled to the growth recovery program.

Figure 1: Liberia Petrol Sales (mil.)

Figure 2: Liberia, Cement sales (bags/day)

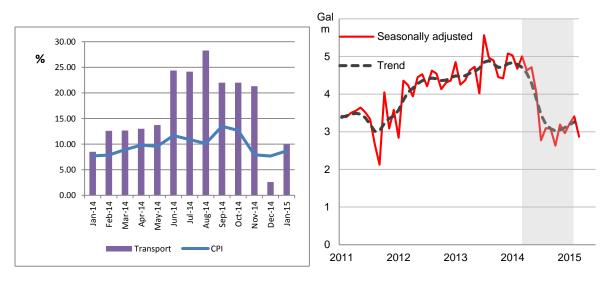


Source: World Bank analysis, LPRC

Source: Liberia Cement Corporation

Figure 3: Liberia, CPI and Transport Costs

Figure 4: Liberia Diesel Sales (mil. Gals)



Source: World Bank analysis, LISGIS

Source: World Bank analysis, LPRC

Table 1: Liberia, Macroeconomic and Fiscal Projections

Aggregates	2013	2014	2015	2016	2017
	Prel.	Prel.	Proj.	Proj.	Proj.
Real GDP Growth (%)	8.7	1.0	3.0	5.0	6.0
Consumer prices (end of period)	7.6	8.0	7.5	7.5	7.5
Fiscal (US\$ millions)					
Total revenue and grants	555	545	484	535	589
Revenue	509	470	427	456	542
Tax revenue	369	385	326	369	442
Non-tax	140	86	101	87	100
Grants, excluding Ebola-related support	46	75	57	79	46
Expenditure and net lending	584	568	746	685	732
Current expenditure	493	456	544	464	500
Capital expenditure	91	112	202	221	233
Overall balance, including grants	-29	-23	-262	-150	-143
Overall balance (% of GDP)	-1.6	-1.2	-12.8	-7.0	-6.1
Residual gap (excluding Ebola Recovery Plan)	0	0.0	0.0	22	0.0
Memorandum items:					
Fiscal year nominal GDP	1,854	1,995	2,042	2,142	2,353

Source: Government of Liberia, IMF and World Bank estimates. Note: Liberia's fiscal year is from July 1 to June 30.

SIERRA LEONE

Intensified containment efforts through the first quarter of 2015 including a third national three-day lockdown have borne fruit with the numbers of new cases generally on a declining trend. Yet at the beginning of April there were still 67 new cases reported in the most recent 21 day period, with total cases topping 12,000.

A degree of economic activity has resumed in early 2015 with the improving EVD situation and the abatement of severe aversion behavior that characterized the second half of 2014. In 2014, overall GDP increased by 7.1 percent, buoyed by the performance of the iron ore sector. However the non-iron ore economy which accounts for some 80 percent of GDP and where well over 98 percent of the population earn their livelihoods, grew only by 1 percent. Hardest hit was the services sector which expanded less than 2 percent, despite a surge in health related and other general government spending. The hospitality industry was particularly impacted by the sharp drop in visitor arrivals and the restrictions on public gatherings placed on the restaurants and entertainment venues. This resulted in the hotel and restaurant sub-sector contracting by about 20 percent. Adversely affected by the evacuation of foreign contractors, the construction sector declined by 8 percent. Agriculture was disrupted and is estimated to have expanded by only 1 percent over the year.

Workers in urban areas, particularly Freetown, experienced a loss of employment—both among wage earners and the non-farm self-employed—reportedly on account of Ebola, according to a World Bank cellphone survey conducted in late 2014. An estimated 9,000 wage earners and 170,000 non-farm self-employed workers were out of work as a result of the EVD crisis, with significant spillovers as these were household heads. The survey also found a decline of 40 percent in the average revenues of households engaged in non-farm enterprises, while the number of such enterprises no longer operating tripled.

Despite concerns that sporadic food shortages triggered by closure of informal markets and other measures would lead to rising food prices, inflation trended slightly lower over the year at 9.8 percent. Following a slight uptick as the outbreak turned into crisis at mid-year—traditionally a period associated with rising food scarcity—food prices were remarkably stable through the remainder of 2014, and remain so in early 2015. Falling international oil prices during the final quarter of 2014 undoubtedly helped to ease inflationary pressures.

Notwithstanding the substantial international assistance and resources, the fiscal situation in 2014 came under considerable pressure as a result of EVD and non-EVD related factors which led to a revenue shortfall, estimated at US\$83 million, and additional unanticipated expenditures in relation to the EVD. The bulk of EVD related spending from international donors was managed off-budget by the National Ebola Response Center, which received only a modest transfer from the budget. For the first half of 2014, revenue underperformance to the tune of US\$17 million was unrelated to the EVD. This was compounded in the second half by a combination of factors related to the spreading EVD epidemic. These included reduced taxpayer compliance, reduced administrative efforts as well as the economic contraction. Expenditure priorities in relation to the EVD dictated reallocations through the second half, partially offset by a fall in foreign financed capital spending as contractors on these activities evacuated. The overall

outcome was a deficit estimated at 3.9 percent of non-iron ore GDP. This was financed largely through an increase in both external budget support and domestic borrowing.

As the crisis took hold, the Leone came under significant pressure with the rate of depreciation sharply higher from July 2014, easing in early December coinciding with an improvement in containment of the EVD. The increased pressure on the currency in the fourth quarter probably also reflected some capital flight through commercial banks. In response to increased demand for foreign exchange during this period, the Bank of Sierra Leone significantly increased the volume available through its weekly auction beginning September 2014. The commercial banks also reported increased demand and this was also evident in the parallel market, which experienced a widening of spreads with official rates. Since December 2014, the Leone has been relatively stable.

Commercial banks, particularly the two state-owned banks that were under administration experienced increased defaults, which led to a sharp increase in non-performing loans relative to regulatory capital. Bank profitability was also adversely affected by the prevailing economic environment which made lending more challenging as well as the sharp drop in treasury-bill yields, from more than 23-29 percent in May 2012 to around 15 percent in 2014, and 2-5 percent in February 2015. With inflation running at 10 percent, real interest rates have been decisively negative for over a year.

The post-Ebola economic recovery plan prepared by government is ambitious in its scope. The plan covers some 14 sectors and is focused on the near-term—an implementation period of two years from June 2015—relegating longer term recovery activities to the current poverty reduction strategy. During that period the plan requires a total of US\$1,063 million, including US\$558 million for the health sector response, representing about 53 percent of the total. Of this, approximately US\$219 million is for achieving zero cases of EVD and maintaining an EVD-free environment. From an absorptive capacity perspective, total non-interest expenditure under the 2014 budget was about US\$800 million.

Agricultural activities have resumed visibly in early 2015 and the planting season is expected to be mostly normal but there are signs of variation related to disruptions caused by the EVD. The government is focusing much of its recovery strategy on the sector, with plans underway for an expanded program of support to be delivered in 2015. This includes a seed distribution program for rice--which will include new high-yielding varieties that have shown much promise in field tests, mechanization support for farmers with large landholdings, and an intensification of the Agricultural Business Center program.

Returning Sierra Leone to the pre-Ebola growth trajectory will pose a serious challenge in 2015 and beyond as the Ebola crisis coincided with a second external shock related to the iron ore sector. Iron ore was the worst performing commodity on global markets in 2014, with prices falling by 50 percent over the year. The decline continued unabated in 2015 to a 10-year low. Sierra Leone's two iron ore producers fell victim to this adverse development late in 2014, but the disruption to GDP was minimal. The operator of the smaller Marampa mine declared insolvency, was placed under administration by its Board in October, re-emerged a few weeks later under new ownership, and resumed production. The operator of the larger Tonkolili mine halted production to conserve financial resources in early December while it sought an equity injection, after accumulating operating losses in previous months. These efforts failed

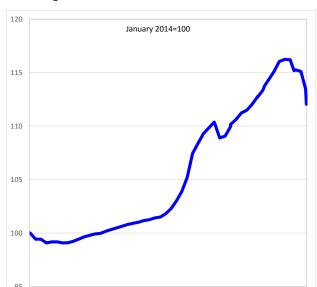
to yield results through the first quarter of 2015 as iron ore prices have continued to fall, to 10-year lows, resulting in a Board decision to place the company under administration. That move has more or less coincided with the attempts of a 25 percent equity partner to acquire the operation. Given these circumstances, it is unclear when underlying issues might be resolved so that operations can resume, notwithstanding the low international iron ore prices which may affect the financial viability of the operation from a commercial perspective. In parallel, during the first week of April 2015, the smaller operation halted production citing the international price environment as well as loss of access to a railway line that is under the control of the larger operation.

In view of the total loss of production at both iron ore mines and uncertainty noted around the prospects for their resumption, if production does not resume in 2015 the iron ore sector could contract by 95 percent, resulting in an overall GDP contraction of 23.5 percent in 2015. This important development—unrelated to the EVD—will continue to have a critical and long-lasting effect on economic performance. This is especially so in the large services sector and logistics related sub-sectors which were dependent on the iron ore industry. Thus for 2015 it is expected that while government services will increase by 3.9 percent, transport is projected to fall about 3.5 percent, while other services would contract by more than 5 percent, with the net effect being a reduction in services of about a 1 percent below 2014. Banking sector profitability will be further affected for banks that are exposed directly and indirectly to the iron ore sector. Hence the deteriorating trend noted above in the financial soundness indicators can be expected to worsen further in 2015. Reinforcing these trends, mining production in non-iron ore sub-sectors has been somewhat below plans at most facilities including bauxite, rutile and industrial diamonds.

The EVD cut short a rising trend of Foreign Direct Investment (FDI) in the post-war era, which had seen FDI increase three-fold in the past five years. During this time FDI rose from a low of US\$95 million in 2007 to US\$950 million in 2011, reflecting the investment phase in iron ore, to an estimated US\$579 million in 2013. While the longer term impact is difficult to assess, it is clear from the loss of an investment pipeline in 2014 of around 150 investors that there will be a hiatus that is likely to take some time to recover from.

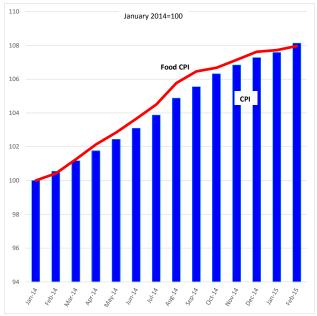
Over the medium term, Sierra Leone's economic prospects will depend on the declaration of Ebola free status, the resumption of mining activity, and the Government capacity to implement its plans. The country's growth trajectory will be contingent on several factors. The declaration of Ebola free status will help bring visitors and investors back to Sierra Leone. Also, improved corporate governance in the mining sector and the successful resolution of commercial issue surrounding the larger iron ore mining company and resumption of investments in 2015 could dramatically influence GDP trends. An improvement in international iron ore prices should also improve prospects. The projected loss of fiscal revenues from the iron ore sector for 2015 are expected to be somewhat offset by improved revenues expected from the non-iron ore sector. Under the assumption of no further iron ore production, real GDP is expected to contract by 23.5 percent in 2015. However, under an "alternate" scenario which assumes an additional 5 percent of GDP of financing for the recovery plan and continued trend in commodity prices, the level of contraction could be reduced to 20.9 percent. Assuming the resumption of iron ore production in 2016, the economy is projected to grow at 19.7 percent and at 12.8 percent in 2017.

Figure 5: Pressure on the Leone abated



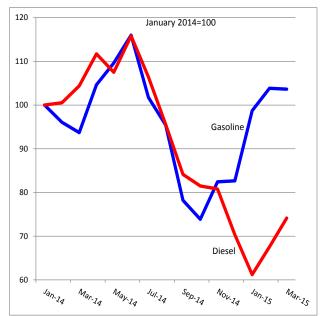
Source: Bank of Sierra Leone.

Figure 7: Food prices are stable



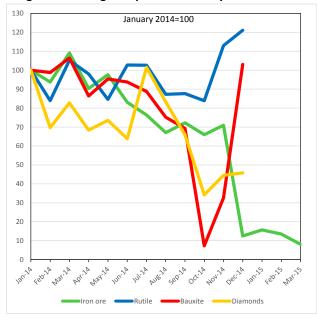
Source: Statistics Sierra Leone

Figure 6: Fuel sales indicate an uncertain recovery



Source: Petroleum Regulatory Agency, Sierra Leone.

Figure 8: Mining collapse extends beyond iron ore



Source: National Minerals Agency, Sierra Leone

Table 2: Sierra Leone, Macroeconomic and Fiscal Projections

	2013	2014	2015	2016	2017
	Prel.	Prel.	Proj.	Proj.	Proj.
Real GDP growth (%)	20.1	7.1	-23.5	19.7	12.8
Non-iron ore GDP growth (%)	5.5	1.0	-1.0	2.0	2.5
Consumer prices (end of period)	8.5	9.8	12.0	10.3	9.5
Fiscal (US\$ million)					
Total revenue and grants	651	684	638	641	700
Revenue	525	478	407	498	550
Tax revenue	486	447	372	461	512
Non-tax revenue	39	31	35	36	38
Grants, excluding Ebola-related support	126	206	230	143	150
Total Expenditure and net lending	729	863	805	841	879
Current expenditure	503	601	525	548	591
Capital expenditure (IMF Program)	264	259	272	275	289
Net lending	-39	3	0	-10	0
Overall balance, excl. Ebola-related support	-205	-385	-398	-343	-329
Including grants	-78	-179	-168	-200	-179
Overall balance (% of non-iron ore GDP)	-1.9	-3.9	-3.6	-3.9	-3.3
Residual gap (excluding Ebola Recovery Plan)	0	0	0	73	53
Memorandum items:					
GDP (US\$ million)	4,910	5,100	4,700	5,100	5,500
Non-iron ore GDP (US\$ million)	4,140	4,630	4,600	5,100	5,400

Source: Government of Sierra Leone, IMF and World Bank estimates.

GUINEA

Guinea continues to be affected by the Ebola outbreak, but there has been considerable success in fighting the epidemic, particularly in the southeastern part of the country. However, big challenges remain, particularly around the capital. After the infection rate peaked in December 2014, it has subsided in January-March 2015, but there are still around 20-50 cases per week. As of April, 2015 the epidemic remains concentrated in the districts around the capital—Conakry, where more than one-fifth of the national population resides, but has been eradicated in most of the country, including the south-east border regions of Gueckedou and Macenta where the crisis originated. In order to have the final push against Ebola, a 45-day state of health emergency was declared by the President, for the prefectures of Forecariah, Coyah, Boffa, and Kindia at the end of March. The capital, Conakry, will also be subject to emergency measures, which include the restriction of movement in areas of transmission, the temporary closure and quarantine of private hospitals and clinics where EVD cases have been detected, and limitation of burial participation to close relatives only. The success of the international efforts, leading to the construction of eight treatment centers in the country, coupled with strong community mobilization, has led to a significant decline in new cases but it may be well into 2015 before the disease is fully eradicated.

2015 will be a difficult year for Guinea as the pandemic continues to unfold and some of the second-order effects on households and investors continue. Real GDP growth which was estimated at 2.3 percent for 2013, slowed to 0.5 percent in 2014, and a contraction of 0.2 percent is projected for 2015². The first quarter of 2015 has confirmed the earlier trends of a broad-based deterioration in manufacturing, construction, agriculture, and commerce. Compared to the first quarter 2014, air transport has declined by 50 percent in first quarter 2015, and hotel occupancy is 25 percent below the similar period in 2014. Construction and manufacturing activities are projected to contract by 1.5 percent in 2015 as investment activity is still affected by the Ebola crisis. Cost and freight have become more expensive, and traffic container volume at the Port of Conakry declined by 30 percent in 2014.

The services and mining sectors continue to be adversely impacted by Ebola in 2015. The services sector is expected to contract by 1 percent in 2015 due to difficulties in commerce and transport and the continued decline in weekly market activity, in spite of the re-opening of borders. Agricultural production is expected to stagnate, due to the outflow of labor from key farming areas and lower levels of planting activity. Overall, the agricultural sector is expected to contract by 1.5 percent. In relation to mining, investors plan to slowly return by the middle of 2015. Bauxite production has shown resilience during the crisis, but other metals have seen marked decreases in production. Some of the mining related construction, including of the Beyla-N'zérékoré road financed by Rio Tinto has not resumed, as many expatriates have not returned. Other mining projects are facing similar delays in 2015.

The inflation rate averaged 9.0 percent in the first quarter of 2015, continuing the trend seen in 2014. A combination of reduced demand, careful monetary policy at the central bank, and the combination of food surplus and food deficit areas led to inflation being contained on average. The Ebola pandemic has led to some increase of food prices in a few regional markets.

² There will be further revisions in June, 2015 as new economic data comes in and Bank-Fund staff review sectoral growth forecasts.

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The GNF local currency has depreciated by 4.5 percent since June 2014 against the dollar and appreciated by 15 percent against the Euro. The exchange rate is about 5 percent below the pre-Ebola levels. As of April, 2015, the gap between the official and parallel exchange rate is at 4 percent, and international reserves remained at over 3 months of imports, although there appears to be some pressures on the reserves. Guinea's current account continues to remain structurally in deficit in 2015 (close to 20 percent of GDP) because of weak export growth and substantial imports of oil and food.

The fiscal impact of Ebola will be felt significantly in 2015. Revenues as a share of GDP were initially projected to increase from 18.7 percent in 2014 to 20.7 percent in 2015 due to lower oil prices and stronger revenue efforts by the authorities to implement planned administrative measures, as well as a resurgence of economic activity in the second half of 2015. However, first quarter data for 2015 shows slippages in revenue collection. On the expenditure side, there is a projected increase of expenditures (especially current), largely due to the cost of the Ebola response plan. Spending for the Ebola response plan in 2015 is projected at just over \$200 million out of a total of \$350 million, amounting to 3.2 percent of GDP. In 2014, the Government, together with international donors, spent \$150 million on a response plan to fund logistics, health centers, the purchase of food and equipment, and salaries. In 2015, the wage bill is projected to increase by 0.8 percent of GDP, reflecting the implementation of a 40 percent staggered general increase in base wages following an important agreement with unions in January 2015. The impact of the global lower oil price is slowly being felt in the Guinea economy with the recently announced lowering of pump prices in early 2015. By the end of 2015, the fiscal impact should be mitigated by stronger grant financing and domestic revenue mobilization.

The Guinea Ebola Recovery Plan represents the Government's ambitious and wide-ranging attempt to end Ebola in the country and re-launch the economy in its aftermath. Prepared under the leadership of former Senegalese Prime Minister Loum, the plan is based on four fundamental pillars — social sector support, economic recovery, infrastructure development, and governance support. The plan costs US\$2.9 billion and includes the strengthening of the health system (systems, human resources, and medicines) to meet the immediate needs of the population post-Ebola (\$427 million), education sector strengthening (\$183 million), infrastructure (\$710 million), and re-launching of industry (\$150 million). The timeline of the plan is a three year horizon, with an initial Ebola containment followed by a broader based recovery. Risks identified in the plan include: political instability, lack of leadership, fiscal risks, regional spillover risks, climactic risks, and the resurgence of the disease that could jeopardize the recovery effort.

The Government will also put its own resources into the fight against Ebola. The Government has programmed \$189 million as counterpart financing in the public investment budget for 2015-2017. The methodology of the costing was based on aggregating the ministry-specific resource needs to support the Ebola recovery and use the existing project portfolio as a base, using current Guinea prices as the base. The time horizon is for an immediate use (July – December 2015) and a medium-term use (2016 and 2017).

Over the medium term, Guinea's economic prospects will depend on the speed at which it eliminates Ebola, the strength of its recovery plan, the return of private and foreign investors, and the successful mobilization of grant financing. The medium-term outlook is positive, influenced by the anticipated recovery in global demand for metals and the successful rebound of services and agriculture. Simulations for 2015-2017 suggest that under an alternate scenario, which assumes containment to zero case in 2015; further abatement in aversion behavior; improvement in commodity prices and financing from donors, equivalent to 5 percent of GDP could lead to an increase in GDP growth from 4.5 percent in the "base case" to 6.8 percent by 2017. There are still considerable downside risks to the near-term outlook

stemming from investor aversion post-Ebola and changes in the global mining environment. Guinea will face an uncertain period of post-Ebola recovery and will need strong support from the international community. The planned presidential elections over 2015–16 period could slow down the implementation of key structural reforms.

Figure 9: Guinea, Inflation (CPI)

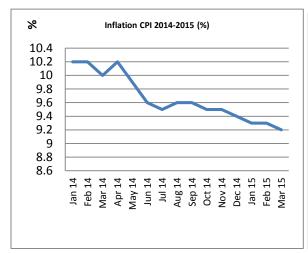


Figure 10: Guinea, sectoral growth (2014-2015)

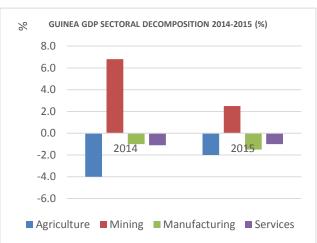


Table 3: Guinea, Macroeconomic and Fiscal Projections

	2013	2014	2015	2016	2017
	Prel.	Prel.	Proj.	Proj.	Proj.
Real GDP Growth (%)	2.3	0.4	-0.2	3.0	4.5
Consumer prices (end of period)	10.5	9.5	9.7	9.5	9.2
Fiscal (US\$ millions)					
Total revenue and grants	1221	1707	1676	1920	2169
Mining revenue	212	190	199	210	250
Non-mining revenue	918	1050	1281	1406	1658
Grants, excluding Ebola-related support	91	467	196	250	150
Expenditure and net lending	1539	1979	2373	2360	2500
Current expenditure	993	1202	1470	1450	1550
Capital expenditure	546	777	903	900	950
Overall balance, Including grants	-318	-272	-697	-440	-331
Overall balance (% of GDP)	-5.2	-4.3	-10.1	-5.7	-3.9
Residual gap (excluding Ebola Recovery Plan)			308	90	120
Memorandum items:					
Fiscal year nominal GDP	6,230	6,629	7,150	7,710	8,520

Source: Government of Guinea, IMF and World Bank estimates

ANNEX 1: METHODOLOGICAL NOTE

The approach to estimating the growth impacts of investment were based on the following: GDP growth rates were projected based on reviews of recent sectoral performance, for each of the countries. These were based on ongoing macroeconomic surveillance that tracks leading indicators (including cement and fuel sales) and an analysis of sectoral developments. These projections were arrived at together with the relevant government authorities and included as inputs: interviews with private sector actors, survey data, and government policy statements. In all cases, current estimates, which include the impact of Ebola are compared with pre-Ebola projections by the World Bank and the International Monetary Fund.

Secondly, incremental capital-output ratios (ICORS) were compiled based on the available relevant literature for sub-Saharan Africa. The basic premise of the ICOR methodology is that of a direct relationship between economic growth and investment, adjusted for the quality of investment and capital depreciation. ³ For sub-Saharan African countries the prevalent long-term ICOR's are between 2 and 5, and depreciation was 0.2 percent. The higher the ICOR, the lower the productivity of capital. Simulations for the alternate growth scenarios for the three countries are based on the simple ICOR model, stated as:

Annual growth rate (g): v; Where t is the level of net investment as a share of GDP and v is the Incremental Capital Output Ratio (ICORs) for the economy representing the amount of additional capital needed to produce an additional unit of output.

The ICOR's were used to derive the impact on GDP growth of an increase in investment equivalent to 5% of GDP (assumed to have a 90% capital and 10% current component) for each of the three countries. The model calibrated the impact of the shocks on GDP in the base case (no additional financing and relatively poor program implementation) to an alternative case (with more financing and better implementation). Additional simulations looked at the impact of larger investment flows on output. While the methodology has limitations, it provides a useful tool for deriving a first-order approximation of the impact of additional financing for the recovery plans on GDP growth. To check the robustness of the results, modelling was also undertaken using a demand side methodology. In this approach, an exogenous aid shock of 5% of GDP was applied to domestic demand (split amongst household consumption, government consumption and fixed investment). In this scenario domestic demand rises more than the 5% of GDP shock due to multiplier effects among the different components. In aggregate however, the rise in GDP is less than 5% as much of the increase in demand is sourced from imports, particularly for investment goods. Overall, modelling the aid shock from the demand side generates results similar to the ICOR approach.

Chenery, Hollis B. and Alan M. Strout, "Foreign Assistance and Economic Development", *The American Economic Review*, Volume LVI, Number 4, Part I, September 1966.

³ Arbache, Jorge, Delfin Go, and John Page, "Is Africa's Economy at a Turning Point?," World Bank Policy Research Working Paper 4519, Washington DC, 2008.

Evolution of Estimates of GDP Growth and Fiscal Balances June 2014 to April 2015

Updates	Liberia		Sierra Leone		Guinea			
	2014	2015	2014	2015	2014	2015		
	GDP Estimates and Projections							
Pre-Crisis June 2014	5.9	6.8	11.3	8.9	4.5	4.3		
October 2014	2.5	1.0	8.0	7.7	2.4	2.0		
December 2014	2.2	3.0	4.0	-2.0	0.5	-0.2		
January 2015 (estimate)	0.5	3.0	7.0	-2.0	0.4	-0.2		
April 2015		3.0		-23.5		-0.2		
	Fiscal Balances (% of GDP)							
Pre-Crisis June 2014	-7.1	-5.4	-4.2	-4.0	-4.0	7.2		
October 2014	-11.8	-5.4	-6.0	-5.7	-4.2	-10.1		
December 2014	-14.3	-5.4	-5.9	-5.7	-4.4	-10.1		
January 2015 (estimate)	-12.8	-7.1	-4.2	-4.6	-4.3	-10.1		
April 2015		-7.1	3.9	-3.6		-10.1		

Source: IMF and World Bank analysis.

ANNEX 2

Note: Liberia's fiscal year is July 1st to June 30^{th.}