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GABON

Selected Issues and Statistical Appendix

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Approved by the African Department

March 21, 2002

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I. INTRODUCTION[1]

1.   This selected issues paper discusses fiscal and development issues with a focus on problems caused by Gabon's high dependence on oil, with large oil price-related fluctuations in government revenue and rapidly declining oil production since its peak in 1997. Oil has represented about one-third of GDP during the last decade and contributed some 15 percent of GDP on average to government revenue. This dependence on oil has given rise to large variations in fiscal balances and corresponding effects on aggregate demand, high levels of government borrowing to maintain expenditure initiated during boom years, and an appreciation of the real exchange rate adversely affecting the traditional export and other non-oil sectors. It also raises issues about the optimal management of the remaining oil resources in the medium and long term, knowing that oil production is projected to decline by one-half over the next six years and decline further thereafter, and given the objective of ensuring that future generations benefit from this oil wealth and are not, instead, saddled with a heavy debt burden.

2.   A typical phenomenon in Gabon has been that during oil boom years large expenditure programs were initiated, but during subsequent periods of lower oil prices and lower government revenue, these programs proved very difficult to cut back or postpone. As a result of this so-called ratchet effect, Gabon has often resorted to domestic and external borrowing, which caused its debt-to-GDP ratio to triple from around 30 percent of GDP in 1970 to almost 100 percent in 1998-99. Section II (by Joseph Ntamatungiro) applies *fiscal impulse analysis* to the period 1970-2001. During this period, Gabon experienced heavily fluctuating oil prices, gradually increasing and then falling oil production, large variations in real GDP growth, ambitious investment programs, and episodes of strong fiscal adjustment (in part under Fund-supported programs) with strong wage restraint, stepped-up tax collection, and deep cuts in investment spending. The fiscal impulse analysis tries to determine the extent to which fiscal policy has been pro-cyclical, that is, has exacerbated the fluctuations in economic activity caused by factors outside direct control of the government. This section shows that fiscal policy has been largely pro-cyclical mirroring developments in oil revenue, and has had only a limited stabilization role. The positive fiscal impulse has been particularly large during the three to four year periods immediately following the first (1973-74) and second (1979-81) favorable oil shocks, as well as during the 1998 spending spree and breakdown of budget management. Despite periods of contractionary fiscal policy and fiscal adjustment efforts, overall, the expansionary expenditure policies have dominated the 1970-2001 period and have caused the government to incur deficits financed by increasingly unsustainable debt.

3.   Section III (also by Joseph Ntamatungiro) addresses the issue of fiscal and debt sustainability with several existing methodologies, adapted to Gabon's situation of high and

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[1] This chapter has been prepared by Arend Kouwenaar.

declining oil revenue. The first part of the section applies the relation between primary fiscal balances and debt-to-GDP ratio—from the debt dynamics framework developed by Blanchard and others (1990)—to Gabon for the 1991-2001 period. It derives a quantitative measure for the *primary balance gaps*, that is, the fiscal efforts necessary to stabilize the debt stock for each of those years. The analysis is then extended by introducing a *normative (desirable) debt-to-GDP ratio*—much lower than today's level and to be reached in a number of years; it derives the respective fiscal adjustment efforts needed (i) to reach that target in a given number of years; and (ii) stabilize the debt-to-GDP ratio at that level thereafter. For example, the illustrative calculations for plausible GDP growth and interest rates show that, to reduce Gabon's debt from 70 percent of GDP in 2001 to 50 percent by 2004, annual primary surpluses of about 8 percent of non-oil GDP are required during 2002–04.

4.   The second part of section III further deepens the fiscal and debt sustainability analysis by taking into account the expected decline in future oil resources. It emphasizes that a forwardlooking fiscal policy is needed to ensure (i) an *equitable intergenerational distribution* of the existing oil wealth; (ii) a relatively stable path for the primary fiscal balances, so that fiscal policies do not have to be revised drastically—at the expense of future generations—when oil resources come to exhaustion; and (iii) a relatively smooth path for real exchange depreciation which is required to replace declining oil resources by non-oil tradable production over time. The section uses a long-term projection and simulation model which—in addition to projecting the non oil economy, oil revenue, and the fiscal accounts during 2001-30—describes the path of *an oil savings fund ("for future generations")*, as well as the transfers of oil revenue made to it and the income transfers made to the budget. The central idea is to ensure (i) a relatively constant oil-based income stream over time (e.g., constant relative to non-oil GDP or in real per capita terms); and (ii) an appropriate total net wealth position (oil based assets minus non oil financial debt) for the future, say by 2030. Based on assumptions about inter alia, the path of oil production and prices, the rate of return on the oil savings fund, GDP growth, and a target for net wealth at the end of the period, the simulations derive a "sustainable path" for the non-oil primary fiscal deficits, the oil-based income transfers, and the overall primary fiscal surpluses, consistent with appropriate levels for oil wealth and financial debt. For example, maintaining a non-oil primary deficit of 4 percent of non-oil GDP, using oil-based revenue equivalent to 6.7 percent of non-oil GDP (in early years only direct oil revenue, in later years transfers from the oil savings fund) would allow the government to reduce the debt-to-non-oil GDP ratio to 20 percent in 2030 (from 120 percent in 2001) while having an oil savings fund equivalent to over 120 percent of non-oil GDP at the end of the period. This path would be sustainable and intergenerationally equitable, as primary non-oil deficits are constant (allowing the same provision of public goods over time) and total net wealth in percent of non oil GDP remains relatively close to its 2001 level.

5.   Section IV (by Ludvig Söderling) examines the prospects for development of the non-oil sector in the face of a rapidly declining oil production. The oil sector provides not only fiscal revenue but, equally important, a sizable overall surplus on the balance of payments, which effectively finances large savings–investment imbalances of the non-oil sector, and a

heavy government external debt burden. While oil declines as a source of financing, significant financing needs remain to tackle poverty and social- and physical infrastructure needs. Moreover, the promotion of non-oil growth is essential to improve employment opportunities for the poor. The *Computable General Equilibrium model* developed captures the key characteristics of the Gabonese economy, which are (i) the oil sector, which acts as an enclave and serves the non-oil sector essentially by financing a large savings–investment deficit; (ii) the high levels of external debt service by the government; (iii) the financing constraints for private non-oil investment; and (iv) the complementary role of the government in providing public infrastructure and pursuing fiscal consolidation and business-friendly policies.

6.   Simulation exercises are undertaken in section IV, based on assumptions consistent with the Fund staff's latest macroeconomic framework. The impact of three negative external shocks are analyzed: (i) a drop in oil prices; (ii) the failure to obtain a rescheduling of external debt; and (iii) an equivalent drop in private capital inflows. The results of the simulations highlight Gabon's dependence on foreign financing—especially private—and its vulnerability to fluctuations in oil prices. To cope with the difficult financial situation, Gabon needs to (i) promote access to foreign financing by continuing its efforts to normalize relations with the international community and pursue business-friendly policies so as to attract foreign investment; (ii) pursue fiscal consolidation; and (iii) pay particular attention to its real effective exchange rate, in order to facilitate the required adjustment to offset the declining balance of payment surpluses currently produced by the oil sector. Furthermore, the potential role of an oil savings Fund for Future Generations is analyzed; such a fund would be most effective if designed in a way to channel government savings to finance private domestic investment.

II. FISCAL PERFORMANCE AND IMPULSE ANALYSIS, 1970–2001[2]

A. Analysis of Fiscal Impulse

Background

7.   Fiscal deficits generally have an expansionary impact on aggregate demand, while fiscal surpluses have a contractionary effect. However, although the fiscal balance can be a useful indicator of the impact of government operations on the economy, it fails to indicate the contribution of government policies with regard to cyclical effects. In fact, fiscal deficits might entail no expansionary policies but rather reflect weak economic activity and the associated dwindling tax base. Moreover, for countries dependent on oil revenue like Gabon, the fiscal balance essentially reflects parameters that determine government revenue on which the authorities have little control, such as developments in world oil prices.

8.   Since the 1980s, the fiscal impact on aggregate demand has been assessed by using measures of cyclically adjusted fiscal balances (IMF, 1998). The underlying idea is that, in the absence of liquidity constraints, cyclical factors in the budget balance are transitory and self-correcting (i.e., so-called automatic stabilizers), and the analysis of the fiscal impact should therefore focus essentially on underlying "discretionary" policy actions that are expected to have a lasting impact on demand. If the economy were in equilibrium, the cyclically neutral balance would characterize situations in which government revenue increases at the same rate as actual GDP, while expenditure increases at the same rate as potential output. Such a fiscal path would link government spending programs to long-term output trends, thereby shielding them from disruptive short-term adjustments. This is particularly important for oil-producing countries whose revenue can be inflated by temporary rises of world oil prices. A deterioration in the terms of trade and the rapid depletion rate of oil reserves are likely to put future fiscal positions under strain, thereby pointing to the need to link spending to a "sustainable" income stream, so as to avoid the so-called ratchet effect.[3] A course of action relating to the permanent income approach would lead the government to save any revenue windfall, in excess of the long-run average income

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[2] This section has been prepared by Joseph Ntamatungiro.

[3] The ratchet effect results from the fact that when oil revenue is high, there is strong pressure to raise expenditure and, when oil revenue is low, it becomes difficult to cut spending. Information deficiencies on the temporary or permanent nature of revenue shocks complicates budget management and may lead to unnecessary abrupt cuts in priority spending, unsustainable borrowing, or the accumulation of arrears. Moreover, upsurges in oil revenue and the associated spending without proper control mechanisms may lead to waste, owing to poor governance and low effectiveness of public spending.

during the boom periods, and to use this when oil revenue falls short of permanent income.[4] Short-term revenue shortfalls associated with weak economic activity would be covered by government borrowing to be repaid during economic recovery.

Conceptual framework

9.   The fiscal impulse (FI_t), or the change in the fiscal stance, measures the size of the initial fiscal stimulus to aggregate demand arising from changes in fiscal policy (Chand, 1984). The fiscal stance, or the cyclical effect of the budget (CEB_t), is the difference between the actual fiscal balance (B_t) and the cyclically neutral balance (CNB_t). These concepts are defined by the following relations:

$$CNB_t = g_o Y_{pt} - t_o Y_t \tag{1}$$

$$CEB_t = B_t - CNB_t = (G_t - T_t) - CNB_t = (G_t - g_o Y_{pt}) - (T_t - t_o Y_t) \tag{2}$$

$$FI_t = \Delta CEB_t = (\Delta G_t - g_o \Delta Y_{pt}) - (\Delta T_t - t_o \Delta Y_t), \tag{3}$$

where t_o and g_o are the ratios of revenue and expenditure relative to GDP in the equilibrium base year (output close to potential), T_t and G_t the nominal revenue and expenditure in period t, and Y_t and Y_{pt} the actual and potential GDP in year t.

10.   Relation (3) can also be rearranged slightly to provide an analysis of the respective contributions of revenue (TI_t) and expenditure (GI_t) policies:

$$FI_t = (t_o \Delta Y_t - \Delta T_t) + (\Delta G_t - g_o \Delta Y_{pt}) = -Y_t \Delta t + (\Delta G_t - g_o \Delta Y_{pt}) \tag{4}$$

$$= \quad \underbrace{TI_t} \quad + \quad \underbrace{GI_t}$$

11.   The impact of government revenue is neutral if revenue (T_t) and actual GDP (Y_t) grow proportionally (unitary revenue elasticity). The impact is expansionary (contractionary) if revenue grows less (more) than proportionally. The impact of government expenditure is neutral if expenditure (G_t) and potential GDP (Y_{pt}) grow proportionally (unitary spending elasticity); the impact is expansionary (contractionary) if expenditure grows more (less) than proportionally.

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[4] Gelb and others (1988) suggest that governments should save some 70 percent of the oil revenue windfall.

B. Fiscal Impulse Analysis Applied to Gabon, 1970–2001

12.   The application requires the choice of an equilibrium base year, estimates for potential output, and the selection of an indicator for the fiscal balance. During 1960–72, Gabon's economy recorded stable growth supported by sound financial policies (Barro Chambrier, 1990). After 1972, Gabon's economy suffered significant terms of trade shocks, reflecting mainly the booms and slumps of the world oil market and the devaluation of the CFA franc in 1994. For the fiscal impulse analysis, 1970 was chosen as the base year because (i) real GDP growth was satisfactory; (ii) the fiscal and current account balances were close to equilibrium; and (iii) the external debt amounted to only 22 percent of GDP. In the absence of estimates on output capacity, non-oil potential output was estimated by the non-oil GDP trend (10 percent on average, in nominal terms). For the oil sector, the analysis was based on an average production growth of 3½ percent and an average nominal price increase (in U.S. dollars) of 8.2 percent.[5] Oil production ranged between 8 and 10 million tons during 1970–86; production rose to above 18 million tons during 1995–97 (mainly with the coming on stream of the new Rabi-Kounga oil fields) before declining gradually to about 13 million tons in 2001 (Table II.1). Gabon being a small oil producer, it is a price taker on the world market, and its supply capacity is only limited by the stock of reserves and its production efficiency and cost structure. Any excess over the long-run income would need to be considered as cyclical and saved; because of the ratchet effect, the alternative of basing government expenditure on the inflated cyclical oil revenue would not be sustainable.

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[5] The increase in oil prices is somewhat stronger than the one suggested by Hotelling (1931), namely, that the equilibrium real price for irreplaceable resources should rise at a rate equal to the real interest rate in order to maintain the real value of resources.

Table II. 1. Gabon: Key Fiscal Indicators, 1970–2001

(In percent of GDP, unless otherwise indicated)

	1970–76	1977–78	1979–86	1987–94	1995	1996	1997	1998	1999	2000	2001
Overall balance	-0.4	4.9	1.0	-6.2	2.8	2.4	1.6	-14.0	1.2	11.8	7.6
Primary balance	1.0	8.7	4.4	-0.2	11.3	8.6	7.8	-6.3	8.1	17.7	16.5
Non-oil primary balance	-6.9	-13.5	-17.2	-9.3	-6.5	-6.8	-12.9	-25.2	-4.9	-5.1	-6.6
Oil revenue	7.9	22.2	21.6	9.1	17.9	15.4	20.7	18.8	13.0	22.8	23.1
Non-oil revenue	17.4	15.3	13.3	12.8	11.6	10.5	12.4	15.6	15.7	11.0	12.1
In percent of non-oil GDP	23.2	24.2	21.6	17.7	19.6	19.0	21.2	21.7	25.1	21.3	21.1
Total expenditure	25.7	32.6	33.9	28.1	26.7	23.5	31.5	48.5	27.5	22.0	27.6
Wage bill	5.4	4.9	5.7	8.7	7.2	6.3	6.3	7.7	7.5	6.1	6.3
Interest payments	1.4	3.8	3.4	6.0	8.5	6.2	6.2	7.6	6.9	5.9	8.9
Investment and net lending	8.4	15.8	17.7	6.0	5.5	5.3	11.2	13.7	4.2	3.1	4.2
External debt stock	29.7	47.8	33.3	63.0	75.9	69.7	68.2	74.4	79.2	62.9	56.8
Total public debt	...	...	...	79.7	112.4	86.5	83.9	99.2	101.0	72.3	69.2
Wage bill/oil revenue in percent	210.8	22.2	26.5	107.2	40.3	41.1	30.4	41.1	58.0	26.6	27.3
Wage bill/revenue in percent	30.2	31.9	43.1	68.6	61.8	60.4	50.7	49.5	48.1	55.1	52.2
Real GDP growth, in percent	17.6	-24.1	1.5	1.4	5.0	3.6	5.7	3.5	-9.6	-1.9	1.5
Fiscal impulse	2.4	-7.5	2.8	-2.7	-7.2	2.3	-0.2	11.0	-14.9	-8.7	-0.9
Revenue contribution	-1.2	-6.4	-0.7	2.1	-6.1	2.6	-7.4	0.5	5.0	-6.3	-0.8
Expenditure contribution	3.6	-1.1	3.5	-4.8	-1.1	-0.3	7.2	10.5	-19.9	-2.3	-0.1
World oil prices (U.S. dollars per barrel)	6.3	12.9	28.5	17.8	17.2	20.4	19.3	13.1	18.0	28.2	24.3
Oil production (millions of tons)	8.3	11.0	8.4	12.6	18.1	18.3	18.5	17.6	15.6	13.6	13.0
Exchange rate (CFA francs per U.S. dollar)	245.9	235.7	329.8	321.8	499.2	511.6	583.7	590.0	614.9	710.0	732.5

Source: Data communicated by the Gabonese authorities and staff estimates.

13.   The primary balance (excluding interest payments) was used instead of the overall fiscal balance, as it is a better indicator of discretionary fiscal policy.[6] Gabon's key fiscal indicators for the period 1970–2001 are summarized in Table II.1. The fiscal balance and the primary balance were in surplus or close to equilibrium for most of the period, except during the early 1970s, 1985–94 and in 1998. The primary deficit averaged about 4 percent of GDP during the second half of the 1980s and reached 6.4 percent during 1998. Reflecting Gabon's increasing indebtedness, interest payments soared from 1.4 percent of GDP during 1970–76 to 6.0 percent during 1987–94 and about 9 percent of GDP in 2001.[7]

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[6] Interest payments on external debt have no direct impact on domestic demand and they are outside government control; similarly, since interest payments on domestic debt are meant

C. Analysis of the Results, 1970-2001

14.   The fiscal impulse analysis suggests that Gabon's fiscal policy stance has largely been procyclical, which has limited the stabilization role of fiscal policy (Figure II.1). Developments in the fiscal position were dominated by the expansionary expenditure policies during 1970–76, 1979–86 and in 1998, and contractionary expenditure policies during 1977-78 and for most of 1987–2001, except for during 1996 and 1998. During boom years, the authorities increased government spending, particularly on investment, to levels that could not be durably sustained by revenue.

15.   Fiscal policy was expansionary during 1970-76, with the fiscal impulse averaging 2.4 percent of GDP. The contractionary effect of revenue was dominated by the large increase in expenditure, reflecting essentially increasing public investment that followed the favorable oil price shock of 1973–74. The bulk of the increase in investment since the mid-1970s was related to the financing of the railway (Transgabonais) and the hosting of the OAU conference (1976–77). As a result, the ratio of external debt to GDP increased from less than 30 percent during 1970–76 to more than 47 percent of GDP on average during 1977–78.

16.   The fiscal stance became contractionary during 1977–78 under a Fund precautionary arrangement under the Extended Financing Facility (EFF), with an average impulse of –7.5 percent of GDP. During this period, the government enhanced revenue collection, with non-oil revenue increasing to just over 24 percent of non-oil GDP. There was also an effort to reverse the sharp increase in government expenditure in the preceding years, through a reduction of the wage bill and the curtailing of extrabudgetary operations.[8]

17.   The favorable oil shock of 1979–80 led to a relaxation of the adjustment effort. During 1979–86, fiscal policy became expansionary, with an average fiscal impulse of about 3 percent of GDP. During this period, there was a slight decline of both oil and non-oil revenue. World oil prices, which had averaged US$33.7 a barrel during 1979–82, dropped to US$13.8 a barrel in 1986. However, there was no cut in expenditure to adjust to the unfavorable developments in government revenue, reflecting the

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mainly to compensate creditors for the erosion of the value of government paper, they have little effect on domestic demand.

[7] The increase in interest payments since 1994 partly reflects the 1994 devaluation of the CFA franc.

[8] Extrabudgetary investment outlays, consisting essentially of investment on infrastructure, represented between 23 and 50 percent of total expenditure during 1974–77, and between 5 percent and 8 percent of total spending during 1980–84. These outlays were generally financed through external and domestic borrowing.

Figure II.1. Gabon: Fiscal Developments, 1970–2001
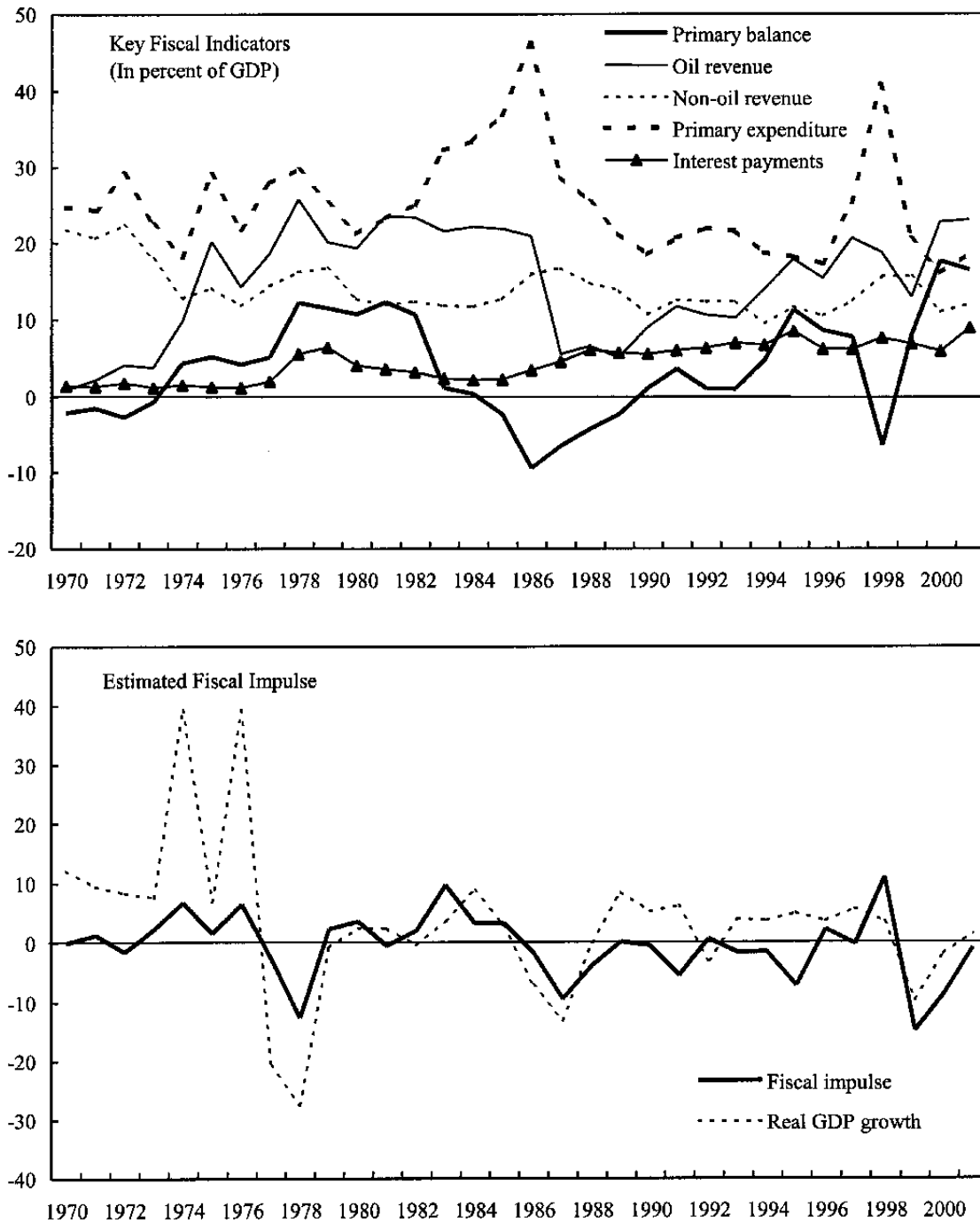
Sources: Gabonese authorities; and staff estimates.

ratchet effect. In particular, the wage bill rose to the equivalent of 43 percent of total revenue during 1979–86, from 32 percent during 1977–78. As with the first oil shock, high oil prices led the government to embark on ambitious public investment programs. Government expenditure rose to about 50 percent of GDP in 1986 from 28 percent of GDP during 1979–82.[9] The fall in oil prices in 1986 led to a larger debt stock, after the significant decline of indebtedness recorded during 1979–85.

18. Fiscal policy became contractionary during 1987–94, with the fiscal impulse indicator averaging –2.7 percent of GDP. During this period, following the sharp drop in world oil prices in 1986, the government proceeded with expenditure cuts in the context of "internal adjustment" policies. Public investment dropped from an average of about 18 percent of GDP during 1979–86 to some 6 percent during 1987–94. However, despite these cuts, the fiscal position remained weak and the fiscal balance turned into significant deficits. This reflected the more than halving of oil revenue, the drop in non-oil revenue, and the rise in the wage bill, which represented about 69 percent of total revenue (up from 43 percent during 1979–86).[10]

19. Following the devaluation of the CFA franc in 1994, the government embarked on a comprehensive adjustment program. There was a resumption of growth owing to a recovery of external competitiveness and a substantial improvement in public finances. Fiscal policy was contractionary in 1995, slightly expansionary during 1996, and neutral in 1997. During 1998, however, there was a collapse in budget management and the fiscal position deteriorated considerably, owing to a large deficit. Since 1999, the authorities have been dealing with recovering from the 1998 crisis and the need to increase the primary surplus in order to service the heavy external debt obligations and reestablish orderly relations with Gabon's creditors. Fiscal policy became very contractionary during 1999–2000, with an average impulse of about –12 percent of GDP, and overall it was neutral in 2001. Efforts were made to improve the collection of non-oil revenue and to rein in expenditure. The primary balance turned from a deficit of over 6 percent of GDP in 1998 to surpluses of 17 percent of GDP during 2000–01. This significant adjustment was painful, as it was accompanied by a sharp reduction in public investment[11] and a freeze of wages and salaries, in the context of a very modest real GDP growth. The cut in public investment made it difficult to maintain an adequate economic and social infrastructure, with a negative impact on the provision of social services and the development of private activities.

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[9] Fiscal imbalances would have been larger if the fall in oil prices had not been partially compensated for by the appreciation of the U.S. dollar.

[10] The rise in the wage bill reflected the substantial wage increases granted in March 1990.

[11] Since public and private investments are likely to be complementary, a strong reduction in public investment could be detrimental to private investment.

D. Conclusions

20.   Fiscal policy constitutes a fundamental tool for Gabon's sustainable development. The analysis of fiscal performance since the 1970s using fiscal impulse indicators shows that Gabon's fiscal stance has generally been procyclical, mirroring mainly developments in oil revenue. Developments in the fiscal position were dominated by the expansionary expenditure policies during 1970–76 and 1979–86, following the first and second oil crises. Fiscal policy became contractionary during 1977–78 (under a Fund-supported program) and for most of the period after 1987 (internal adjustment during 1987–94 and adjustment under Fund-supported programs after 1994, with the exception of 1996 and 1998). During boom years, the authorities increased government spending, notably on investment, to unsustainable levels, particularly following the downward adjustments in oil prices. This led to increased public indebtedness, with a heavy debt service exerting lasting strain on public finances for the period after the mid-1980s.

21.   Following the 1994 devaluation, the authorities opted for a medium-term consolidation of public finances, notably through a strengthening of transparency in the management of resources. However, the debt burden remains heavy, and fiscal developments are very dependent on the oil sector. The prospective steady decline in oil production and the associated government revenue will require a further strengthening of adjustment efforts, in particular to improve the non-oil revenue base and reduce nonpriority current spending.

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III. ANALYSIS OF FISCAL AND DEBT SUSTAINABILITY[12]

A. Background

22.   As Gabon is a member of the CFA monetary zone, fiscal deficits have had no significant direct impact on inflation and the exchange rate, owing to the fixed exchange rate and the cointegration of prices in CFA countries and prices in France (Odedokun, 1997; and Nuven, 1994). However, these deficits have led to high levels of indebtedness, which have become costly to the budget. The external debt burden became so high that Gabon had to resort to six debt reschedulings from Paris Club creditors during 1987–2000. Despite these reschedulings, the external debt service has remained high, thereby reducing the resources available for the development of basic economic and social infrastructure, which are necessary for long-term development (Gerson, 1998).

23.   The fiscal deficits recorded in the early 1970s, most of the 1980s, and the early 1990s were financed by recourse to external and domestic borrowing. The debt-to-GDP ratio increased from around 30 percent in the early 1970s to around 100 percent during 1995–99. Reflecting mainly stepped-up repayments, the debt ratio has since then been on a declining trend and was slightly below 70 percent of GDP at end-2001. While external debt has represented the bulk of public debt, domestic debt became important during the 1990s, averaging over 20 percent of total debt in the second half of that decade. However, with the improvement in the government's fiscal position, the domestic debt was reduced to below 15 percent of GDP at end-2001. Foreign borrowing was contracted essentially at unfavorable commercial conditions, including high interest rates of 7 to 12 percent during 1991–2001 (Table III.1)[13] and short maturities (less than ten years).[14] As a result, the external debt service constitutes a heavy burden for Gabon's development, currently representing 13½ percent of GDP and consuming 40 percent of government revenue. The servicing of external debt has necessitated significant fiscal adjustment and the maintenance of large primary surpluses. Domestic borrowing included bank financing and the accumulation of payments arrears. [15, 16]

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[12] This section has been prepared by Joseph Ntamatungiro.

[13] In 1982, the implicit interest rate averaged 14 percent (22 percent for floating rates and 8 percent for fixed rates). In 1979, the average maturity of Gabon's debt was about three years.

[14] Until the early 1980s, bank loans and export credits represented the bulk of Gabon's external debt. Since then, the debt composition changed somewhat in favor of bilateral loans (mainly Paris Club creditors), with somewhat longer maturities.

[15] Seigniorage in CFA franc countries is limited by the requirement that central bank financing (statutory advance) during period t should not exceed 20 percent of revenues

(continued...)

B. Conceptual Framework for Debt and Fiscal Sustainability

24.   The analysis of fiscal sustainability determines whether the government can pursue indefinitely a given set of fiscal policies without future policy reversals (Zee, 1998; and Horne, 1991). In particular, fiscal policy is sustainable if it leads to a steady state debt-to-GDP ratio.[17] The current analysis uses indicators of fiscal sustainability developed by Blanchard, Chouraqui, Hagemann, and Sartor (1990) in the context of OECD countries and builds on the debt dynamics developed by Buiter (1997):

$$\Delta D_t = I_t - B_t \tag{1}$$

$$I_t = rD_{t-1},$$

where ΔD is the change in government debt ($D_t - D_{t-1}$), I_t the interest payments, B_t the primary balance, and r the nominal interest rate.

25.   Equation (1) indicates that government fiscal deficits are financed by the contracting of new debt; the stock of debt is reduced when primary surpluses exceed interest payments. By dividing both sides of the equation by GDP ($Y_t = (1+g)Y_{t-1}$), where g is the nominal GDP growth rate, and after rearranging, equation (1) leads to the following dynamic equation:

$$\Delta d_t = (r\text{-}g)d_{t-1}/(1+g) - b_t. \tag{2}$$

Solving forward this first-difference equation leads to the *intertemporal budget constraint* that the stock of debt has to be equal to the present discounted value of future primary fiscal balances:

$$d_t = -\sum_{j=1}^{\infty} \gamma^{-j} b_{t+j} \qquad \gamma = (1 + r)/(1 + g) \quad and \quad \gamma - 1 = (r - g)/(1 + g). \tag{3}$$

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collected in period t-1. However, since no limit is set on the government borrowing from commercial banks, there is a risk of crowding out the private sector. Such a risk is alleviated by the setting of targets on net bank credit to government under the BEAC's monetary programming exercise, as well as in the context of Fund-supported programs.

[16] The accumulation of domestic payments arrears had a negative impact on private investment and the local banking system. Following a comprehensive audit in 1999, the government has stepped up their clearance, notably in the context of commercial agreements with domestic creditors (so-called securitization).

[17] The issue of the desirable level of the debt-to-GDP ratio is addressed in Subsections D and E.

26.   Failure to meet this constraint will result either in a profound change in fiscal policy or a debt repudiation, high inflation, and exchange rate depreciation, therefore suggesting that the current fiscal policies are not sustainable.

27.   One indicator of fiscal sustainability is provided by the comparison of the actual primary balance with a theoretical sustainable primary balance ($b*$) that would stabilize the ratio of debt to GDP at d_{t-1}, or $\Delta d_t=0$:

$$b* = d_{t-1}\,(r\text{-}g)/(1+g) \;= d_{t-1}\,(\gamma - 1) \tag{4}$$

$$b* - b_t = d_{t-1}(r\text{-}g)/(1+g) - b_t. \tag{5}$$

Equation (4) shows that, when nominal growth is higher than the interest rate, the stock of debt could be stabilized while incurring primary deficits ($b* <0$). Otherwise, primary surpluses would be needed to stabilize the debt-to-GDP ratio at the current level (d_{t-1}). Equation (5) gives the magnitude of the fiscal adjustment that would be required to stabilize the debt-to-GDP ratio. If this effort is not secured, the country's debt-to-GDP ratio would continue to increase above the current level at a rate equal to $b* - b_t = \Delta d_t$.

28.   A positive primary balance gap indicates the fiscal effort needed to stabilize the debt stock and to honor government's debt obligations. A negative value indicates a *budgetary margin*. It should be noted that stabilizing the debt-to-GDP ratio at the existing level does not imply that the current level is desirable.

C. Gabon's Fiscal Performance, 1991–2001

29.   The above framework is applied to Gabon for the 1991-2001 period. It indicates that Gabon has made progress towards fiscal sustainability since 1994, although the medium-term financial outlook remains difficult (Table III.1 and Figure III.1). Primary balance gaps, which are positive during 1991–93 become negative during most of the period after 1994, implying significant margins that have allowed Gabon to reduce its debt-to-GDP ratio. However, the positive gap in 1998 is indicative of the fragility of Gabon's fiscal adjustment. To dampen cyclical effects and estimate the fiscal adjustment required over the medium term, medium-term gaps ($b*\text{-}b_3$) were constructed using three-year forward averages for the primary balance (b_3), based on the primary balances for the current year and the following two years. This indicator broadly confirms the finding using short-term primary gaps.

Figure III.1. Gabon: Estimated Primary Balance Gaps, 1991–2001

(In percent of GDP)

Sources: Gabonese authorities; and staff estimates.
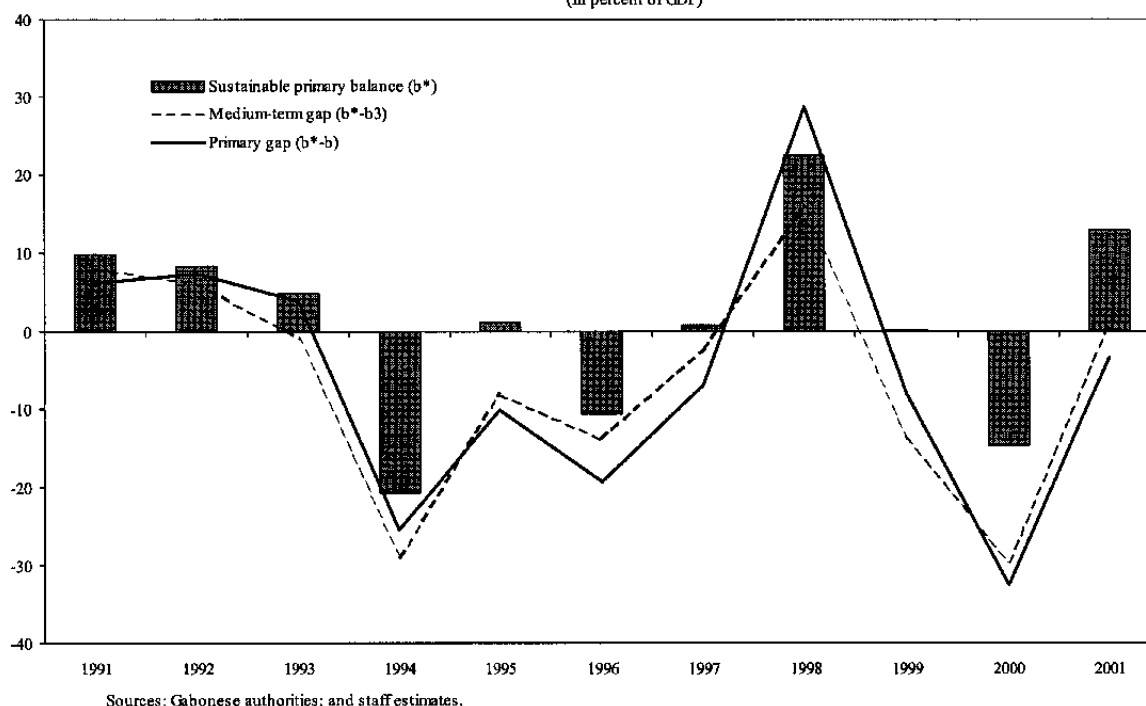
Table III.1.Gabon: Analysis of Fiscal and Debt Sustainability, 1991–2001

(In percent of GDP, unless otherwise indicated)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Debt-to-GDP ratio at the end of t-1 (d_{t-1})	60.3	67.2	67.5	80.1	123.7	112.4	86.5	83.9	99.2	101.0	72.3
Primary balance (b)	3.6	1.0	1.0	4.7	11.3	8.6	7.8	-6.3	8.1	17.7	16.5
Primary balance, three-year average ahead (b3)	1.9	2.3	5.7	8.2	9.3	3.4	3.2	6.5	14.1	14.7	12.2
Implicit interest rate (r) in percent 1/	9.4	9.2	10.7	12.7	7.3	6.5	7.6	7.7	7.5	7.4	11.7
Nominal GDP growth (g), in percent	-5.9	-2.9	3.4	52.0	6.4	17.7	6.7	-14.9	7.4	26.0	-5.3
Estimated primary balance and growth gaps 2/											
b^*	9.8	8.4	4.8	-20.7	1.1	-10.7	0.7	22.3	0.1	-14.9	13.0
b^*-b	6.2	7.3	3.7	-25.4	-10.2	-19.3	-7.1	28.7	-8.0	-32.6	-3.5
b^*-b3	8.0	6.1	-0.9	-28.9	-8.1	-14.0	-2.5	15.9	-14.0	-29.6	0.8

Sources: Gabonese authorities; and staff estimates and projections.

1/ Interest payments due in t divided by stock of debt at the end of t-1.

2/ b^* is the sustainable primary balance (allowing the stabilization of the debt ratio at d_{t-1}), (b^*-b) and (b^*-b3) the short- and medium-term primary gaps.

D. Achieving a Normative Debt-to-GDP Ratio

30.   As noted above, the analysis of fiscal sustainability based on the stabilization of the existing debt-to-GDP ratio is limited by the fact that it does not necessarily imply that the debt-to-GDP ratio would be stabilized at an optimal or desirable level. A lower debt-to-GDP ratio may be justified by the need to lower interest payments, to improve the government's credibility relative to the private sector, and to reduce the debt-service burden, so as to provide room for maneuver with regard to future fiscal policy. In particular, the prospects for lower oil revenue in the case of Gabon would call for a reduction in the debt-to-GDP ratio to a level consistent with the prospects for non-oil revenue. To reduce the debt-to-GDP ratio to a desirable level in year n (d_n), significant incremental primary surpluses will have to be generated each year until year n. Only when the desirable debt-to-GDP ratio has been reached, can the analysis developed above be applied. Expanding equation (2) to get $d_n = \gamma^n d_o - b\,(1 + \gamma + \gamma^2 + ... + \gamma^{n-1})$, where d_o is the initial debt-to-GDP ratio, one obtains the primary surplus $(\underline{b})$ required every year to reduce the debt-to-GDP ratio from d_o to d_n after n years:

$$\underline{b} = (\gamma^n d_o - d_n)(\gamma - 1)/(\gamma^n - 1), \qquad \text{where } \gamma = (1 + r)/(1 + g) \quad \text{and} \quad \gamma - 1 = (r - g)/(1 + g) \qquad (6a)$$

$$\underline{b} = \underbrace{d_n\,(\gamma - 1)}_{(1)} + \underbrace{(d_o - d_n)\,(\gamma - 1)[\gamma^n/(\gamma^n - 1)]}_{(2)} \qquad (6b)$$

where the first term in (6b) is the primary balance required to stabilize the debt-to-GDP ratio at the desirable level d_n and the second term in (6b) is the incremental fiscal effort required to reduce the debt-to-GDP ratio from d_o to d_n in n years.[18]

31.   The table below shows (i) the primary surpluses required to reduce the debt-to-GDP ratio from 70 percent to various desired levels in three years; and (ii) the primary balance needed to stabilize the debt-to-GDP ratio once the the desirable level has been reached.[19] For example, with an interest rate of 4 percent and a GDP growth rate of 2 percent, a primary surplus of about 11 percent of GDP would be required every year to reduce the debt-to-GDP ratio from 70 percent to 40 percent over a three-year period.[20] Maintaining this level thereafter would require a primary surplus of about 1 percent of GDP every year.

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[18] The second term of (6b) is close to $(d_o - d_n)/n$, i.e., the debt reduction divided by the number of years to achieve it.

[19] $\underline{b}$ is more sensitive to the difference between g and r than to levels.

[20] The ratio of 40 percent of GDP corresponds to about 70 percent of non-oil GDP. A debt-to-GDP ratio of 70 percent is one of the four convergence criteria required by the CEMAC. As

Primary Balance Needed to Achieve and Maintain
a Normative Debt-to-GDP Ratio

(In percent of GDP, from an initial level of 70 percent of GDP)

	Normative Debt to GDP Ratio (d_n) to be Achieved in Three Years					
	70	60	50	40	30	20
Interest rate=4 percent; nominal GDP growth=6 percent						
Primary balance needed to achieve d_n $(\underline{b})$	-1.3	2.1	5.5	8.9	12.3	15.7
Primary balance needed to maintain d_n $(b_n{}^*)$	-1.3	-1.1	-0.9	-0.8	-0.6	-0.4
Interest rate=4 percent; nominal GDP growth=2 percent						
Primary balance needed to achieve d_n $(\underline{b})$	1.4	4.6	7.9	11.2	14.4	17.7
Primary balance needed to maintain d_n $(b_n{}^*)$	1.4	1.2	1.0	0.8	0.6	0.4

32.   The next subsection addresses the issue of how to determine the desirable debt-to-GDP ratio and sustainable primary balances in the face of the expected decline in oil revenue.

E. Fiscal Sustainability in the Face of Exhaustible Resources

Introduction

33.   As indicated above, the traditional sustainability analysis has several limitations. First, maintaining the debt-to-GDP ratio unchanged does not address a country's existing heavy debt burden and the level of the desirable debt-to-GDP ratio is undetermined. Second, for countries like Gabon, where the government budget is dominated by oil revenue, there is a need to take into account the expected stream of oil revenue over time. In this regard, it is essential to consider the income derived from oil not as the accrual of revenue, but as a reduction in wealth associated with an exhaustible resource. This is particularly important for Gabon for which oil production is projected to be reduced by one-half over the next few years.[21] The intertemporal government budget constraint given by equation (3) and the sustainable primary balance of equation (4) may be misleading in such a case, since the underlying level of government fiscal deficits and net indebtedness is underestimated (Alier

underlined in the next subsection, a debt ratio based on the non-oil GDP would be more relevant, especially in view of the projected decline in oil production.

[21] Oil currently contributes 40 percent of Gabon's GDP, about half of total government revenue and three quarters of exports.

and Kaufman, 1999). In fact, such a framework assumes that revenue, including oil revenue, would be collected indefinitely, despite the finite horizon for the exploitation of oil resources. There are two ways to safeguard the oil wealth, either by not exploiting the resource or by investing the value of oil production and consuming only all or part of the associated investment income. The decision would depend on future oil prices and the interest rates on the investment of oil savings.[22] In particular, oil exploitation when prospective oil price increases are lower than the return on placement, would be more rapid, but oil revenue would need to be largely set aside to generate financial wealth to be used after the depletion of oil reserves.[23]

34.   A forward-looking approach is needed to ensure that the government is not forced to revise its policies, at the expense of future generations, when the oil wealth is exhausted.[24] Fiscal policy should aim at intergenerational equity, by setting aside part of oil revenue in earlier years to be shared with future generations when oil resources will be much lower. Furthermore, spreading over time the spending of foreign exchange earnings from oil would lead to a smoother path for the real exchange rate, as the depreciation eventually required when oil reserves are exhausted would start early on as financial reserves in foreign exchange are built.[25] The problem at hand is, therefore, to find a sustainable path for the non-oil fiscal balance where deficits in later years can be financed by part of the oil revenue set aside in early years.[26]

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[22] For a framework for the optimal exploitation of irreplaceable resources, see Hotelling (1931). Caution should be exercised in valuing oil resources, since the volatility of oil prices or exchange rate depreciations could lead the government into an unsustainable consumption path based on a poor valuation. Accordingly, the value of oil wealth should be reexamined continuously (see Tersman (1991) in the case of Norway).

[23] For an analysis of the experience of policies in a number of oil producing countries, see Liuksila, Garcia, and Basssett (1994). The authors noted the headway made in Mexico, Egypt, and Indonesia in the diversification of sources of government revenue; however, while the experience was mixed in the cases of Nigeria and Venezuela.

[24] For a forward-looking balance sheet approach, see Tersman (1991) and Liuksila, Garcia, and Bassett (1994).

[25] Another reason to keep the set-aside oil income in international assets is to protect these resources from political spending pressures and to insulate the domestic economy from volatility of oil revenues (see Davis and others (2001)).

[26] The current analysis does not deal with precautionary policies aimed at smoothing oil revenue (excess oil revenue saved to be used when oil revenue is below the permanent income level), including the use of market-based hedging instruments. Limitations to the use

35.   It can be argued that investment in infrastructure, health, and education in the context of a growth and poverty reduction strategy could help generate higher growth in the non-oil sector and adequate non-oil revenue for future generations. A delicate balance will therefore have to be struck between the current investment needs and the constitution of savings for future generations. This balance will depend on a number of variables, including the time preference of the current generation,[27] the information on the volume of oil reserves and the period remaining until exhaustion, the return on financial investments versus the cost of borrowing, and the capacity of the current generation to use effectively the income from oil resources.

Framework for fiscal sustainability and intergenerational equity

36.   The framework below derives the path for oil and non-oil wealth and the associated non-oil primary balances, while attempting to illustrate the choices faced by the government in the management of oil resources and its non-oil debt:

$$W_{t+1} = A_{t+1} + FFG_{t+1} + Vo_{t+1} \tag{7a}$$

$$A_{t+1} = A_t(1+r) + F_{t+1} + Yo_{t+1}. \tag{7b}$$

$$FFG_{t+1} = FFG_t(1+\rho) + To_{t+1} - Yo_{t+1}, \tag{7c}$$

where A is the non-oil debt ($A<0$), F the non-oil primary balance, To the oil revenue, Yo the transfer of oil-based revenue (direct budgetary allocations of oil revenue or transfer from the oil savings fund or Fund for Future Generations, FFG), ρ the return on FFG resources, and Vo the discounted future oil revenue, or a measure of the oil wealth.

37.   **Oil wealth and oil revenue.** To estimate oil wealth, it is assumed that annual oil production (O_t) changes at a constant rate ($e<0$, i.e., a decline), the tax rate τ on oil resources is constant, and a parameter λ determines the annual rate of change in world oil prices (P_t). Under these conditions, oil revenue and oil wealth in current year t and beyond are, respectively:

$$To_{t+j} = \tau P_t O_t (1+\lambda)^j (1+e)^j \tag{8a}$$

$$= To_t(1+\lambda)^j(1+e)^j$$

---

of futures markets or options as hedging tools include (i) the basis risk; (ii) inadequate expertise; (iii) difficulty to pay deposit and margin calls, and premiums; and (iv) the fact that the government is not always the producer/seller of oil resources.

[27] For a conceptual framework for intergenerational welfare optimization, see the annex at the end of this section.

$$Vo_t = \tau P_t O_t (\sum_{j=0}^{\infty} [(1+\lambda)(1+e)/(1+r)]^j) \tag{8b}$$

$$= To_t(1+r)/(r-e-\lambda-e\lambda)$$

$$Vo_{t+j} = Vo_t (1+\lambda)^j (1+e)^j,$$

where $To_t = \tau P_t O_t$ is the oil revenue in period t.[28] From relations (8a) and (8b), oil revenue in period $t+j$ also equals to

$$To_{t+j} = Vo_t [(r-e-\lambda-e\lambda)/(1+r)](1+\lambda)^j (1+e)^j. \tag{8c}$$

38.   **Transfer to the budget of oil-based income.** These transfers are either direct budgetary oil revenue or income from the FFG. It is assumed that the oil wealth, Vo_t, is distributed equitably across generations through equal income transfers per capita (y^*):

$$Vo_t = y^* N \sum_{j=0}^{\infty} [(1+\eta)/(1+r)]^j = y^* N(1+r)/(r-\eta) \tag{9a}$$

$$y^* = Vo_t(r-\eta)/N(1+r) \tag{9b}$$

$$Yo_t^* = Ny^* = Vo_t(r-\eta)/(1+r) \tag{9c}$$

$$Yo^*_{t+j} = N_{t+j} y^* = Vo_t[(r-\eta)/(1+r)](1+\eta)^j, \tag{9d}$$

where η is the population growth. For simplicity, assuming that non-oil GDP growth equals to population growth ($\eta=g$), relation (9d) can be expressed in terms of non-oil GDP as follows:

$$yo^*_{t+j} = vo_t(r-g)/(1+r), \tag{9e}$$

underlying the idea that oil-based transfers will be constant in terms of non-oil GDP.

39.   **Fund for Future Generations.** The FFG is fed by the net amount of oil revenue and transfers to the budget, in addition to earnings on the stock. Using equations (7c), (8c) and (9e), the path for the FFG is as follows:

$$FFG_{t+j} = FFG_{t+j-1}(1+\rho) + Vo_t[(r-e-\lambda-e\lambda)/(1+r)](1+\lambda)^j (1+e)^j - Vo_t[(r-g)/(1+r)](1+g)^j. \tag{10a}$$

As a ratio of non-oil GDP, the position of the Fund for Future Generations evolves according to the following path:

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[28] For a finite horizon (T) for the exploitation of oil resources, the oil wealth amounts to
$Vo_t = To_t([(1+\lambda)(1+e)/(1+r)]^{T-t+1}-1)/[(1+\lambda)(1+e)/(1+r)-1]$.

$$\mathit{ffg}_{t+j} = vo_t\,[(r\text{-}g)/(1+r)]\,[(1+\rho)/(\rho\text{-}g)] + vo_t\,\zeta(j)/(1+g)^j \tag{10b}$$

$$\mathit{Lim}\;\mathit{ffg}_{t+j} = vo_t\,[(r\text{-}g)/(1+r)]\,[(1+\rho)/(\rho\text{-}g)] \tag{10c}$$
$$j\!\rightarrow\!\infty$$

$$= vo_t \qquad \text{when } r = \rho \tag{10d}$$

where vo_t is the oil wealth-to-GDP ratio, while $\zeta(j)$ is the deviation relative to the long-term path given by equations (10c) and (10d). These equations show that the position of the oil fund relative to non-oil GDP will tend to reproduce the oil wealth in the base year (vo_t).

40.   **Non-oil debt.** For the dynamics of the debt and the net financial position excluding oil-based wealth, we turn to the earlier fiscal sustainability analysis (equations 6a-b), replacing the primary balance $\underline{b}$ by the non-oil primary balance F plus the transfers of the oil-based income to the budget ($Yo_t{}^*$). A target for the debt-to-non-oil GDP ratio (a_{t+n}) to be reached in year $t+n$ is also assumed:

$$\underline{b} = f + yo_t{}^* = a_{t+n}\,(\gamma\text{-}1) + (a_t\text{-}a_{t+n})\,(\gamma\text{-}1)[\gamma^n/(\gamma^n\text{-}1)] \tag{11}$$

with f and $yo_t{}^*$ representing F and $Yo_t{}^*$ expressed in terms of the non-oil GDP.

41.   The first term in (11) is the overall primary balance (including oil-based transfers, i.e., direct oil revenue and transfers from the FFG) required to stabilize the debt-to-non-oil GDP ratio at the desirable level a_{t+n}, while the second term is the incremental fiscal effort to get to that level in n years. The non-oil primary balance (f, likely a deficit) is determined residually once the political choices about sustainable and intergenerationally equitable oil transfers ($yo_t{}^*$) and the desirable debt-to-non-oil GDP ratio have been made.

Application to Gabon

42.   **Fiscal prospects with no policy change.** Gabon's current non-oil financial position is negative and consists mainly of the domestic and external debt, representing about 120 percent of non-oil GDP at end-2001 (about 70 percent of GDP).[29] During 2001-23, oil production is projected to decline on average by 10 percent annually (e = -0.10), and existing oil reserves are assumed to be virtually depleted by 2023.[30] Non-oil GDP growth (g) is

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[29] Net foreign assets of the central bank are not included in the government's net position, given their past volatility and their current low level (negative during 1998-99 and less than 3 percent of GDP during 2000-01). Similarly, privatization proceeds were not included, with past experience indicating that they have barely covered restructuring costs.

[30] This assumption may be restrictive as it assumes the absence of new oil discoveries.

projected at 5 percent.[31] Oil prices are assumed to remain at their level of 2001 (US$24.3 per barrel, or $\lambda=0$), above the average price recorded during 1979–2001 (US$22.2 per barrel), as well as above current WEO medium-term projections (around US$20 per barrel).[32] Assuming a long-term market interest rate (r) of 4 percent, the oil wealth Vo_t (or discounted oil revenue) is estimated at 289 percent of non-oil GDP (some 165 percent of GDP) at end-2001, and is projected to decline continuously in the future and to disappear after year 2023 following the virtual exhaustion of oil reserves. The total net wealth position at end-2001 is estimated at about 168 percent of non-oil GDP (Table III.2).

43.   The non-oil primary balance is an essential indicator of long-term fiscal policy sustainability and a key determinant of the total net wealth.[33] Fiscal sustainability should be analyzed by assessing whether the underlying fiscal policy in the non-oil sector is strong enough to sustain a viable fiscal position in the long run, especially following the depletion of oil reserves. The baseline projections in Table III.2 and Figure III.2 indicate that, even though fiscal policy has been strengthened in recent years so as to significantly reduce the non-oil primary deficit, the latter still represented about 11½ percent of non-oil GDP in 2001 (6½ percent of GDP). If current policies were to continue—that is, maintaining this deficit in terms of non-oil GDP—the net wealth position of the government would become increasingly negative from year 2018 onward, reaching –196 percent of non-oil GDP by year 2030 (Table III.2, baseline). Fiscal adjustment would be needed to avoid such a deterioration and to ensure a successful replacement of oil resources. Therefore, current fiscal policies are unsustainable over the long run.

44.   **Fund for Future Generations**. An alternative strategy would be for the government to save part of the oil revenue so as to compensate for the future depletion of oil reserves. This could be achieved through Gabon's Fund for Future Generations (*FFG*), legally created in 1998.[34] According to the statutes, 10 percent of the budgeted oil revenue is to be

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[31] In the following discussion, no inflation is assumed in the long run. Therefore, projections for interest rates and GDP growth rates make no difference between nominal and real rates.

[32] It is assumed that the best estimate of future prices is the current price ($E_t P_{t+j} = P_t$).

[33] Chalk (1998) uses the term "core deficit" in his analysis for countries producing nonrenewable resources.

[34] For a discussion on the setting up and the use of savings funds for nonrenewable resources, see Davis and others (2001) and Liuksila, Garcia, and Bassett (1994). The literature indicates that the constitution of savings funds is not a panacea as it has not been successful in disconnecting expenditure decisions from oil revenue developments. Liuksila, Garcia, and Bassett also show how oil contingency mechanism funds established by Venezuela had limited success due in part to pressing expenditure needs and to the diversion of resources.

Table III.2. Gabon: Analysis of Fiscal and Debt Sustainability, 2001–30 1/
(In percent of non-oil GDP, unless otherwise indicated)

	2001	2005	2010	2015	2020	2023	2025	2030
Number of years of additional oil production	0.0	4.0	9.0	14.0	19.0	22.0	0.0	0.0
Non-oil GDP in billions of CFA francs	1,937.4	2,354.9	3,005.5	3,835.9	4,895.7	5,667.3	6,248.2	7,974.5
Oil production, in million tons	13.0	8.5	5.0	3.0	1.8	1.3	0.0	0.0
Debt, with no policy change	-121.1	-52.3	-37.5	-60.4	-99.3	-125.9	-146.4	-195.9
Non-oil primary balance (f)	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5
Oil revenue	40.3	21.8	10.1	4.7	2.2	1.4	0.0	0.0
Overall primary balance	28.8	10.3	-1.4	-6.8	-9.3	-10.1	-11.5	-11.5
Market nominal interest rate ((r) in percent)	4.0							
Nominal non-oil GDP growth (g), in percent								
Nominal non-oil GDP growth ((g) in percent)	5.0							
Number of years before oil reserve depletion	22.0	18.0	13.0	8.0	3.0	0.0	0.0	0.0
Oil price changes (in percent)	0.0							
Oil production growth (in percent)	-10.0							
Oil wealth (discounted oil revenue)	288.8	230.7	167.6	110.1	52.1	13.8	0.0	0.0
Total asset (without policy change)	167.8	178.4	130.1	49.7	-47.2	-112.1	-146.4	-195.9
With the Constitution of the FFG 1/								
Non-oil primary balance (in percent)	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5
Overall primary balance, excluding the FFG	28.8	8.1	-2.4	-7.3	-9.6	-10.3	-11.5	-11.5
Oil revenue	40.3	21.8	10.1	4.7	2.2	1.4	0.0	0.0
Annual allocation to the budget	40.3	19.6	9.1	4.2	1.9	1.2	0.0	0.0
Annual allocation to the FFG	0.0	2.2	1.0	0.5	0.2	0.1	0.0	0.0
FFG position	0.0	11.0	17.3	19.7	20.2	20.1	19.8	18.8
Debt	-121.1	-63.2	-54.9	-80.1	-119.5	-146.0	-166.1	-214.8
Oil wealth (discounted oil revenue)	288.8	230.7	167.6	110.1	52.1	13.8	0.0	0.0
Total assets	167.8	178.4	130.1	49.7	-47.2	-112.1	-146.4	-195.9
Sensitivity to the FFG return								
FFG return	2.0							
Oil wealth (discounted oil revenue)	288.8	230.7	167.6	110.1	52.1	13.8	0.0	0.0
FFG position	0.0	10.6	15.7	16.7	15.8	15.0	14.1	12.2
Debt	-121.1	-63.2	-54.9	-80.1	-119.5	-146.0	-166.1	-214.8
Total assets	167.8	178.1	128.5	46.7	-51.6	-117.3	-152.0	-202.5
FFG return	6.0							
Oil wealth (discounted oil revenue)	288.8	230.7	167.6	110.1	52.1	13.8	0.0	0.0
FFG position	0.0	11.3	19.0	23.3	26.0	27.2	27.7	29.0
Debt	-121.1	-63.2	-54.9	-80.1	-119.5	-146.0	-166.1	-214.8
Total assets	167.8	178.8	131.8	53.3	-41.5	-105.1	-138.4	-185.7
FFG return	8.0							
Oil wealth (discounted oil revenue)	288.8	230.7	167.6	110.1	52.1	13.8	0.0	0.0
FFG position	0.0	11.7	20.9	27.6	33.4	36.8	38.9	44.8
Debt	-121.1	-63.2	-54.9	-80.1	-119.5	-146.0	-166.1	-214.8
Total assets	167.8	179.1	133.7	57.6	-34.1	-95.4	-127.2	-169.9

Source: Staff estimates and projections.

1/ FFG stands for Fund for Future Generations. Each year, 10 percent of oil revenue is allocated to the Fund and invested at a rate of 4 percent.

transferred to the FFG until a minimum capital of CFAF 500 billion (about 25 percent of the 2001 non-oil GDP) is attained. Such an arrangement, if applied from 2002, would be a step in the right direction (Table III.2, second panel). However, the simulations at an interest rate of 4 percent show that the amounts to be set aside under the *FFG* statutes would not allow a replacement of oil revenue in later years. With the FFG attaining only 19 percent of non-oil GDP by 2030, together with a smaller debt reduction, the net wealth position would reach −196 percent of non-oil GDP by year 2030, as under the baseline scenario. To avoid such deterioration in net wealth, considerably larger fiscal adjustment would be needed.

45.   The results are sensitive to the assumptions on various parameters, notably on the return on the *FFG* resources.[35] For example, with a return of 8 percent, the *FFG* position and the net wealth would be about 26 percentage points of non-oil GDP higher (than for an interest rate of 4 percent) by year 2030. (Table III.2 and Figure III.2). Therefore, it is important to maximize the return on FFG resources, as it would not make much sense to keep poorly remunerated funds when the country continues to face challenging development needs and pay high interest rates on its debt.

Figure III. 2 Gabon: Total Asset Projections: No Policy Change, 2001–30
(In percent of non-oil GDP)
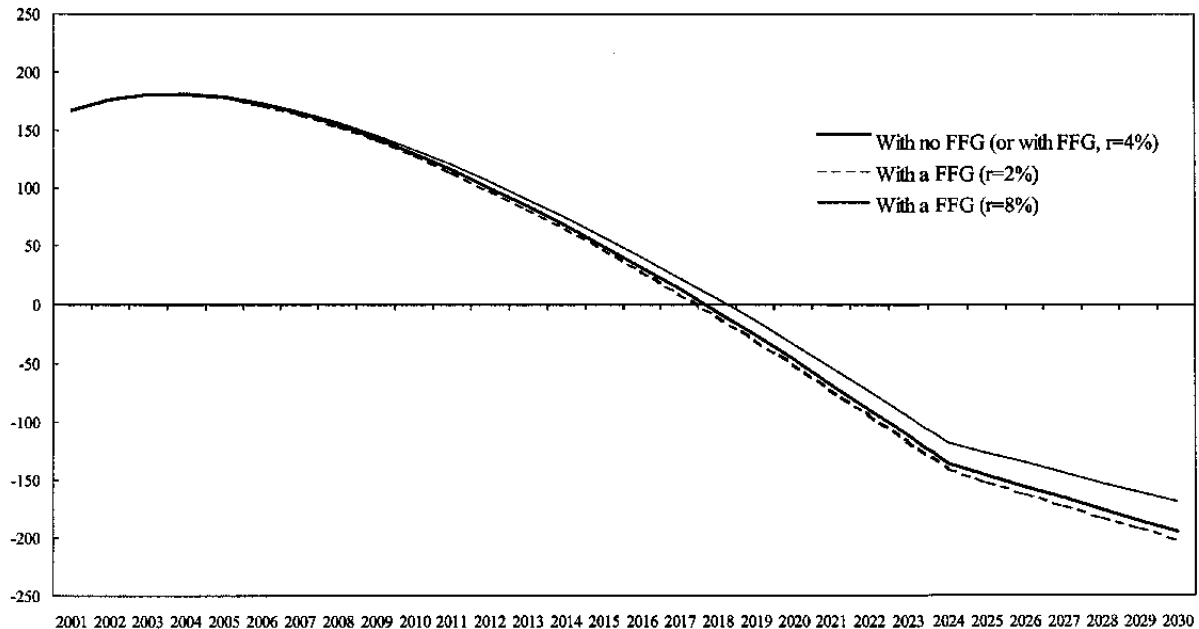
Source: Staff estimates and projections.

[35] Higher production and oil prices would improve Gabon's financial prospects; however, they would not fundamentally change the thrust of the analysis.

46.   **Prospects for a sustainable fiscal path.** The following forward-looking scenario, based on the discussion above on fiscal sustainability and intergenerational equity, incorporates an equitable distribution of oil wealth across generations (that is, keeping the income transfer from oil resources and the oil-based wealth constant across generations, as developed in equations (7-11)).[36] Simulations of a sustainable path for the non-oil primary balance, the net transfers from the FFG, and the overall primary balance (and, hence, the change in the financial wealth) were conducted under the following assumptions: (i) a growth rate of non-oil GDP of 5 percent equal to the growth rate of the income transfer for oil-based resources; (ii) a return on FFG resources of 7½ percent; and (iii) a target for non-oil debt of 20 percent of non-oil GDP, to be reached in 30 years. The constant oil-based income transfer is calculated from equation (9e) above at about 6.7 percent of non-oil GDP (some US$150 per capita). This resulting sustainable fiscal path entails non-oil primary deficits of about 4 percent of non-oil GDP each year and overall primary surpluses of 2.7 percent of non-oil GDP each year during the 2002–30 period (see table below). These overall surpluses would allow the debt ratio of the debt to non-oil GDP to be reduced to below 70 percent by 2015 and to the target level of 20 percent by year 2030.

47.   During the first eight years, transfers to the FFG would represent over half of oil revenue; from 2009 onward, the bulk of the decreasing oil revenue would be transferred to the budget to finance non-oil primary deficits. The projected non-oil primary deficits would be financed by oil revenue allocated directly to the budget and, from 2013 onward, increasingly by transfers from the *FFG*. As shown in Figure III.3 and the table below, such a strategy would allow a progressive reduction in the debt-to-GDP ratio while keeping the net wealth position at comfortable, positive levels.

48.   The debt would be brought from 121 percent of non-oil GDP at end-2001 to below 70 percent (one of the CEMAC's convergence criteria) by year 2015, eight years before the projected depletion of oil reserves.[37] The FFG position would reach US$12 billion by 2025 and would be about US$14 billion in 2030 (or 128 percent of non-oil GDP). Total net wealth would be above US$10 billion after 2025, a level that would be higher than the net position at end-2001.

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[36] As noted above, oil-based income transfers and wealth can either be constant in per capita terms, that is, growing over time at the same rate as population growth, or constant relative to GDP, that is, growing over time at the same rate as real GDP.

[37] Given the short maturities that characterize Gabon's debt, a primary surplus of 2.7 percent of non-oil GDP might not be sufficient to service the debt in the medium term. Debt relief from external creditors would be necessary to spread the debt repayment over a longer period and to facilitate the constitution of savings in the FFG during the initial years. Also, depending on the level of the return on FFG resources relative to interest payments on debt, the government might allocate more oil revenue for debt repayment.

Figure III.3 Gabon: Possible Policy Options and Fiscal Sustainability, 2001–30

Possible Policy Options
(In percent of non-oil GDP)

Legend:
- Non-oil primary balance
- Debt ratio
- Oil revenue transfers to the budget
- Transfers from the FFG

New Wealth Projections with Policy Change
(In millions of U.S. dollars)

Legend:
- Total debt
- Total assets
- FFG position
- Oil wealth
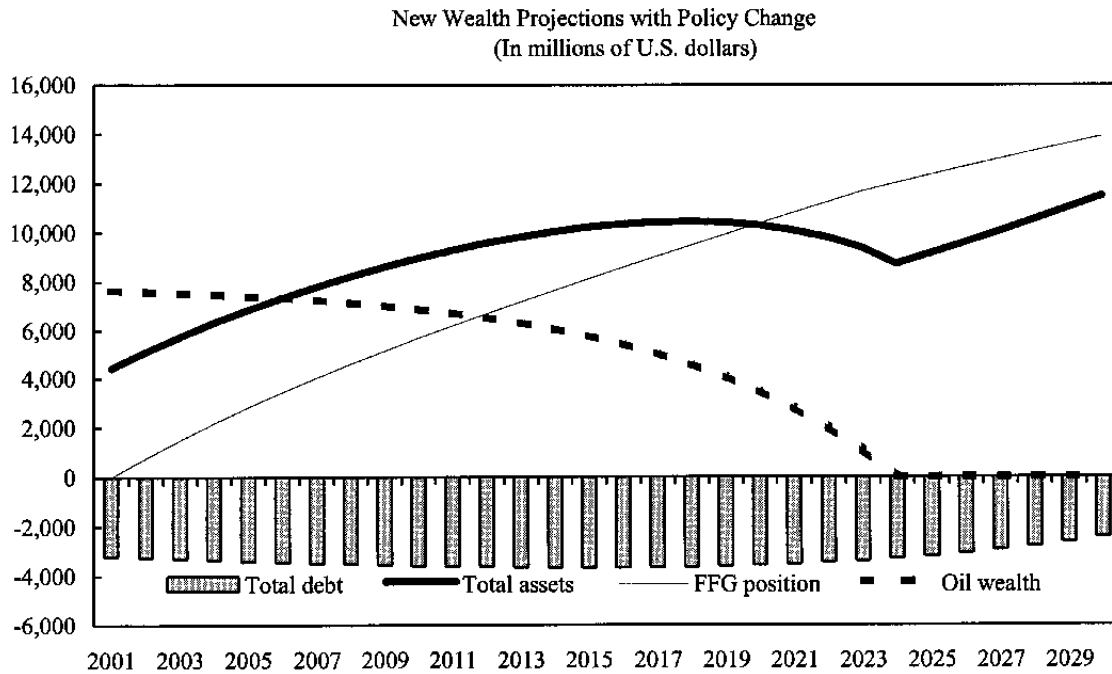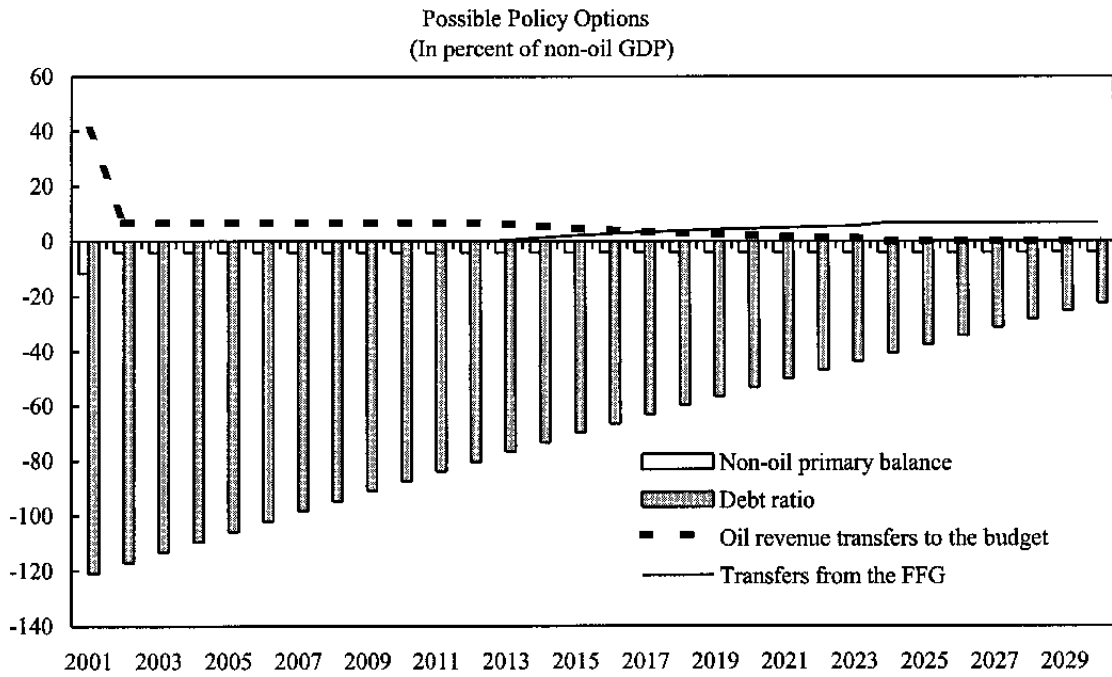
Source: Staff estimates and projections.

Gabon: A Path for the Sustainable Replacement of Oil Resources, 2001–30

	2001 Est.	2005	2010	2015	2020	2025	2030
Policy variables	(In percent of non-oil GDP)						
Non-oil primary balance	-11.5	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0
Oil revenue	40.4	21.8	10.1	4.7	2.2	0.0	0.0
Oil transfers to the budget	40.4	6.7	6.7	4.7	2.2	0.0	0.0
Primary balance, excluding FFG transfers	28.9	2.7	2.7	0.7	-1.8	-4.0	-4.0
Transfers from the FFG	0.0	0.0	0.0	2.1	4.6	6.7	6.7
Primary balance, including FFG transfers	28.9	2.7	2.7	2.7	2.7	2.7	2.7
Outcomes							
Total debt	-121.1	-105.8	-87.4	-69.9	-53.3	-37.4	-22.2
FFG position	0.0	88.2	138.3	154.9	155.1	144.6	127.7
Oil wealth	288.8	230.7	167.6	110.1	52.1	0.0	0.0
Total net wealth	167.8	213.1	218.5	195.1	153.9	107.3	105.4
	(In millions of U.S. dollars)						
Total debt	-3,202	-3,400	-3,587	-3,662	-3,560	-3,188	-2,420
FFG position	0	2,834	5,674	8,110	10,366	12,336	13,898
Oil wealth	7,639	7,416	6,877	5,767	3,480	0	0
Total net wealth	4,437	6,851	8,965	10,215	10,286	9,149	11,478

F. Conclusions and Policy Implications

49.   Although traditional indicators appear to suggest that since 1994 there has been progress toward fiscal sustainability and a clear shift from past policies, the fiscal situation remains fragile, particularly in the face of the expected decline in oil production and revenue. Therefore, forward-looking policies are needed to ensure that drastic policy revisions are not necessary when the oil wealth comes to exhaustion. In this context, there is a case for aiming at a non-oil primary deficit that ensures long-term fiscal sustainability and for setting aside some oil revenue so as to enable future generations to benefit from the adequate provision of public goods, after the oil resources have been exhausted. The immediate policy implications are that the authorities should pursue their efforts to consolidate public finances by improving non-oil revenue through a broadening in the tax base, by strengthening expenditure management and control, by reorienting public spending in line with the poverty reduction strategy, and by actually constituting the Fund for Future Generations. On the latter, the level of oil revenue savings needed to ensure fiscal sustainability and intergenerational equity would be higher than envisaged under the 1998 statutes of the *FFG*. Given the short maturity of Gabon's debt, fiscal sustainability will, however, also be helped by significant debt relief,

which would allow a longer repayment period. In addition, in view of the unfavorable social indicators, the authorities will have to strike a delicate balance between meeting the existing basic development needs and setting aside savings for future generations.

Conceptual Framework: An Intergenerational Model

The optimum spread of oil revenue can be analyzed in the context of a simple intergenerational model of maximization of a social welfare W, with representative citizens in periods t and $t+1$ with similar utility functions U and consuming $c(t)$ and $c(t+1)$, respectively. Citizens of the current generation (N) have an income $\Gamma(t)$ generated from transfers received from the government. For simplicity, the oil sector is under government control, and there is no production in the non-oil sector. The current generation saves $F(t)$ in favor of the next generation, whose population is $N(1+\eta)$, where η is the population growth rate. The government perceives a rent on oil resources in terms of royalties and other taxes. The problem is to find $c(t)$ and $c(t+1)$ that are solutions to the following intergenerational optimization problem:

$$\text{Max } W = U(c(t)) + \beta\, U(c(t+1)) \tag{1}$$

s.t.:

$$N\, c(t) + F(t) = \Gamma(t)$$
$$N(1 + \eta)\, c(t + 1) = (1+r)F(t),$$

where β is a discount factor indicating the time preference and r the market interest rate.[38]

Optimal consumption levels in t and $t+1$ are functions of the income per capita and the time preference parameter β. While both consumption sets are affected positively by the income, the impact of β on $c(t)$ is negative while it is positive on $c(t+1)$, underscoring the role played by β in determining the savings of the current generation in favor of the future generation (saving by the current generation is an increasing function of β). The consumption by the future generation depends on the consumption of the current generation, as indicated by relation (8):

$$c(t+1) = c(t)(1+r)\beta/(1+\eta). \tag{2}$$

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[38] For a log utility function, the solution to this problem is

$$c(t) \quad = [\Gamma(t)/N]/(1+\beta)$$
$$c(t+1) = [(1+r)\Gamma(t)/N(1+\eta)]\beta/(1+\beta)$$
$$F(t) \quad = \Gamma(t)\beta/(1+\beta).$$

The equitable consumption path, where consumption is equal across generations, is given by $\beta = (1+\eta)/(1+r)$. In this context, the higher the population growth rate, the larger will be the resources set aside for future generations so as to ensure equitable wealth redistribution across generations. When $\beta > (1+\eta)/(1+r)$, the current generation cares for future generations to the extent that it saves enough so as to allow higher consumption by them. When $\beta < (1+\eta)/(1+r)$, the current generation saves less for future generations, thereby lowering their consumption.

If one interprets $\Gamma(t)$ as the oil wealth, that is, the discounted government revenue derived from oil reserves, the analysis has profound fiscal policy and intergenerational welfare implications. Depending on the value of β, the government will seek intergenerational equity or will favor the current or future generations. Current government policies (deficits or surpluses) are indications of the weight the government gives to the current generation as against future generations.

For plausible values of β (i.e., almost or exceeding one) current generations should generate fiscal surpluses derived from oil resources and accumulate financial assets that would replace the oil wealth after the depletion of oil reserves. The return on these financial assets would later on help finance the fiscal deficits run by future generations.

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IV. PROSPECTS FOR SUSTAINABLE GROWTH AND ECONOMIC DEVELOPMENT IN GABON[39]

A. Introduction

50.   The Gabonese economy has been centered around its production of oil since the oil crises of the early 1970s. As oil production is now expected to fall by over 50 percent in the coming five years, one of the main challenges for Gabon concerns the development of a more diversified economy. The short- to medium-term consequences of the declining oil sector are to a large extent related to an increasingly tight domestic and external financing situation, as illustrated by the following indicators:

•   Oil tax revenue constituted nearly 60 percent of total fiscal revenue on average between 1999 and 2001.

•   Oil exports made up close to 80 percent of total exports during the same period.

•   The overall balance of payments of the oil sector showed a surplus of around 20 percent of total GDP on average in 1999–2001, effectively financing a large savings-investment deficit in the non-oil sector, in addition to substantial repayments of government external debt.

51.   While the oil sector diminishes as a source of financing, the financing needs in Gabon continues to be high. Social and physical infrastructure are in need of significant improvement, and the public external debt service—claiming over 40 percent of government revenue on average in 2000-01—will continue to be extremely high in the absence of a debt rescheduling.

52.   On a longer-term perspective, the development of the non-oil sector is essential for economic development and poverty reduction. In 2001, the oil sector accounted for approximately two-fifths of total GDP. Furthermore, regardless of the prospects for oil in Gabon, poverty reducing growth would need to be derived from the non-oil sector, given the limited effect the oil industry has on employment and economic activity of the general population in Gabon.

53.   In this section, an attempt will be made to simulate the development of the non-oil economy under various assumptions with the help of a simple Computable General Equilibrium (CGE) model, tailored to capture the most important specificities of the Gabonese economy. Particular attention will be paid to the roles of (i) fiscal consolidation; (ii) private investment; (iii) external financing; and (iv) Gabon's sensitivity to fluctuations in oil prices. The purpose is, in particular, to show that the availability of financing for

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[39] Prepared by Ludvig Söderling.

investment—especially private—is a condition for non-oil growth. The potential role for an income stabilization fund will also be discussed.

B. Resource Dependence and Lack of Diversification—Stylized Facts

54.   It is often perceived that a rich endowment in natural resources presents a curse rather than a blessing as it can lead to lower growth (Sachs and Warner, 1995 and 2001; Gylfason, 2001 and 2002; and Auty, 2001) and a higher degree of inequality (Leamer and others, 1999), although this is not uncontroversial (Deaton, 1999; and Stijns, 2001). The potential consequences of resource abundance and lack of diversification in general are summarized below.

55.   Large inflows of export earnings from the natural resource sector may result in a real appreciation of the exchange rate, resulting in a contraction (or lack of development) of the non-resource economy and deindustrialization through the Dutch disease effect. The public sector—or state owned enterprises—often accounts for a dominant part of non-resource activity, in particular if a large proportion of resource rents accrue to the government. Agriculture declines, and migration towards the urban areas ensues. As both industry and agriculture are stifled, consumer goods are typically mostly imported. Dutch disease is not easily quantified and in fact the real effective exchange rate (REER) does not provide clear indications of the phenomenon in Gabon. REER actually depreciated slightly in the 1980s and 1990s; the devaluation of the CFA franc in 1994 brought about a major REER depreciation which to a large extent has been maintained since then, despite some erosion due to higher prices of imports and higher factor costs. Nevertheless, Dutch disease-like crowding out of local industry and agriculture is evidenced by the small shares in non-oil GDP (Table IV.2). Furthermore, the urbanization ratio of around 70 percent is an indication of the agricultural sector being abandoned in the hope to benefit from oil rents being distributed mainly in the larger cities.

56.   The significant rents associated with resource exploitation may lead to corruption. The negative effects of corruption on growth are extensively documented (see, e.g., Tanzi (1998) for a survey of the literature). Corruption may have a negative impact on foreign direct investment by adding uncertainty (Wei, 1997), distract efforts away from productive activities (Krueger, 1974) or investment (Murphy, Shleifer, and Vishny, 1993), result in waste of human capital as people in a position to extract rents typically are relatively well educated (Berthélemy and Dessus, 2000), or provide wrong incentives for entrepreneurs (Baumol, 1990). Empirical evidence shows that corruption is particularly prevalent in oil and mineral rich countries (Leite and Weidermann, 1999). Corruption is also difficult to quantify or even define. Organizations such as Transparency International (TI) calculate indices

measuring the perceived degree of corruption in a number of countries; unfortunately not including Gabon. Nevertheless, corruption is an undeniable problem in Gabon.[40]

57. Debt overhang may arise. Future export revenues from resource exports are often implicitly or explicitly collateralized to obtain external loans (Manzano and Rigobon, 2001). A subsequent fall in the terms of trade leaves the borrower with an unsustainable debt burden, hampering productive investment in the future. Gabon's oil resources certainly helped the country gain access to foreign borrowing during the 1970s and 1980s. As oil prices fell in the mid-1980s, Gabon was no longer able to service its debt and has had to resort to repeated Paris Club reschedulings since the late 1980s.

58. Productivity of capital is often very low. Related to the issues of corruption and debt, a sudden increase in capital inflows—often perceived as permanent—may induce excessive or otherwise inefficient public investment projects either through political pressures to spend rather than to save, bribery involved in obtaining lucrative government investment contracts, or nationalistic pride in a particular project (so-called white elephants). Furthermore, abundance of rents tends to weaken market discipline and efficient use of resources (Auty, 2001). Government investment contracts with the private sector tend to be over priced—or even fictitious, as the 1999 audit of Gabon's stock of accounts payable showed.[41] Tanzi and Davoodi (1997) showed empirically that corruption led to higher public investment of lower quality. The effect of wasteful—and sometimes exaggerated—investment leads to low total factor productivity (TFP) and the buildup of foreign debt. Gabon's debt was to a large extent accumulated during the 1970s and 1980s as a result of wasteful spending on investment projects—the most prominent of which was the Transgabonais railway (Yates, 1996; and Barro Chambrier, 1990). As Table IV.1 shows, capital productivity has been very low in Gabon throughout the 1980s and 1990s. Simple growth accounting—assuming constant returns to scale in private and public capital and labor, a private capital coefficient of 0.3, a public capital coefficient of 0.1, and labor growth equal to the growth of the population— leads us to conclude that TFP growth was extremely low, or even negative, in particular prior to the devaluation in 1994.[42]

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[40] A small survey (Neumann, 1994) carried out in 1994 by an association of German exporters gave Gabon a 3.13 rating on a TI standardized scale from 0 (most corrupt) to 10 (least corrupt), roughly comparable to Kenya, Cameroon, Senegal, and Côte d'Ivoire but better than in Nigeria and the Democratic Republic of the Congo.

[41] As much as 18 percent of government liabilities were cancelled as they corresponded to double, triple or fictitious invoicing; another 29 percent was cancelled, corresponding to debt paid but still recorded as due, or offset against large tax arrears due by suppliers.

[42] The coefficients used to calculate the contribution of capital accumulation and labor growth correspond to those used in the model, see below.

Table IV.1. Gabon: Growth Accounting, 1980–2001

(In percentage points, annual average)

	1980–93	1994–2001
Contribution to non-oil GDP growth—total	0.5	2.7
Private capital accumulation	2.0	0.9
Public capital accumulation	1.5	0.7
Growth in labor	1.5	1.5
Total factor productivity	-4.5	-0.4

Source: Staff estimates.

59. Resource abundance is often associated with neglect of education and health and poor development of human capital. The quality of human capital can be negatively affected by resource abundance through at least three channels; (i) a low degree of diversification provides few opportunities for learning by doing (see below); (ii) easy access to rents may lead authorities to underrate the importance of education for the future (Gylfason, 2001); and (iii) through the corruption channel, high public investment diverts resources away from social spending (Tanzi and Davoodi, 1997). Although public spending on education and health has tended to be rather high in Gabon, results have been disappointing. While the enrollment rate is well over 100 percent for primary school, and just over 50 percent for secondary school, completion rates for both types of schooling are below 50 percent. Furthermore, despite Gabon's relatively high income per capita, health indicators such as life expectancy, infant and child mortality are not significantly better than the average for Sub Saharan Africa.

60. Financial systems tend to be poorly developed, which hampers growth essentially through the failure to (i) pool risks; (ii) efficiently allocate resources; (iii) mobilize savings; and (iv) facilitate the exchange of goods and services (Khan and Senhadji, 2000).[43] As natural resource endowments take on a high importance—relative to physical capital—for national wealth, the need for financial intermediation decreases (Gylfason, 2002). Moreover,

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[43] It deserves to be mentioned that some oil-rich countries, such as Kuwait, Qatar, and Saudi Arabia, have relatively well-developed financial systems, as measured by private credit as a percentage of GDP.

in the case of Gabon, the oil sector is essentially an enclave with very little interaction with the rest of the economy in terms of use of domestic factor and intermediate inputs. Capital and financial services are to a large extent imported from abroad. In addition, saving in the form of foreign bank accounts is not uncommon, diminishing further the need for domestic financial intermediation. Gabon's financial system is extremely shallow in comparison with countries of similar income per capita. In 1999, credit to the private sector as a percentage of GDP was only 10.7 percent (17.2 percent of non-oil GDP), compared to 27 percent for Kenya, 57.5 percent for Mauritius and 69.3 percent in South Africa.

61.   Moreover, there is evidence that diversification in itself has a positive impact on growth. A diversified economy provides more opportunities for positive externalities in the form of learning by doing (see, e.g., Lucas (1993)). The level of diversification may also influence the behavior of investors. A low level of diversification precludes risk-averse agents from diversifying their investments (Acemoglu and Zilibotti, 1997). As a result, they invest in low-risk projects that are also assumed to have a low level of productivity.[44] Empirical evidence of the beneficial impact of diversification on growth can be found in Feenstra and others (1999), and Berthélemy and Söderling (2001).

C. Brief Overview of the Non-Oil Economy in Gabon, 1989–2001

62.   The oil sector, as a share of total GDP has hovered around 30-35 percent—measured in constant 1991 prices—during the last decade (Figure IV.1.). As oil prices and exchange rates fluctuate widely, the share of oil in total GDP is also shown in current prices. The share of oil in total GDP is significantly higher in the post devaluation period if measured in current prices, as oil prices are set in U.S. dollars. For example the ratio was around 43 percent in 2001 if measured at current prices, compared to 26 percent in 1991 prices.

63.   As is evident from Figure IV.2, showing a diversification index, no real progress has been made in terms of diversification since the end of the 1980s. The index—measuring the degree of diversification of production within the non-oil sector—is defined as the square of total production, divided by the sum of squares of production by all sectors. Theoretically, the index goes from one in the extreme case when the entire production is concentrated in one sector to infinity if when production are evenly spread over an infinite number of sectors. The diversification index fell slightly mainly due to the increasing weight of the services and government services sectors in conjunction with a continued low share of all industrial sectors.

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[44] Furthermore, indivisibilities on the micro level prevent capital from being spread too thinly. Consequently, poor countries are limited in the number of investment projects they can open. As income rises, investment can be spread over an increasing number of projects. In this setting diversification becomes endogenous and is the factor that drives growth.

64.   In concurrence with the expectations from an economy suffering from Dutch disease, agriculture and fishery represent only a relatively small part of the economy despite Gabon's significant endowment in arable land and waters rich in fish (Table IV.2). Prior to the oil crises of the 1970s—which transformed Gabon into an oil dependent economy—Gabon produced significant quantities of coffee and cocoa. Furthermore, industry (wood processing, agro-industry, and other industries) accounts for only about 10 percent of non-oil GDP. Government services make up about 20 percent of non-oil GDP, that is, roughly the size of agriculture, fishery, and industry combined. The bulk of the non-oil economy consists of services (commerce, transportation, tourism, and telecommunications). This is also what has driven growth, in addition to wood processing and other industries in the most recent years. The construction sector depends heavily on public investment projects and has, therefore, been somewhat erratic, following the ups and downs of government finances.

Figure IV.1. Gabon: Composition of Total GDP in 1991 Market Prices, 1989–2001

Oil GDP (left scale) Non-oil GDP (left scale)

Oil/total GDP - 1991 prices (right scale) Oil/total GDP - current prices (right scale)
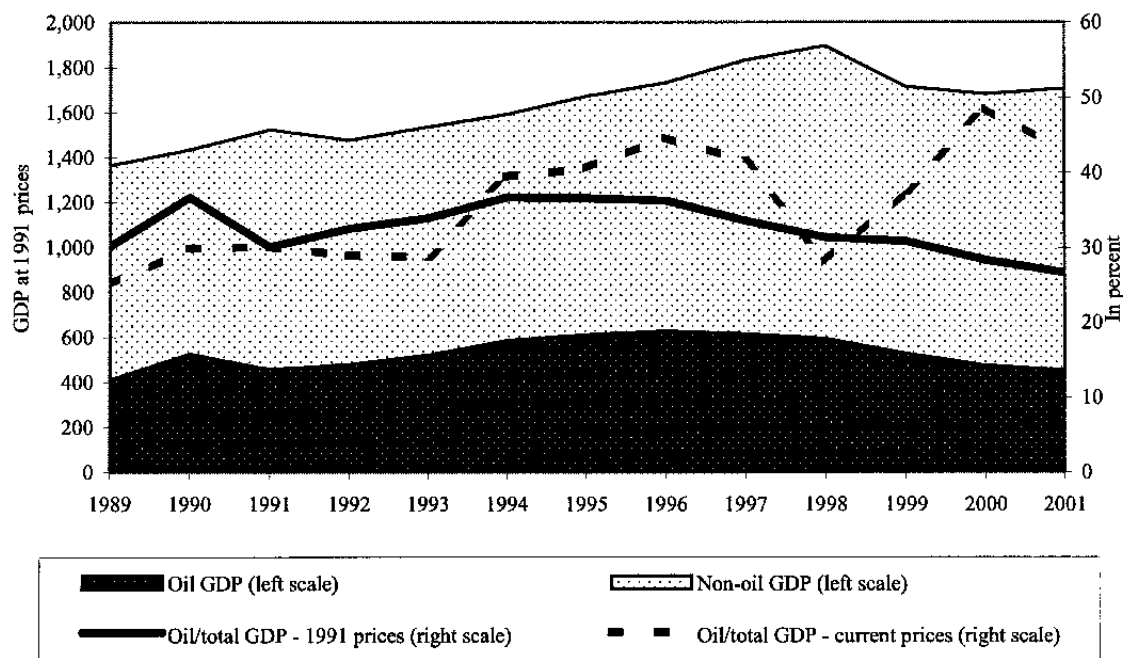
Figure IV.2. Gabon: Non-Oil Diversification Index, 1989–2001
(Index, 1989=100)
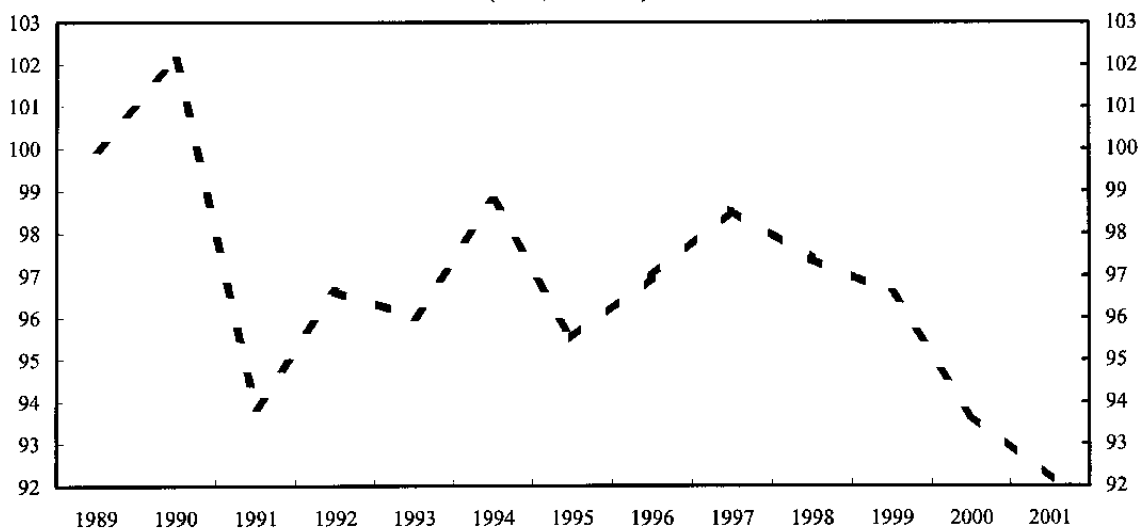
Source: Gabonese authorities; and IMF staff estimates.

Table IV.2. Gabon: Composition and Growth of Non-Oil GDP, 1990–2001

	1990	1994	1999	2000	2001
	(In percent)				
Share of total GDP	100.0	100.0	100.0	100.0	100.0
Agriculture, fishing	10.8	10.7	9.4	9.6	9.7
Forestry exploitation	2.7	3.0	3.5	3.8	3.8
Mining	6.0	3.1	3.6	3.4	3.1
Agro-industry	3.8	4.0	3.8	3.7	3.8
Wood industry	0.6	0.4	1.3	1.0	1.3
Other industries	4.8	4.5	5.4	5.8	5.8
Electricity and water	3.5	3.6	3.5	3.5	3.5
Construction, public works	6.2	6.6	6.4	5.1	4.6
Transport	10.6	10.7	9.2	9.5	9.6
Services	17.9	17.7	21.2	21.8	22.3
Commerce	13.5	14.3	10.5	10.7	11.0
Financial services	1.3	1.6	1.3	1.4	1.4
Government services	18.3	19.9	20.8	20.7	20.2
	(In percentage points)				
Contributions to real growth	-4.3	0.5	-7.9	0.5	2.7
Agriculture, fishing	-0.3	0.0	0.1	0.3	0.3
Forestry exploitation	0.2	0.2	0.5	0.3	0.1
Mining	-0.4	0.3	-0.2	-0.2	-0.2
Agro-industry	0.2	-0.2	-0.2	0.0	0.2
Wood industry	-0.1	-0.3	0.3	-0.3	0.3
Other industries	0.1	0.1	-0.4	0.4	0.1
Electricity and water	-0.2	0.3	0.2	0.0	0.1
Construction, public works	-0.7	0.1	-3.7	-1.2	-0.4
Transport	-0.2	-0.3	-1.5	0.3	0.4
Services	-0.8	-0.5	-0.8	0.7	1.1
Commerce	-1.6	-0.5	-2.8	0.3	0.6
Financial services	0.2	0.5	-0.3	0.0	0.1
Government services	-0.5	0.9	1.0	0.1	0.1

Sources: Gabonese authorities; and staff estimates.

D. Description of the Model

65.   The model used for the simulations of the various scenarios is a simple static[45]
general equilibrium model, inspired by the 1-2-3 Model developed by Devarajan and others
(1994). The analysis that follows focuses on the non-oil sector, while the impact from the oil
sector is considered as exogenous. In this respect, the oil sector is treated as an enclave with
the only influence on the rest of the economy deriving from two sources: (i) oil tax revenues
paid to the government by oil companies; and (ii) provision of foreign exchange. All
equations, variables and parameters are presented in Annex II.

66.   Total value added is determined by a standard Cobb-Douglas production function,
with constant returns to scale in the two production factors capital and labor:

$$GDP = A * K^a L^{(1-a)}, \quad 0 < a < 1, \tag{1}$$

where K, L and A represent the stock of private capital, labor, and total factor productivity
(TFP), respectively. Total factor productivity is determined as

$$A = TFP * (G/K)^b, \quad 0 < b < 1, \tag{2}$$

where TFP is a function of variables such as the quality of human capital, the pervasiveness
of corruption, the quality of institutions, openness to trade, absence of distortions etc. G/K
represents the availability of public capital relative to private capital. The public capital is the
stock of all physical capital paid for by the government, such as roads, sewage systems,
telephone lines and other public physical infrastructure. It is assumed that rapid private
economic development may have a negative impact on total factor productivity through
effects of congestion, unless it is accompanied by a minimum level of public investments
(Latreille and Varoudakis, 1996).

67.   Combining equations (1) and (2) renders:

$$GDP = TFP * K^\alpha L^{(1-\alpha-\beta)} G^\beta, \quad \alpha = a - b \text{ and } \beta = b. \tag{3}$$

In other words, by internalizing the effect of the relative availability of public capital, we
obtain a production function with constant returns to scale in three production factors—now
including public capital. Equation (3) shows the optimal allocation of investment between
public and private capital. The marginal productivities of private and public capital are
$\alpha * GDP/K$ and $\beta * GDP/G$, respectively. When private capital is relatively scarce, savings are
most productively channeled to finance private investment and vice versa. In the present case,

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[45] Strictly speaking, the model would be considered as sequentially dynamic, as stocks carry
over from one year to another.

the marginal productivity of private capital is equal to that of public capital when G/K is equal to β/α.

68. As abstraction is made from intermediate inputs, total production equals non-oil GDP. Firms are assumed to produce one domestic good and one good for export, according to a constant elasticity of transformation (CET) function of relative (tradable/nontradable) prices. On the demand side (either for consumption or investment), consumers choose between a domestic and an imported good, which are imperfectly substitutable following a constant elasticity of substitution (CES, or Armington) function (see Annex II).

69. Private non-oil savings are assumed to be a constant share of private non-oil income:

$$Sp=s*Y. \tag{4}$$

This savings function has the disadvantage of not taking into account incentives to save provided by an interest rate. Moreover, as the model is static, it does not take into account agents' potential desire for inter temporal consumption smoothing. The purpose is to keep the model as simple as possible, and the above savings function is likely to be sufficiently close to reality in the context of poorly developed financial systems and in the presence of credit constraints. Government savings is the difference between revenue and current expenditures.

70. The non-oil economy wide savings—investment balance can be described as:

$$Sg+Sp=Ig\_nominal+Ip\_nominal+CA+Oil\ tax\ revenue, \tag{5}$$

or expressed differently:

$$Ip\_nominal = Sp + (Sg - Ig\_nominal - Oil\ tax\ revenue) - CA, \tag{5b}$$

where Sg and Sp are total savings of the government and the non-oil private sector respectively, $Ig\_nominal$ and $Ip\_nominal$ are government and private investment respectively, and CA is the current account balance of the non-oil sector (all in nominal terms). Note that this specification holds by virtue of the enclave nature of the oil sector, which is assumed to interact with the non-oil sector only through tax payments. Given this specification of savings, private investment is essentially determined by the level of production,[46] the government's non-oil overall balance (represented by the term in parenthesis) and the non-oil current account.

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[46] Income is closely related to production (value added). It is the sum of GDP, government transfers, net factor income and net foreign private remittances in nominal terms, see Annex II.

71.   The capital stock is a function of accumulated investments and a depreciation rate. For simplicity, the labor market is passive in the model as nominal wages are assumed to adjust fully to gains in total factor productivity. No labor rigidities are taken into account, and it is assumed that there is an excess labor supply. As a result, the capital-labor ratio is fixed and the unit labor cost remains constant in real terms

72.   In the fiscal sector, oil tax revenue is considered exogenous, while non-oil tax revenue is determined endogenously by the level of imports, exports, consumption of domestic goods and private income. Government consumption and transfers, as well as domestic and external financing are exogenous (with the exception of additional domestic financing under certain scenarios, see below). Public investment balances the difference between government savings and available domestic and external financing resources. As investment projects tend to span over several years, it would be unrealistic to allow public investment to go below a certain level. Moreover, too low a level of public investment would be politically unfeasible and incompatible with poverty reduction.[47] To take these considerations into account, an exogenous minimum level of investment is imposed, with the potential result that the government may need to raise additional domestic financing if savings and available financing resources do not cover the minimum investment level. This additional domestic financing could, for instance, take the form of government securities,[48] or it may simply consist of running up domestic arrears. In either case, the additional financing results in a decrease in resources available for the private sector, thereby crowding out private investment.

73.   The overall balance of payments of the non-oil sector is determined exogenously by the overall balance of the oil sector and any exceptional financing, such as debt relief—including a potential rescheduling of Paris Club debt, and variation in net foreign assets. The capital account and the flows of factor income and foreign remittances of the non-oil sector are assumed exogenous. As a consequence, the non-oil trade balance adjusts—in response to changes in the real effective exchange rate (REER)—to equilibrate the balance of payments. The nominal exchange rate is set as the numeraire.

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[47] Furthermore, up to a certain point, public and private investment are likely complementary rather than competing for financing resources.

[48] This type of financing—until present, nonexistent in Gabon—is being discussed in the context of the gradual elimination of the statutory advances (i.e., government financing from the central bank) within the CEMAC zone.

E. Calibration, Assumptions, and Results of the Baseline Scenario

74.   The model is calibrated using data for 2000. The CET and CES elasticities—Ω and σ respectively—are set at 0.6 and 0.9, respectively.[49] The sensitivity analysis displayed in Annex I shows that the model is not very sensitive to the choice of these parameters. The private and public capital coefficients in the production function are set to 0.3 and 0.1, respectively (see below).

75.   The assumptions for the exogenous variables are made in a manner to focus the analysis on capital accumulation of the private sector with public capital as a complementary production factor. This is in no way intended to diminish the importance of total factor productivity (TFP) growth.[50] However, the focus will be on savings and investment, for the following reasons: (i) Gabon faces a severe liquidity constraint in the short to medium term, as the declining oil production inevitably will put pressure on the fiscal balance, while the declining surplus on the oil current account will necessitate alternative sources for investment financing; and (ii) finding alternative engines for growth to replace oil implies significant structural change which is costly and requires substantial investment.[51] Although in the case

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[49] Akitoby (1998) used a CET elasticity of 0.95 and a CES elasticity ranging from 0.75 to 0.9 in his application of a CGE model for Benin. Devarajan and others (1994) set both elasticities to 0.6 in a model applied to Sri Lanka. Go (1994) tested and used a CET elasticity of 0.6 and a CES elasticity of 0.5 in an application on the Philippines.

[50] In fact, TFP has a doubly positive effect on growth. Besides the direct effect on production, it can be assumed to influence capital accumulation by (i) enhancing incentives to invest; and (ii) by securing higher domestic savings, as income rises with the level of TFP and production. Nevertheless, capital accumulation has often been identified as the driving factor for long term growth, although this point of view is not unchallenged. Sala-i-Martin (1997) argued that investment was one of the few variables that was consistently found to have a positive and significant impact on growth. See also De Long and Summers (1991) for the importance of investment for growth. The lack of investment is often quoted as one of the major problems in Africa (Fischer, Hernández-Catá, and Khan, 1998; Hernández-Catá, 2000). See also Young, 1995 on the respective roles of capital accumulation and productivity for the East Asian countries. In contrast, Hsieh (1998) claimed that Young's and others' conclusions were inconsistent with observed movements in factor prices. Devarajan, Easterly, and Pack (2001) found no relationship between slow growth and low investment rates in Africa. Easterly and Levine (2001) found empirical evidence that productivity growth, and not factor accumulation, was the main variable explaining the difference in growth across countries.

of Gabon, the *volume* (rather than the *quality*) of investment can hardly be blamed for the poor growth performance in the past, but given the difficult financial situation, it could easily become the key constraint in the future.

76.   Total factor productivity (TFP) is assumed to grow at a constant rate of 1.5 percent per year.[52] The initial (1980) capital stock was calculated using the Harberger method (Harberger, 1978). According to this method, under constant returns to scale the capital stock in year t-1 can be approximated by the investment in year t divided by the sum of the long-term growth rate of value added and the rate of depreciation.[53] The 2000 public capital stock was estimated from public investment series, and based on the assumption that the 1980 stock was zero.[54]

77.   Current debt obligations of the government are known and in the Baseline scenario Gabon is assumed to obtain additional public external financing corresponding largely to the financing gap in the Fund staff's medium-term macroeconomic framework of March 2002.[55] Net external financing in the four medium-term scenarios below includes government investments in the Fund for Future Generations (FFG) corresponding to 10 percent of oil revenues.[56] As these funds are assumed to be placed abroad, the FFG amounts to a capital

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[51] In the same vein, Amin Gutiérrez de Piñeres and Ferrantino (1997) found that diversification (and, hence, structural change) may actually be associated with negative growth in the short term, as structural change is a costly process. This further justifies the focus on savings and investment.

[52] This corresponds roughly to the rate of growth in TFP in East Asian countries as well as in well performing African economies in the 1970s and 1980s (Berthélemy and Söderling, 2001).

[53] Strictly speaking, this approximation is only valid in the absence of total factor productivity (TFP) growth, but with reasonably long investment series (and, weak TFP growth as in the case of Gabon), this tends not to matter much. For example, halving the assumed 1980 capital stock reduces the estimate of the 2000 level by only 10 percent.

[54] Again the impact of the assumed level of the 1980 stock on the estimated 2000 level is minor.

[55] The model incorporates specific terms for new external financing, including for refinancing of existing debt service comparable to those obtained under the most recent Paris Club reschedulings.

[56] FFG is an income stabilization fund envisaged to smooth the fall in income induced by the declining oil production (see further below).

outflow. Domestic financing takes into account the phasing out of statutory advances (government financing from the central bank) within the CEMAC.

78.   World prices of exports and imports are assumed constant. Oil revenue is based on a decline in oil production from 13.6 million tons in 2000 to 6.1 million tons in 2007—corresponding to the most recent projections by the Gabonese authorities. Projected oil prices and exchange rates correspond to the January 2002 WEO assumptions. The assumed improvement in the efficiency in non-oil tax collection is illustrated in Table. Government current expenditure is assumed to decrease by 7 percent annually in real terms between 2001 and 2007. Minimum public investment is set at the level of 2000 in real terms.

79.   Table IV.3 shows the simulation results for key variables under the Baseline scenario. The assumed slow but steady increase in net foreign assets corresponds to the Fund staff's latest (March 2002) medium term macroeconomic framework. Known outcomes of exogenous variables for 2001 have been taken into account in the simulation. For example, net private capital flows were sharply negative in 2000 and 2001, to a large extent due to extraordinary events, such as significant payments of domestic arrears and debt by the government, which allowed government suppliers to pay foreign debt obligations and also translated into a certain amount of capital flight. This explains the significant volatility in the balance of payment and the REER in 2000–02.[57] For 2002–07, the net private capital flows are assumed to increase gradually—by and large following the assumptions in the medium–term macroeconomic framework of the IMF.

80.   The path of the current account balance is nearly the mirror image of oil fiscal revenues, as the non-oil current account compensates for the fall in oil production and exports. In order for this to happen, the real effective exchange rate (REER) must be depreciated sharply, which would thereby shift production incentives towards export and consumption towards domestic goods. Non-oil exports grow on average 6.9 percent per year in real terms, somewhat faster than GDP.

81.   GDP grows steadily throughout the forecast period at an average rate of 5.3 percent. The Baseline scenario incorporates the assumption that an increasing part of private investment is financed by private capital flows, including foreign direct investment (FDI), mitigating the required improvement in the non-oil current account. On balance, private investment remains stable around 22 percent of non-oil GDP. Public investment remains above the minimum level (corresponding to the level observed in 2000) throughout the simulation period but declines somewhat in the later years, as oil revenues decline. The

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[57] The REER is the equilibrating variable in the model. As the model is static, any shock is fully taken into account in one year, which may result in significant variation in the REER on a year-to-year basis. It is, however, the trend which is more relevant to analyze.

increasingly tighter fiscal situation is assumed to be mitigated by a significant reduction in current expenditure in conjunction with an increased efficiency in tax collection.

Table IV.3. Gabon: Overview of Key Variables and Parameters Under the Baseline Scenario, 2000–07

(In percent, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007
Real non-oil GDP (index, 2000=100)	100.0	104.2	110.2	115.5	121.5	128.3	135.7	143.7
Real non-oil GDP growth		4.2	5.8	4.9	5.2	5.5	5.8	5.9
Private investment (percent of non-oil GDP)	17.7	21.9	22.1	21.0	21.3	22.0	22.6	21.8
Public investment (percent of non-oil GDP)	6.6	9.7	7.6	10.7	9.0	7.4	6.9	8.7
Private savings rate	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
TFP growth		0.0	1.5	1.5	1.5	1.5	1.5	1.5
REER 1/	100.0	88.9	102.2	107.0	117.8	127.1	132.6	134.9
Change in REER (+ = depreciation)		-11.1	15.0	4.6	10.2	7.9	4.3	1.7
Oil tax revenue/non-oil GDP	52.7	45.1	27.8	23.7	20.0	15.8	12.5	10.8
Non-oil tax revenue/non-oil GDP	25.4	26.2	28.0	29.4	29.9	30.6	31.2	31.7
Apparent tax rate - import taxes 2/ 3/	16.6	16.6	18.0	18.8	19.3	19.5	19.6	19.7
Apparent tax rate - export taxes 2/	6.3	6.3	6.8	7.1	7.3	7.3	7.4	7.4
Apparent tax rate - indirect taxes 2/	8.9	8.9	10.3	11.2	12.0	12.8	13.5	13.9
Apparent tax rate - direct taxes 2/	5.1	5.1	5.9	6.4	6.9	7.4	7.8	8.0
Non-oil current account/non-oil GDP	-25.6	-34.9	-22.8	-21.2	-17.7	-14.0	-10.6	-8.5
Real non-oil exports (index, 2000=100)	100.0	98.9	110.4	117.5	128.4	139.5	150.0	159.8
Real non-oil imports (index, 2000=100)	100.0	118.0	107.9	108.0	102.4	99.5	100.5	104.4
Net external government financing/non-oil GDP	-3.1	-10.9	-7.0	-3.2	-5.8	-6.6	-7.7	-7.6
Net external private financing/non-oil GDP	-17.0	-9.9	1.8	4.1	8.5	8.4	9.1	9.2
Change in net foreign assets/non-oil GDP (- = increase)	-7.4	6.9	-3.4	-1.7	-2.9	-2.3	-1.7	-1.2

Source: Staff projections.

1/ REER is defined as the local currency market price of imports (including import taxes) divided by the price of the domestic good.

2/ The apparent tax rate is defined as tax collected divided by the theoretical tax base.

3/ Import taxes do not include VAT on imports, which is treated as indirect tax.

F. Alternative Scenarios: Vulnerability to Negative External Shocks

82.   In what follows, three different scenarios shall be analyzed and compared to the baseline scenario described above: (i) a scenario where oil prices are 10 percent lower than in the baseline scenario for all years (henceforth referred to as the Oil Shock scenario); (ii) a scenario assuming no debt rescheduling (No Debt Relief scenario); and (iii) a scenario with the same shortfall in foreign financing as the preceding scenario, but in the form of less private capital flows (Less FDI scenario).[58]

83.   Figure IV.3 shows the outcome of GDP, private investment, the real effective exchange rate (defined as the price of imports divided by the price of the domestic good), and the additional domestic financing requirement in the four scenarios. The No Debt Relief scenario highlights the difficult fiscal situation faced by Gabon. To maintain a minimum level of public investment in the absence of debt relief, there is a substantial need for additional domestic financing, although limited to the period of the foregone rescheduling.[59] Moreover, the vulnerability to fluctuations in the price of oil is illustrated by the Oil Shock scenario. Under this scenario, the need for additional domestic financing is maintained throughout the simulation period as the assumed fiscal consolidation effort is not sufficient to compensate for the fall in oil tax revenues. Under both scenarios, the domestic borrowing (or accumulation of domestic arrears) by the government results in a significant drop in private investment compared to the Baseline scenario, and an adverse impact on growth. Table IV.4 shows that growth under the No Debt Relief scenario is on average about 0.8 percentage points lower than under the baseline scenario in the medium term, while the corresponding figure for the Oil Shock scenario is about 1.3 percentage points.

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[58] Net financing from a rescheduling is first positive under the consolidation period and then becomes negative as the country begins repaying principal (in addition to interest) on the consolidated amount. The equivalent flow of FDI is not entirely realistic. Nevertheless, this profile is kept for the sake of comparability between the two scenarios.

[59] The consolidation period of a potential debt rescheduling is assumed to be mid-2002 to mid-2005.

Figure IV.3. Gabon: Scenario Overview, 2000–07

Non-Oil GDP
(Index, 2000=100)

Baseline
No Relief
Oil Shock
Less FDI

Private Investment/Non-Oil GDP
(percent)

Baseline
No Relief
Oil Shock
Less FDI

Additional Domestic Financing/Non-Oil GDP (percent)

Baseline
No
Relief
Oil
Shock
Less FDI

Real Effective Exchange Rate
(Index, 2000=100)

Baseline
No Relief
Oil Shock
Less FDI
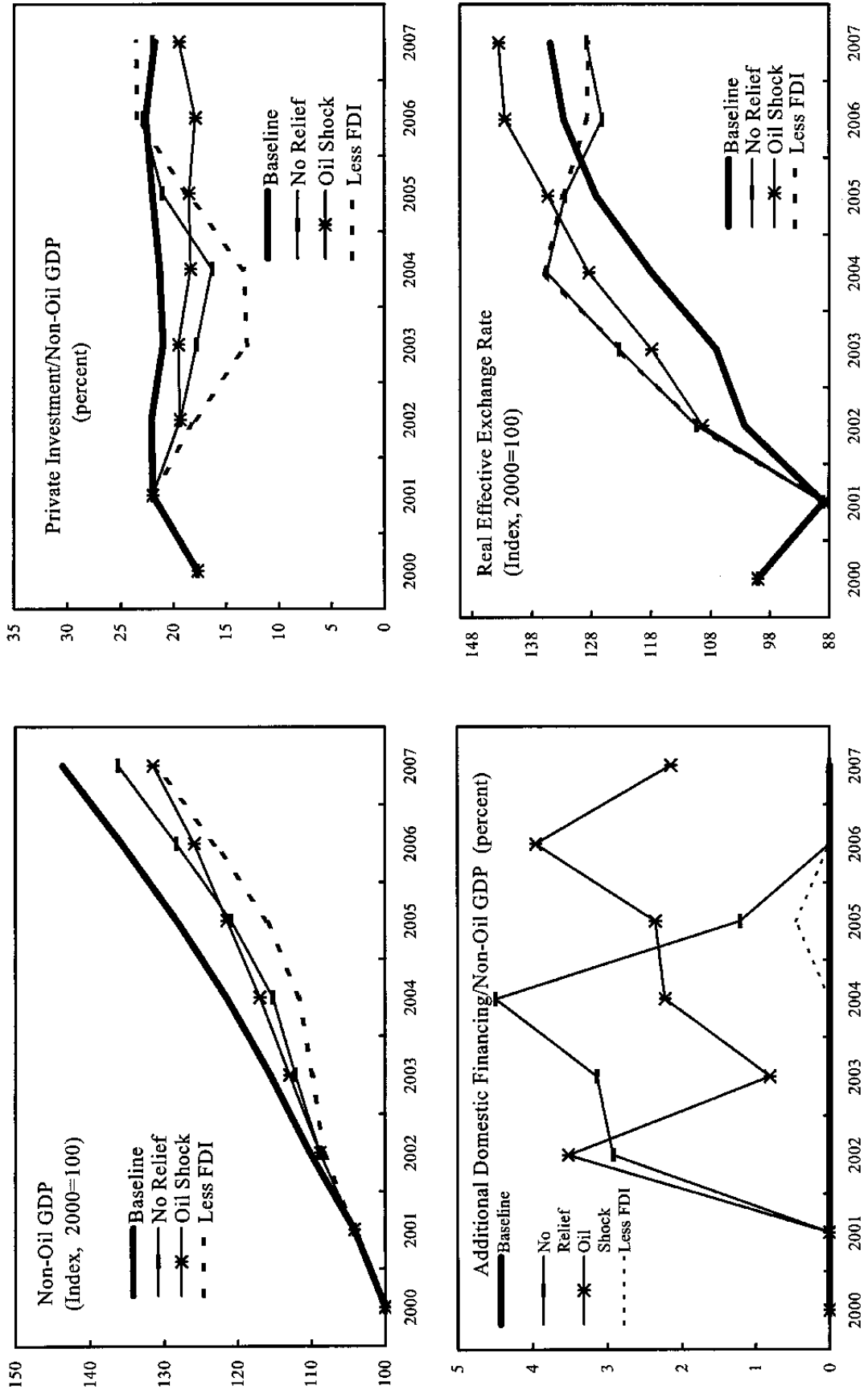
Source: IMF staff projections.

84.   Under the Less FDI scenario, growth is even lower than under the No Debt Relief scenario, although the amounts of foregone foreign financing are equal. This is because private capital finances private investment directly, whereas a rescheduling finances government investment.[60] Figure IV.3 shows clearly that private investment falls even further under the Less FDI scenario than under the No Debt Relief scenario. The stronger negative impact on growth is a result of the private to public capital ratio being below its optimal level, making private investment more productive than public investment (Table IV.4). Note that this is a result of the assumed private and public capital coefficients ($\alpha = 0.3$ and $\beta = 0.1$, respectively) in conjunction with the estimated levels of private and public capital.[61] Nevertheless, a private capital coefficient of 0.3 is relatively conservative[62] and it appears reasonable to assume that priority should be given to private investment, while maintaining a minimum level of public investment in infrastructure.[63]

85.   As oil exports fall, the non-oil current account needs to improve, which requires a significant REER depreciation in all scenarios. The cumulative REER depreciation in the medium term is the largest in the oil shock scenario. Under the two scenarios assuming a shortfall in foreign financing, the REER depreciates sharply during the years corresponding to the consolidation period of the foregone debt rescheduling, after which it appreciates again as the negative shock is temporary.

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[60] A fall in private capital flows may be a response to weakened business incentives for private investors. The model does not directly capture investment incentives, but failure to improve the business climate can reasonably be assumed to have a negative effect on investment, induce capital flight and reduce FDI.

[61] Changing α to 0.2, for example, would imply that the ratio was at its optimal ratio already close to the beginning of the forecast period, leaving no difference in private and public capital productivity.

[62] A private capital coefficient for the manufacturing industry in Cameroon was robustly estimated at 0.3 by Söderling (2001).

[63] Empirical evidence indicating a higher productivity of private investment relative to public investment in Africa can be found in Ghura (1997) and Ghura and Hadjimichael (1996).

Table IV.4. Gabon: Scenario Summary

(In percent, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007
Non-oil GDP growth								
Baseline		4.2	5.8	4.9	5.2	5.5	5.8	5.9
No debt relief		4.2	4.4	3.1	2.8	4.9	6.1	6.2
Oil shock		4.2	4.5	3.8	3.6	3.8	3.6	4.4
Less FDI		4.2	4.0	1.4	1.6	3.9	6.1	6.6
Private capital stock/public capital stock ratio 1/								
Baseline	1.80	1.84	1.90	1.90	1.94	2.00	2.08	2.11
No debt relief	1.80	1.84	1.90	1.95	2.00	2.09	2.13	2.12
Oil shock	1.80	1.84	1.90	1.97	2.03	2.10	2.16	2.25
Less FDI	1.80	1.84	1.87	1.84	1.84	1.91	2.03	2.10
Non-oil current account/non-oil GDP								
Baseline	-25.6	-34.9	-22.8	-21.2	-17.7	-14.0	-10.6	-8.5
No debt relief	-25.6	-34.9	-19.4	-14.4	-10.5	-11.0	-11.9	-9.9
Oil shock	-25.6	-34.9	-20.2	-17.4	-14.6	-12.1	-8.4	-6.8
Less FDI	-25.6	-34.9	-19.4	-14.7	-11.0	-11.5	-12.5	-10.2
Primary balance/non-oil GDP								
Baseline	39.4	30.6	20.5	17.2	18.5	19.1	19.1	17.9
No debt relief	39.4	30.6	23.0	23.6	22.8	21.2	16.9	15.6
Oil shock	39.4	30.6	17.3	17.1	16.8	17.4	15.3	16.7
Less FDI	39.4	30.6	21.9	19.7	21.9	21.1	20.7	19.0
Public investment/non-oil GDP								
Baseline	6.6	9.7	7.6	10.7	9.0	7.4	6.9	8.7
No debt relief	6.6	9.7	6.1	5.9	5.7	5.4	8.8	10.6
Oil shock	6.6	9.7	6.0	5.8	5.6	5.4	5.2	5.0
Less FDI	6.6	9.7	7.1	9.5	6.7	5.7	5.3	7.6
REER (Index, 2000 = 100)								
Baseline	100.0	88.9	102.2	107.0	117.8	127.1	132.6	134.9
No debt relief	100.0	88.9	110.4	123.3	135.4	132.4	126.1	128.7
Oil shock	100.0	88.9	109.3	117.8	128.3	135.3	142.4	143.5
Less FDI	100.0	88.9	110.4	123.3	135.9	132.7	128.7	128.4
Change in the REER (+ = depreciation)								
Baseline		-11.1	15.0	4.6	10.2	7.9	4.3	1.7
No debt relief		-11.1	24.2	11.7	9.8	-2.2	-4.7	2.0
Oil shock		-11.1	23.0	7.8	8.9	5.4	5.3	0.7
Less FDI		-11.1	24.2	11.7	10.2	-2.3	-3.0	-0.2

Source: Staff projections.

1/ Optimal private to public capital stock ratio = 3.

G. Saving for the Future—a Longer-Term Perspective

86.   In this subsection, the potential effects of an income stabilization fund are analyzed and different modalities for the implementation of such a fund are discussed. The simulations that follow are for illustrative purposes only, and should not be regarded as forecasts, as a simple static model such as the present one is far from sufficient to capture all of the important considerations involved. The purpose of this section is to demonstrate that the decision of whether a stabilization fund makes sense is not simply a question of whether the return on public investment is higher or lower than the return on investments in the FFG. Furthermore, it will be argued that the analysis of the choice between a domestically or an externally invested FFG needs to go beyond the simple comparison of rates of return. The following discussion is not intended to be exhaustive. Some caveats are highlighted at the end of the section.

87.   Assuming that the productivity of public investment is relatively low, and that a high return can be found on certain investment vehicles, there may be a case for an income stabilization fund like the Fund for Future Generations (FFG), which would cushion the impact of the fall in oil revenue by saving a given share of oil revenues for the future. An improvement in the productivity of public investment over time could provide an additional argument for spending public resources later rather than immediately. In terms of the model used here, the marginal productivity of public capital increases with the ratio of private to public capital. Intuitively, investment in infrastructure makes more sense the more the private sector is developed and the more infrastructure is utilized by the industry.

88.   When contemplating the design of a potential savings fund such as the FFG, an important question is whether assets should be saved abroad or domestically. As indicated above, access to foreign financing will play a crucial role for investment and growth in the non-oil sector in Gabon in the medium term. Investing FFG resources in foreign securities would imply a capital outflow, the medium-term effect of which would be analogous to a foreign financing shortfall analyzed under the No Debt Relief scenario above, that is, a drop in investment and growth etc. However, the longer-term outcome may be positive if returns on foreign securities are significantly higher than domestically available securities or savings accounts. On the other hand, investment is assumed to be constrained by savings and identified capital flows. Rather than placing FFG funds abroad—albeit in relatively high return assets—channeling these resources to finance private investment may prove more beneficial if the effect on non-oil growth is taken into consideration.

89.   The simulation period is extended to 2012, in order to allow for the use of savings which are accumulated during 2002–07. Three scenarios will be examined: (i) one with a large FFG placed in foreign securities (called the External FFG scenario); (ii) the same FFG but placed domestically (Domestic FFG scenario); and a scenario without FFG (No FFG scenario). Foreign securities are assumed to render an 8 percent return, while a domestic FFG gives a low return of 1.5 percent. In the following scenarios, assumptions on the fiscal consolidation effort and the associated transfers to the FFG have purposely been exaggerated,

in order to get larger differences between scenarios.[64] Exogenous variables for the period beyond 2007 are obtained essentially by extrapolation.

90.   Figure IV.4 shows the net cumulative cash flow from the FFG to the government under the three scenarios. Under the two scenarios with an FFG, interest and dividends from the FFG is assumed to be reinvested into the fund. During 2002-07, savings are made in the fund, which are withdrawn during the following five years. In all cases, the fund is completely exhausted at end-2012. It is clear that the higher rate of return in the External FFG can make an important difference in terms of resources available towards the end of the simulation period. The cumulative (undiscounted) difference between the External FFG and the Domestic FFG exceeds CFAF 300 billion or nearly one-fifth of 2000 non-oil GDP.[65]

91.   However, determining which is the preferable arrangement is less obvious from a stand point of economic growth (Figure IV.5). Under the External FFG scenario, growth is initially slower than under the No FFG scenario as funds are placed abroad—constituting a capital outflow limiting resources available for investment. Growth is stronger during the second half of the simulation period as the accumulated assets in the FFG are used to increase public investment. Although External FFG appears less favorable than No FFG in Figure IV.5, this conclusion is sensitive to assumptions on the marginal productivity of public capital and on the return on the External FFG investments.

92.   The Domestic FFG is, however, clearly more advantageous than the other scenarios, as it provides both an immediate boost to growth and long-term benefits in terms of higher income per capita. The additional resources set aside by the FFG are channeled to the private sector, thereby raising private investment. As private investment is assumed more productive than public investment, growth is initially significantly stronger than under the No FFG scenario. Furthermore, compared to the No FFG scenario, the ratio of private to public capital grows significantly faster during the initial years, rendering public investment more productive in later years. In addition, since non-oil GDP grows faster initially under the Domestic FFG scenario, the tax base grows accordingly, thereby contributing to the consolidation of the fiscal stance while still allowing for some increase in public investment.

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[64] 30 percent of oil revenues are assumed to be saved in the FFG, made possible by an annual reduction of current government spending of 25 percent during 2001-07 in real terms. Care was taken to avoid making the FFG large to the point where the government would be forced to raise additional domestic financing, in which case the FFG might have a directly negative effect, or cancel part of the positive effect, on private investment.

[65] Transfers under the No FFG scenario is zero every year for obvious reasons.

Figure IV.4. Gabon: Accummulated Cash Flow from FFG, 2000–12
(In billions of CFA francs)
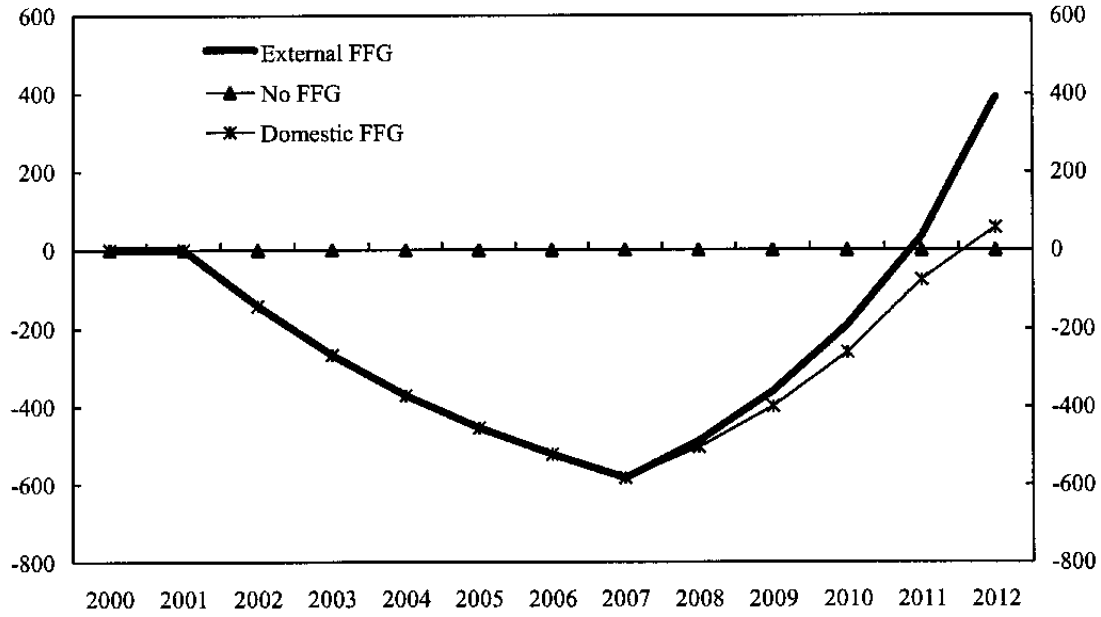
Figure: IV.5. Gabon: Non-Oil GDP, 2000–12
(Index, 2000=100)
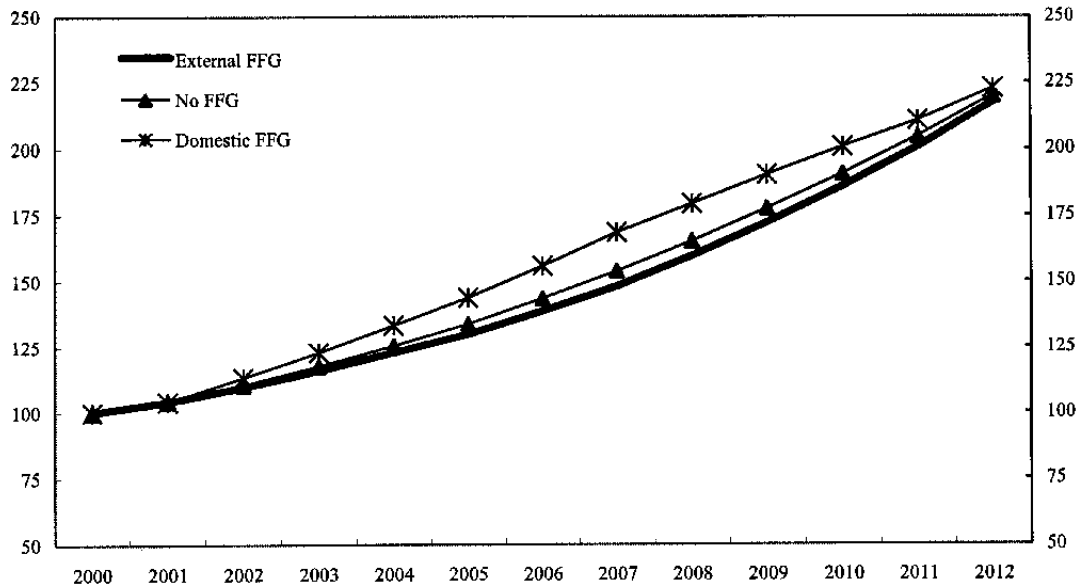
Source: IMF staff projections.

93.   Although the results from the simulations above are indicative only, it appears that a FFG invested domestically is preferable under the following conditions: (i) private investment is more productive than public investment; (ii) the private sector has limited access to foreign financing and private investment is therefore hampered by an expansionary fiscal policy, and capital outflows, including (large) public ones; and (iii) government savings invested domestically can be channeled to finance private investment.

94.   Several caveats exist, however, in particular regarding point (iii). It is not clear that government savings in the domestic banking system would in fact be recycled into new credit so as to boost private investment, given the imperfections in the financial sector in Gabon.[66] A more direct way of allowing the private sector to benefit from government savings would be to accelerate the repayment of domestic debt or arrears. This would require working out a transparent and fair system of repayment, so as to avoid unequal treatment of creditors. Another caveat, mentioned earlier, is that additional funding to the private sector would not necessarily lead to an increase in investment, in case incentives to invest are weak.

H.   Conclusions and Policy Implications

95.   The development of Gabon's non-oil economy depends critically upon the ability to mobilize financing for investment. As oil production declines, prompting structural change in the economy, the need for both private and public investment will take on increasing importance. At the same time, Gabon faces an extremely difficult financial and external situation, with a large improvement in the non-oil savings—investment balance needed to compensate for the shrinking surplus on the oil current account, in conjunction with a continued high debt service burden. This improvement in the non-oil current account necessitates a significant adjustment of the real effective exchange rate (REER).

96.   Moreover, foreign financing will take on an increasingly important role to allow, in particular the private sector, to maintain a sufficient level of investment. The simulation results show that the failure to obtain additional foreign financing for the government—for example in the form of a debt rescheduling—would have serious implications for growth and development in the medium term. A shortfall in private capital inflows (such as foreign direct investment) would have an even stronger negative effect on growth, as private investment can reasonably be assumed to have a stronger impact on output than public investment.

97.   It is evident that Gabon is vulnerable to changes in world oil prices, further emphasizing the need for diversification of the economy. A fall in oil revenue would have a direct impact on the government's ability to maintain necessary public investment. If the fall would be large, and the government would be unable to adjust by reducing current

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[66] For instance, lack of viable projects or asymmetric information may induce banks not to lend.

expenditure, the weakened financial stance of the government would risk affecting the private sector negatively through the crowding out of financing for investment.

98.   The merits of an income stabilization fund—intended to smooth the impact of the falling oil revenues—have been examined in this study. Although further analysis is needed, it is clear that the discussion of whether and how such a fund should be implemented needs to go beyond a simple comparison of rates of return on various investment alternatives. If private investment is relatively more productive than public investment, there is a case for government savings to be channeled to the private sector rather than to be invested abroad, in spite of potentially higher returns on foreign securities.

99.   There are clear policy lessons to be learned from these findings:

- Fiscal consolidation is key to sustain a minimum level of public investment without crowding out the private sector.

- In order to secure external financing in the future, Gabon needs to continue its efforts to normalize relations with the international community. This would entail continued fiscal consolidation, improvements in governance, and the implementation of a comprehensive poverty reduction strategy.

- An income stabilization fund is likely to be most effective if some of the saved resources are recycled domestically to finance private investment. In this regard, it is crucial to find a transparent and fair solution to the problem of channeling government savings to the private sector.

- The required significant depreciation of the real effective exchange rate (REER) in the medium term emphasizes the need for proper REER management, including government policies that support flexibility in the prices of factors and goods.

- Investment incentives also need to be held up by government policies. Probably the most important component of productive private investment incentives is a sound business environment. This would require a decrease in the role of the state in the economy, an improvement the business climate, and a strong stance against corruption.

Sensitivity Analysis

	2000	2001	2002	2003	2004	2005	2006	2007
Non-oil GDP (2000=100)								
CET=0.6, CES=0.9	100.0	104.2	110.2	115.5	121.5	128.3	135.7	143.7
CET=0.6, CES=0.6	100.0	104.1	110.1	115.5	121.6	128.4	136.0	144.1
CET=0.9, CES=0.9	100.0	104.2	110.2	115.6	121.5	128.2	135.7	143.6
Real exports (2000=100)								
CET=0.6, CES=0.9	100.0	98.9	110.4	117.5	128.4	139.5	150.0	159.8
CET=0.6, CES=0.6	100.0	97.3	110.7	118.4	130.7	142.9	154.2	164.5
CET=0.9, CES=0.9	100.0	97.4	110.5	118.1	130.3	142.5	153.6	163.9
Real imports (2000=100)								
CET=0.6, CES=0.9	100.0	118.0	107.9	108.0	102.4	99.5	100.5	104.4
CET=0.6, CES=0.6	100.0	116.8	108.1	108.7	104.1	102.0	103.6	107.9
CET=0.9, CES=0.9	100.0	116.9	108.0	108.4	103.8	101.7	103.2	107.4
REER (2000=100)								
CET=0.6, CES=0.9	100.0	88.9	102.2	107.0	117.8	127.1	132.6	134.9
CET=0.6, CES=0.6	100.0	85.9	102.8	108.9	122.9	134.9	141.9	144.9
CET=0.9, CES=0.9	100.0	90.4	102.2	106.3	115.4	122.8	127.1	128.9
Non-oil tax revenue (CFAF bn)								
CET=0.6, CES=0.9	376.8	436.6	460.4	499.8	508.6	527.4	556.9	593.2
CET=0.6, CES=0.6	376.8	441.4	459.5	497.1	502.7	519.4	547.7	583.3
CET=0.9, CES=0.9	376.8	431.9	460.7	501.9	515.9	539.7	572.8	611.3

Note: CET indicates the CET elasticity, Ω. CES indicates the CES elasticity, σ.

Details on the Model Specification

A. Derivation of the Optimal Production and Consumption Baskets

The share of production of exported goods as compared to domestic goods is determined by a CET function, rendering the optimization problem for the firm:

Max $Px*$GDP$=Pd*D+Pe*E$,   (A.1)

under the condition

$GDP=At*[bt*E^{\rho t}+(1-bt)*D^{\rho t}]^{1/\rho t}$ (A.2)

where E is exports, Pe is the export price received by the producer, D is the domestic good with the relevant price Pd, GDP is total production (value added) of the composite good, Px is the price of the composite good, and At bt and ρt are parameters.

The solution to the optimization problem is

$E/D=(((1-bt)/bt)*(Pe/Pd))^{\Omega}$, $\Omega=1/(\rho t-1)$, $0<bt<1$, $\rho t>1$.

In a similar manner, the optimal consumption basket is determined by minimizing:

$Pq*Qd=Pd*D+Pm*M$,   (A.3)

under the condition

$Qd=Aq*[bq*M^{\rho q}+(1-bq)*D^{\rho q}]^{1/\rho q}$,

where Qd and M are total demand and imports respectively, with their respective prices Pq wand Pm, and Aq, bq and ρq are parameters. The solution is

$M/D=((bq/(1-bq))*(Pd/Pm))^{\sigma}$, $\sigma=1/(1-\rho q)$, $0<bq<1$, $\rho q<1$.   (A.4)

As Pe and Pm are exogenous, Pd will adjust to balance supply and demand for the domestic good.

B. Equations

Real sector—real terms

Real non-oil GDP (=production)	$GDPno$	$=TFP*(K^\alpha*L^{\wedge}(1-\alpha-beta)*G^\beta)$
Private capital stock	K/L	$=K0/L0\ 1/$
Public capital stock	G	$=(1-\delta)*G0+Ig$

Supply of composite good	Qs	$=Aq*((bq*M^{\wedge}\rho q+(1-bq)*Ds^{\wedge}\rho q))^{\wedge}(1/\rho q)$
Demand for composite good	Qd	$=Cp+Cg+Ip+Ig$

Private non-oil consumption	Cp	$=(1-s-ty)*Yno/Pt$
Private non-oil investment	Ip	$=K-(1-\delta)*K0$

Real sector—nominal values

Non-oil private income	Yno	$=Px*GDPno+FSp*neer+RE*neer+Pq*TRg$
Private non-oil savings	$EqSp$	$=s*Yno$

Fiscal sector—real terms

Public investment	Ig	$=(T+Grants*neer-Pt*Cg-TRg*Pq+Fg*neer+$
		$DomFin\text{-}Iext*neer+AccDomArr)/Pk$

Fiscal sector—nominal values

Tax revenue	T	$=tm*neer*pwm*M+tq*Pq*Qs+ty*Yno+$
		$te*neer*pwe*E+Orev$
Government savings	Sg	$=T-Cg*Pt-TRg*Pq-Iext*neer$
Additional domestic financing	$AccDomArr$	$=IF((T+Grants*neer-Pt*Cg-TRg*Pq+Fg*neer+$
		$DomFin\text{-}Iext*neer-IgMin*Pk)>=0,0,$
		$-(T+Grants*neer-Pt*Cg-TRg*Pq+Fg*neer+$
		$DomFin\text{-}Iext*neer-IgMin*Pk))$

Prices

Sales price of composite good	Pt	$=(1+tq)*Pq$
Non-oil GDP deflator	Px	$=(Pe*E+Pd*Ds)/GDPno$

Price of capital good	Pk	$=Pt$
Price of composite good	Pq	$=(Pm*M+Pd*Ds)/Qs$
Exchange rate	$neer$	$=100$
Export price in domestic currency	Pe	$=(1-te)*neer*pwe$
Import price in domestic currency	Pm	$=(1+tm)*neer*pwm$

External sector—real terms

Exports	E/Ds	$=(((1-bt)/bt)*(Pe/Pd)^{\wedge}\omega$
Imports	M/Dd	$=((bq/(1-bq))*(Pd/Pm))^{\wedge}\sigma$

Equilibrium conditions

Savings-investment equilibrium	0	$=Pk*(Ip+Ig)-(Sp+Sg-(CAno)*neer-Orev)$
Production equilibrium	0	$=GDPno-At*((bt*E^{\wedge}\rho t+(1-bt)*Ds^{\wedge}\rho t))^{\wedge}(1/\rho t)$
Domestic good equilibrium	0	$=Dd-Ds$
Composite good equilibrium	0	$=Qd-Qs$
Non-oil current account	0	$=pwe*E-pwm*M+RE+Grants+FSp+FSg-(CAno)\ 2/$

1/ Suffix 0 indicates value from one year earlier.
2/ This equation is included as a check only, since it is implied by Walras law.

C. Variables

Exogenous		Endogenous	

Real sector–real terms

Real sector–real terms

		Real non-oil GDP	$GDPno$
Total factor productivity	TFP	Private capital stock	K
		Public capital stock	G

Fiscal sector—nominal values

		Labor	L
Government oil revenue	$Orev$	Supply of composite good	Qs
Domestic financing, net	$DomFin$	Demand for composite good	Qd
		Supply of domestic good	Ds

Fiscal sector—real terms

		Demand for domestic good	Dd
Government consumption	Cg	Private non-oil consumption	Cp
Government transfers	TRg	Private non-oil investment	Ip
Minimum public investment	$IgMin$		

External sector—nominal foreign currency terms

Real sector—nominal values

		Non-oil private income	Yno
Interest on external debt (public)	$Iext$	Private non-oil savings	Sp
Interest rate, external debt	int		

Fiscal sector—real terms

Net public external borrowing	Fg	Public investment	Ig
Net private non-oil external borrowing	Fp		

Fiscal sector—nominal values

Foreign remittance, net	RE		
Foreign grants	$Grants$	Tax revenue	T
Oil overall balance	$OBoil$	Government savings	Sg
Non-oil net private factor income	FSp	Additional domestic financing	$AccDomArr$
Non-oil net private factor income	FSg		

Prices

Non-oil current account	$CAno$		
Import tariff rate	tm	Sales price of composite good	Pt
Export tax rate	te	Non-oil GDP deflator	Px
Indirect tax rate	tq	Price of domestic good	Pd
Direct tax rate	ty	Price of capital good	Pk
World export prices	pwe	Price of composite good, excl. tax	Pq
World import prices	pwm	Nominal effective exchange rate	$neer$
		Export price in domestic currency	Pe

Ratios

		Import price in domestic currency	Pm
Private non-oil savings rate	s		

External sector—real terms

		Non-oil exports	E
		Non-oil imports	M

D. Parameters

Private capital coefficient	α	0.30
Public capital coefficient	β	0.10
Elasticity *CET*	Ω	0.60
Elasticity *CES*	σ	0.90
Scale for *CET*	*At*	2.39
ρ *CET*	ρt	2.67
Share for *E CET*	*bt*	0.83
Scale for *CES*	*Aq*	1.95
ρ *CES*	ρq	-0.11
Share for *M CES*	*Bq*	0.38
Depreciation rate	δ	0.05

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Gabon: Basic Data

Area, population, and GDP per capita (1999) 1/

Area	257,670 square kilometers
Agricultural land	19.2 percent of total
Population	
Total	1.2 million
Growth rate	2.4 percent
Density	4.7 per square kilometer
GDP per capita (2001)	US $3,743

	1995	1996	1997	1998	1999	2000	2001 Est.
National accounts			(In billions of CFA francs)				
GDP at constant 1991 prices	1,671.6	1,732.2	1,831.6	1,895.3	1,713.9	1,681.0	1,706.1
GDP at current prices	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
			(In percent of GDP)				
Consumption	55.1	54.3	43.9	61.5	55.0	46.2	53.6
Gross investment	23.3	20.0	31.5	39.1	24.2	22.1	24.9
Gross national savings	26.5	30.6	34.3	20.4	15.4	25.3	23.8
External resource balance (gap -)	21.5	25.8	24.6	-0.6	20.8	31.7	21.5
External current account balance (including transfers)	3.2	10.6	2.8	-18.7	-8.8	3.2	-1.1
Prices			(Percentage changes from previous year)				
Consumer price index (average)	10	4.5	4.1	2.3	-0.7	0.4	2.1
Private consumption deflator	1.0	16.1	-9.2	8.9	-10.5	-7.3	5.8
Export unit values	0.5	23.7	9.7	-37.2	36.9	48.4	-15.6
Import unit values	4.0	10.6	14.2	14.9	-19.9	26.2	11.2
Terms of trade	-2.7	21.2	-3.6	-29.0	37.9	43.0	-16.9
Central government finance			(In billions of CFA francs)				
Total revenue and grants	730.6	755.1	1,029.8	912.1	813.6	1,207.6	1,190.1
Total expenditure	660.9	684.3	980.2	1,281.6	779.5	786.1	934.2
	524.9	530.0	630.6	918.8	660.6	674.8	790.9
Capital	136.0	154.3	349.6	362.8	118.9	105.1	118.3
Primary balance	280.6	251.8	241.6	-167.9	230.0	633.5	558.7
Overall balance (on a commitment basis)	69.7	70.8	49.6	-369.4	34.1	421.5	255.9
Change in arrears (reduction -)	-53.6	-106.7	-54.0	80.9	3.3	-276.2	-42.0
Overall balance (on a cash basis)	16.1	-35.9	-4.4	-288.5	37.4	145.4	214.0
Domestic financing	-80.4	-36.2	8.4	302.7	-32.3	-305.7	-4.7
External financing	64.4	72.1	-4.0	-14.2	-5.1	160.2	-209.2
Of which							
Debt rescheduling	171.8	150.8	122.9	0.0	0.0	649.5	29.4
Debt cancellation	22.4	21.9	20.0	19.0	18.0	17.0	17.0

Gabon: Basic Data (continued)

	1995	1996	1997	1998	1999	2000	2001 Est.
Money and credit	(In billions of CFA francs)						
Net foreign assets	25.2	103.5	100.7	-46.0	-44.0	177.2	-8.1
Net domestic assets	332.0	317.3	367.5	505.6	491.0	350.1	574.8
Credit to the government (net)	239.4	238.7	207.1	329.1	304.5	128.9	273.6
Credit to the private sector	217.9	214.4	305.8	316.5	319.6	356.9	419.2
Other items (net)	-123.0	-122.5	-135.5	-126.2	-115.3	-105.4	-85.4
Broad money	357.1	420.8	468.2	459.6	447.0	527.3	566.7
Balance of payments	(In millions of U.S. dollars, unless otherwise indicated)						
Trade balance	1,744.7	2,220.1	2,097.3	803.8	1,656.7	2,291.8	1,635.1
Exports, f.o.b.	2,642.9	3,189.5	3,067.6	1,906.7	2,504.5	3,218.5	2,633.6
Imports, f.o.b.	-898.2	-969.4	-970.3	-1,102.9	-847.8	-926.8	-998.5
Services (net)	-1,390.8	-1,432.8	-1,717.1	-1,446.1	-1,883.2	-2,078.9	-1,638.1
Of which							
Interest payments due and IMF charges	-354.8	-312.7	-284.8	-306.5	-281.0	-263.3	-369.9
Unrequited transfers (net)	-197.0	-183.6	-231.7	-196.7	-181.8	-49.7	-45.6
Current account balance	156.9	603.7	148.5	-839.1	-408.3	163.2	-48.7
Official capital	-260.1	-196.7	-251.7	-275.8	-268.8	-309.0	-399.4
Disbursements	166.3	157.8	92.2	49.0	47.5	31.9	7.0
Amortization due	-426.5	-354.5	-343.8	-324.8	-316.2	-340.9	-406.3
Private capital (net)	-163.5	-338.6	-59.8	264.8	-129.4	40.1	95.6
Overall balance	-430.7	-254.9	-205.7	-666.1	-408.8	-89.4	-315.4
Arrears (reduction -)	0.0	0.0	0.0	385.2	399.4	-679.1	81.8
Fund credit (net)	8.0	26.6	19.2	-22.6	-24.5	7.6	-11.1
Debt relief	389.1	337.6	244.8	32.2	29.3	938.7	63.3
Other net assets	33.6	-109.2	-58.4	271.4	4.6	-169.5	173.3
Official external reserves (end-year)							
Total (gross)	150.2	259.5	293.7	18.2	23.0	192.2	13.6
In months of imports	2.0	3.2	3.6	0.2	0.3	2.5	0.2
External debt							
Public external debt outstanding 2/	3,762.9	3,971.0	3,634.5	3,334.2	3,658.9	3,167.0	2,627.7
Of which							
Fund credit	98.5	120.9	133.8	109.2	85.6	90.2	75.9
Debt service as percent of exports of goods and non-factor services (before debt r	28.5	19.4	18.3	31.3	23.2	18.0	28.2
Exchange rate							
CFA francs per SDR (average)	757.2	742.7	803.1	800.2	840.7	936.4	932.5
CFA francs per U. S. dollar (average)	499.2	511.6	583.7	590.0	614.9	710.0	732.5

Gabon: Basic Data (concluded)

Social indicators 1/

Population characteristics (2001)

Population, total (2001; in millions)	1.2
Population growth rate (in percent)	2.4
Life expectancy at birth, total (years)	53
Infant mortality rate (under 1 year; per 1,000)	84
Child death rate (under 5 years; per 1,000)	133
Urban population (percent of total)	81
Adult illiteracy (percent of total)	41

Labor force (1999)

Total	554,660
Participation rate (percent of total)	47
Of which	
Female	45

Nutrition (1990)

Daily calorie supply (calories per person)	2,383
Daily protein supply (grams per person)	59
Prevalence of malnutrition (under 5 years; percentage of age group)	25
Energy consumption (1998, kilotons of oil equivalent)	1,668
Per capita (1998, kilogram of oil equivalent)	1,413

Sources: World Bank: *World Development Indicators*, 2001; and staff estimates.

1/ Data available through 1999.
2/ Medium- and long-term debt (excluding nonpublicly guaranteed debt).

Gabon: Income and Social Indicators, 1970–99

	Latest Single Year			Same Region/Income Group	
	1970–75	1980–85	1993–99	Sub-Saharan Africa	Upper-middle income
Population					
Total population, midyear (millions)	0.6	0.8	1.2	659	647
Growth rate (annual average, in percent)	3.3	3.3	2.4	2.6	1.3
Urban population (in percent of population)	40	5.2	81	34	76
Total fertility rate (births per woman)	4.3	4.5	5.1	5.3	2.7
Poverty (in percent of population)					
National head count index 1/	66 2/	...	23	...	...
Income					
GNP per capita (U.S. dollars)	3,100	3,900	3,877	538	5,407
Consumer price index (1995=100)	26	76	107.5	131	122
Food price index (1995=100)	...	76	107	130.5	...
Social indicators					
Public expenditure					
Health (in percent of GDP)	...	...	3.1	3.99	5.48
Education (in percent of GNP)	2.1	5.0	2.9	4.1	5.0
Gross school enrollment rates (in percent of age group)					
Primary	...	172	162	78	107
Secondary	...	43	56	25	64
Tertiary	...	6	8	3	14
Access to safe water (in percent of population)					
Total	...	58	67	...	...
Urban	...	75	80	...	...
Rural	...	34	30	...	...
Immunization rate (in percent of children under 12 months)					
Measles	...	58	30	57	78
DPT	...	24	31	59	75
Life expectancy at birth (years)					
Total	45	49	53	47	66
Male	43	47	51	46	65
Female	47	51	54	48	69
Mortality					
Infant (per thousand live births)	132	112	84	92	54
Under 5 (per thousand live births)	232	194		161	78
Adult (15-59)					
Male (per 1,000 population)	521	474	386	499	221
Female (per 1,000 population)	421	387	344	453	170
Maternal (per 100,000 live births)	...	600	...	...	...

Source: World Bank, *World Development Indicators*, 2001.

1/ Poverty data from the World Bank, "The Gabonese Republic: Poverty in a Rent-Based Economy,"1997.
2/ As of 1960.

Table 1. Gabon: Gross Domestic Product by Sector at Current Prices, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
Primary sector	1,220.3	1,539.5	1,551.5	961.8	1,308.6	1,982.9	1,701.5
Agriculture, livestock, hunting, and fishing	123.7	128.1	132.0	134.0	137.4	141.2	147.0
Forestry exploitation	75.1	78.5	92.4	51.7	72.4	85.9	87.4
Oil	969.8	1,278.7	1,274.4	713.8	1,041.8	1,702.0	1,415.2
Mining	51.7	54.2	52.7	62.3	57.0	53.8	51.9
Secondary sector	274.6	279.8	341.0	365.0	300.0	279.6	285.0
Agro-industry	42.5	40.1	39.8	44.9	43.4	42.8	45.1
Wood industry	12.5	10.6	15.2	16.1	21.0	15.6	21.1
Other industries	57.0	67.6	81.7	87.4	78.2	84.0	86.6
Refinery	12.6	11.7	8.6	16.2	17.2	19.8	20.7
Electricity and water	35.4	39.6	35.9	29.3	32.9	33.6	35.0
Construction and public works	92.8	99.5	152.4	158.8	99.3	69.7	62.4
Research and oil services	21.8	10.7	7.4	12.3	8.0	14.1	14.1
Tertiary sector	864.1	916.0	1,001.4	1,082.4	1,039.9	1,067.5	1,106.8
Merchant services	629.0	671.3	742.3	804.3	745.0	769.6	806.5
Transport	129.5	152.2	164.4	172.1	145.1	150.0	157.4
Services	265.2	276.7	322.3	362.3	346.7	359.1	384.6
Commerce	222.4	221.6	232.0	250.8	234.6	241.4	244.9
Financial services	11.9	20.8	23.6	19.1	18.6	19.1	19.6
Nonmerchant services	235.1	244.7	259.1	278.1	294.9	297.9	300.3
Government services	235.1	244.7	259.1	278.1	294.9	297.9	300.3
Gross domestic product at factor costs	2,359.0	2,735.3	2,893.9	2,409.2	2,648.5	3,330.0	3,093.3
Import duties	116.2	177.5	215.2	235.8	191.1	246.9	294.1
Gross domestic product at current prices	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
Memorandum items:							
Value added							
Oil sector	1,004.2	1,301.1	1,290.4	742.3	1,067.0	1,735.9	1,450.0
Non-oil sector	1,471.0	1,611.7	1,818.7	1,902.7	1,772.6	1,841.0	1,937.4
Public sector	235.1	244.7	259.1	278.1	294.9	297.9	300.3
Private sector	1,235.9	1,367.0	1,559.6	1,624.6	1,477.7	1,543.1	1,637.1

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 2. Gabon: Gross Domestic Product by Sector
at Constant 1991 Market Prices, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
Primary sector	742.9	748.7	742.5	726.9	670.0	612.6	592.3
Agriculture, livestock, hunting, and fishing	100.5	101.7	99.0	103.4	104.9	107.8	111.2
Forestry exploitation	28.2	28.2	36.5	33.3	39.2	42.4	43.5
Oil	575.0	582.2	572.7	547.1	485.5	424.5	401.8
Mining	39.2	36.6	34.3	43.1	40.4	37.9	35.8
Secondary sector	223.8	249.1	292.6	321.5	270.7	266.1	270.2
Agro-industry	37.2	38.9	38.9	44.9	42.5	42.0	43.7
Wood industry	3.6	3.8	6.1	11.4	14.7	10.9	14.6
Other industries	44.2	52.1	61.6	65.9	60.8	65.1	66.4
Refinery	19.8	34.4	32.6	33.6	34.3	35.8	36.8
Electricity and water	34.5	33.0	35.0	35.8	38.7	39.0	40.2
Construction and public works	67.8	74.9	108.5	116.3	70.9	57.6	52.8
Research and oil services	16.7	12.0	9.9	13.6	8.8	15.7	15.7
Tertiary sector	646.8	663.1	707.5	757.2	704.0	719.4	743.9
Merchant services	455.6	466.2	501.3	538.0	472.3	487.1	510.9
Transport	100.4	105.2	114.4	121.1	103.0	106.5	110.8
Services	192.4	200.2	221.3	246.7	237.1	245.0	257.4
Commerce	149.1	142.7	144.2	151.4	117.2	120.2	126.7
Financial services	13.7	18.1	21.4	18.8	15.0	15.4	16.0
Nonmerchant services	191.2	196.9	206.2	219.2	231.7	232.3	233.0
Government services	191.2	196.9	206.2	219.2	231.7	232.3	233.0
Gross domestic product at factor costs	1,613.5	1,660.9	1,742.6	1,805.6	1,644.7	1,598.1	1,606.4
Import duties	58.1	71.3	89.0	89.7	69.2	82.9	99.7
Gross domestic product at constant 1991 market prices	1,671.6	1,732.2	1,831.6	1,895.3	1,713.9	1,681.0	1,706.1
Memorandum items:							
Value added							
Oil sector	611.5	628.6	615.2	594.3	528.6	476.0	454.3
Non-oil sector	1,060.1	1,103.6	1,216.4	1,301.0	1,185.3	1,205.0	1,251.8
Public sector	191.2	196.9	206.2	219.2	231.7	232.3	233.0
Private sector	868.9	906.7	1,010.2	1,081.8	953.6	972.7	1,018.8

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 3. Gabon: Gross Domestic Product, 1995–2001

(Annual percentage changes)

	1995	1996	1997	1998	1999	2000	2001 Est.
GDP at current prices							
Total	6.4	17.7	6.7	-14.9	7.4	26.0	-5.3
Oil sector 1/	9.3	29.6	-0.8	-42.5	43.7	62.7	-16.5
Non-oil sector	4.5	9.6	12.8	4.6	-6.8	3.9	5.2
GDP at constant 1991 prices							
Total	5.0	3.6	5.7	3.5	-9.6	-1.9	1.5
Oil sector 1/	4.6	2.8	-2.1	-3.4	-11.1	-10.0	-4.6
Non-oil sector	5.2	4.1	10.2	7.0	-8.9	1.7	3.9
GDP deflator							
Total	1.3	13.6	0.9	-17.8	18.7	28.4	-6.7
Oil sector 1/	4.5	26.0	1.3	-40.5	61.6	80.7	-12.5
Non-oil sector	-0.7	5.2	2.4	-2.2	2.3	2.2	1.3
Consumer prices (period average)							
Index for African households	10.0	4.5	4.1	2.3	-0.7	0.4	2.1
Terms of trade	-2.7	21.2	-3.6	-29.0	37.9	43.0	-16.9

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ The oil sector consists of the oil-extracting industry, refining, research, and oil services.

Table 4. Gabon: Supply and Use of Resources at Current Prices, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
GDP at market prices	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
Oil sector	1,004.2	1,301.1	1,290.4	742.3	1,067.0	1,735.9	1,450.0
Non-oil sector	1,471.0	1,611.7	1,818.7	1,902.7	1,772.6	1,841.0	1,937.4
Resource balance	533.4	750.5	766.4	-16.5	589.5	1,134.3	728.4
Exports	1,455.5	1,773.1	2,011.8	1,232.5	1,645.1	2,419.5	2,046.4
Goods	1,319.2	1,631.6	1,790.5	1,124.8	1,540.0	2,285.3	1,929.2
Nonfactor services	136.2	141.5	221.3	107.7	105.1	134.2	117.2
Imports	-922.1	-1,022.6	-1,245.4	-1,249.0	-1,055.6	-1,285.2	-1,318.0
Goods	-448.4	-495.9	-566.3	-650.7	-521.3	-658.0	-731.4
Nonfactor services	-473.7	-526.7	-679.1	-598.3	-534.3	-627.1	-586.6
Domestic demand	1,941.8	2,162.3	2,342.7	2,661.5	2,250.1	2,442.6	2,659.0
Consumption	1,364.7	1,581.1	1,364.2	1,627.6	1,562.8	1,652.3	1,816.1
Public	291.0	327.4	335.8	409.1	338.2	344.9	348.9
Private	1,073.7	1,253.6	1,028.4	1,218.5	1,224.6	1,307.4	1,467.3
Investment	577.0	581.2	978.5	1,033.9	687.3	790.3	842.9
Stockbuilding	15.5	40.4	19.0	30.3	0.0	0.0	0.0
Fixed capital formation	561.5	540.8	959.5	1,003.6	687.3	790.3	842.9
Public	136.0	154.3	349.6	362.8	118.9	105.1	118.3
Private	425.5	386.5	609.9	640.8	568.4	685.2	724.6
Oil sector	269.9	202.2	372.6	356.3	320.7	386.9	363.3
Non-oil sector	155.6	184.3	237.3	284.5	247.7	298.3	361.3

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 5. Gabon: Supply and Use of Resources at Constant 1991 Prices, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
GDP at constant prices	1,671.6	1,732.2	1,831.6	1,895.3	1,713.9	1,681.0	1,706.1
Oil sector	611.5	628.6	615.2	594.3	528.6	476.0	454.3
Non-oil sector	1,060.1	1,103.6	1,216.4	1,301.0	1,185.3	1,205.0	1,251.8
Resource balance	418.9	369.6	393.4	253.4	310.8	187.7	177.1
Exports	913.8	918.3	1,031.5	900.8	834.2	729.2	704.3
Goods	828.2	845.0	918.0	822.1	780.9	688.8	664.0
Nonfactor services	85.5	73.3	113.5	78.7	53.3	40.5	40.3
Imports	-494.9	-548.8	-638.1	-647.3	-523.3	-541.5	-527.2
Goods	-240.7	-266.1	-290.1	-337.2	-258.5	-277.3	-292.6
Nonfactor services	-254.3	-282.6	-347.9	-310.1	-264.9	-264.2	-234.6
Domestic demand	1,252.8	1,362.6	1,438.2	1,641.9	1,403.1	1,493.3	1,529.0
Consumption	866.7	911.3	853.8	973.9	994.0	1,093.4	1,139.3
Public	227.8	268.6	272.9	341.7	283.9	275.4	271.9
Private	638.9	642.7	580.9	632.2	710.1	818.0	867.5
Investment	386.0	451.3	584.4	668.0	409.1	399.9	389.7
Stockbuilding	15.5	40.4	19.0	30.3	0.0	0.0	0.0
Fixed capital formation	370.5	410.9	565.4	637.7	409.1	399.9	389.7
Public	95.0	132.1	211.3	274.7	82.4	65.4	70.8
Private	275.5	278.8	354.1	362.9	326.6	334.5	318.9
Oil sector	157.4	114.4	205.2	193.3	181.7	187.1	165.7
Non-oil sector	118.1	164.4	148.9	169.7	145.0	147.5	153.2

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 6. Gabon: Supply and Use of Resources at Constant 1991 Prices, 1995–2001

(Annual percentage changes)

	1995	1996	1997	1998	1999	2000	2001 Est.
GDP at constant prices	5.0	3.6	5.7	3.5	-9.6	-1.9	1.5
Oil sector	4.6	2.8	-2.1	-3.4	-11.1	-10.0	-4.6
Non-oil sector	5.2	4.1	10.2	7.0	-8.9	1.7	3.9
Resource balance	5.9	-11.8	6.5	-35.6	22.6	-39.6	-5.7
Exports	5.2	0.5	12.3	-12.7	-7.4	-12.6	-3.4
Goods	4.2	2.0	8.6	-10.4	-5.0	-11.8	-3.6
Nonfactor services	16.0	-14.3	54.8	-30.7	-32.2	-24.1	-0.3
Imports	4.6	10.9	16.3	1.4	-19.2	3.5	-2.6
Goods	4.9	10.6	9.0	16.2	-23.4	7.3	5.5
Nonfactor services	4.2	11.2	23.1	-10.9	-14.6	-0.2	-11.2
Domestic demand	4.7	8.8	5.5	14.2	-14.5	6.4	2.4
Consumption	4.6	5.1	-6.3	14.1	2.1	10.0	4.2
Public	0.4	17.9	1.6	25.2	-16.9	-3.0	-1.3
Private	6.2	0.6	-9.6	8.8	12.3	15.2	6.1
Investment	4.8	16.9	29.5	14.3	-38.8	-2.2	-2.6
Stockbuilding	-16.2	160.6	-53.0	59.5	0.0	0.0	0.0
Fixed capital formation	5.9	10.9	37.6	12.8	-35.9	-2.2	-2.6
Public	-4.8	39.0	60.0	30.0	-70.0	-20.7	8.4
Private	10.2	1.2	27.0	2.5	-10.0	2.4	-4.7
Oil sector	18.9	-27.3	79.3	-5.8	-6.0	3.0	-11.4
Non-oil sector	0.4	39.2	-9.4	13.9	-14.6	1.7	3.9

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 7. Gabon: Savings and Investment Balances, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In percent of total GDP)						
Total economy							
Gross national savings	26.5	30.6	34.3	20.4	15.4	25.3	23.8
Gross domestic savings	44.9	45.7	56.1	38.5	45.0	53.8	46.4
Investment	23.3	20.0	31.5	39.1	24.2	22.1	24.9
External resource balance	21.5	25.8	24.6	-0.6	20.8	31.7	21.5
External current account balance	3.2	10.6	2.8	-18.7	-8.8	3.2	-1.1
Excluding official transfers (excluding official transfers	3.2	10.6	2.8	-18.7	-8.8	3.2	-1.1
Government							
Gross national savings	8.3	7.7	12.8	-0.3	5.4	14.7	11.0
Gross domestic savings	15.5	13.2	18.2	6.6	11.5	19.9	19.0
Investment	5.5	5.3	11.2	13.7	4.2	2.9	3.5
External resource balance	10.0	7.9	6.9	-7.1	7.3	17.0	15.6
External current account balance	2.8	2.4	1.6	-14.0	1.2	11.8	7.6
Private sector 1/							
Gross national savings	18.2	22.8	21.4	20.6	10.0	10.6	12.8
Gross domestic savings	29.4	32.5	37.9	31.9	33.5	33.9	27.3
Investment	17.8	14.7	20.2	25.4	20.0	19.2	21.4
External resource balance	11.6	17.8	17.7	6.5	13.5	14.7	5.9
External current account balance	0.3	8.2	1.2	-4.7	-10.0	-8.5	-8.6
Oil sector							
Gross national savings 2/	35.9	35.6	24.4	20.8	15.3	25.1	25.9
Gross domestic savings 2/	29.1	34.4	32.1	20.3	28.9	39.5	34.4
Investment	10.9	6.9	12.0	13.5	11.3	10.8	10.7
External resource balance	18.2	27.5	20.1	6.8	17.6	28.7	23.6
External current account balance	25.0	28.6	12.4	7.3	4.0	14.3	15.2
Non-oil sector							
Gross national savings 2/	-17.7	-12.8	-3.0	-0.2	-5.3	-14.5	-13.1
Gross domestic savings 2/	0.3	-1.9	5.9	11.6	4.6	-5.6	-7.0
Investment	6.9	7.7	8.2	11.9	8.7	8.3	10.7
External resource balance	-6.6	-9.6	-2.4	-0.3	-4.1	-14.0	-17.7
External current account balance	-24.6	-20.5	-11.3	-12.1	-14.1	-22.9	-23.8
	(In percentage changes, unless otherwise indicated)						
Memorandum items:							
Real GDP	5.0	3.6	5.7	3.5	-9.6	-1.9	1.5
Real non-oil GDP	5.2	4.1	10.2	7.0	-8.9	1.7	3.9
GDP per capita (in U.S. dollars)	4,654.6	5,214.5	4,759.2	3,908.0	3,927.2	4,179.5	3,742.9

Sources: Ministry of Economy, Finance, Budget, and Privatization; and staff estimates.

1/ Including nonfinancial public sector enterprises.
2/ Owing to data limitations, the split between the savings of the oil and the non-oil private sectors is subject to some uncertainty.

Table 8. Gabon: Crude Oil Production and Prices, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In millions of metric tons)						
Crude oil production	18.1	18.3	18.5	17.6	15.6	13.6	13.0
Mandji (Elf)	3.3	3.0	2.8	2.9	2.7	2.6	0.0
Avocette/Coucal (Elf)	2.2	2.3	2.5	2.4	2.4	0.0	0.0
Gamba (Shell)	0.3	0.4	0.4	0.5	0.6	0.5	0.5
Lucina (Perenco) 1/	0.2	0.4	0.4	0.3	0.4	0.3	0.3
Rabi (Shell)	10.9	10.9	11.2	9.9	11.3	9.5	11.3
Echira (Shell)	0.1	0.1	0.1	0.2	0.3	0.0	0.0
Oguendjo (Perenco) 1/	0.4	0.8	0.8	0.6	0.6	0.7	0.9
Obando (Perenco) 1/	0.5	0.4	0.3	0.2	0.4	0.0	0.0
Tchatamba (Marathon)	0.0	0.0	0.0	0.5	0.9	0.0	0.0
M'Bya (Perenco)	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Brème (Perenco)	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Gombe (Perenco)	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	(In U.S. dollars ber barrel)						
Prices (annual averages)							
Aggregate export price	16.5	20.3	18.1	11.6	16.9	27.2	22.6
Mandji							
Posted 2/	15.6	19.0	16.7	10.6	16.3	25.1	20.7
Official 3/	15.1	18.4	16.2	10.2	15.8	24.3	20.0
Gamba							
Posted 2/	19.1	23.4	21.2	13.8	19.7	...	...
Official 3/	15.4	18.9	17.1	11.2	16.1	25.7	21.7
Lucina							
Posted 2/	16.8	19.9	18.3	11.9	17.3	27.7	23.1
Official 3/	13.4	15.9	14.6	9.6	13.8	22.1	18.5
Oguendjo							
Posted 2/	16.7	19.5	17.9	11.4	16.3	25.4	20.3
Official 3/	13.4	15.6	14.3	9.2	13.0	20.3	16.2
	(In thousands of metric tons)						
Production of refined products							
Butane	10.7	10.7	10.1	10.1	11.4	8.2	6.9
High-test gasoline ("super")	79.1	78.7	71.0	78.3	77.7	60.2	59.9
Kerosene	91.7	91.3	81.1	89.3	96.8	67.5	67.4
Diesel and gas oil	241.2	240.2	233.3	245.9	256.7	194.7	187.4
Fuel oil and bitume	317.0	315.7	293.4	323.1	344.2	262.8	262.7

Sources: Ministry of Mining, Energy, Petroleum, and Water Resources; Banque des Etats de l'Afrique Centrale (BEAC); and Ministry of Economy, Finance, Budget, and Privatization.

1/ The data for the production of these wells were consolidated for 1996 and 1997.
2/ World market price for this type of crude oil.
3/ As determined for tax purposes on the basis of posted prices for the main fields, taking into account the gravity of the crude oil produced.

Table 9. Gabon: Capital Expenditure and Oil Exploration, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs, unless otherwise indicated)						
Capital expenditure 1/	205.9	198.2	253.8	174.7	153.7	...	...
Research and exploration	82.3	73.9	128.0	73.7	83.0	...	...
Development and production	123.6	124.3	125.8	101.0	70.7	...	...
Seismic kilometers	31,715	22,000	21,660	48,040	44,000	...	...
Number of exploration wells	6	8	12	10	3	3	14
Number of discovery wells	2	0	3	4	0	0	2
Number of development wells	27	22	40	20	10	21	22
Memorandum items:							
Exports of oil	1,055.4	1,335.1	1,401.9	833.4	1,143.2	1,827.8	1,509.1
	(In percent of oil exports)						
Capital expenditure for research and exploration	7.8	5.5	9.1	8.8	7.3	...	...
Capital expenditure for development and production	11.7	9.3	9.0	12.1	6.2	...	...

Source: Ministry of Mining, Energy, Petroleum, and Water Resources.

1/ These data are different from national accounts data, because of different classifications.

Table 10. Gabon: Discovered Oil Fields During 1990–2001

Field	Year of Discovery	Operator
Avocette	1990	Elf Gabon
Pingouin Cap Lopez	1991	Elf Gabon
Mandji South/Tchengue South	1991	Elf Gabon
Mandji South/Tchengue Northeast	1991	Elf Gabon
Mokabou Dianongo	1991	Elf Gabon
Remboue Abanga	1991	British Gas
Barbier Guiffette	1991	Elf Gabon
Alonha	1991	Conoco
Dimande/Mpira	1991	Agip
Vanneau nord	1991	Elf Gabon
Pomarin Dianongo	1991	Elf Gabon
Remboue	1992	British Gas
Maguelou	1992	Conoco
Pélican Est	1992	Elf Gabon
Roussette Ouest	1993	Elf Gabon
Pingouin Est	1993	Elf Gabon
Mayonami	1994	Total Gabon
Vera	1994	Total Gabon
Assala	1994	Elf Gabon
Ozima 1	1995	Elf Gabon
Sanderlaing 1	1995	Elf Gabon
Mboukou 1	1995	Elf Gabon
Mboukou 1. G.2	1995	Elf Gabon
Sitatounga	1995	Elf Gabon
Tchatamba Marine 1	1995	Marathon
Walt Whitman	1996	Amoco
Kenige	1997	Shell Gabon
Tchatamba Sud	1997	Marathon Gabon
Atora	1997	Elf Gabon
Tchatamba Ouest	1998	Marathon Gabon
Orovinyaré	1998	Marathon Gabon
Tchibala Ouest	1998	Vaalco
Baudoin Marine Nord 8	1999	Elf Gabon
Atora	1999	Elf Gabon
Olowi	2001	Pioneer
Toucan	2001	Shell Gabon

Source: Ministry of Mining, Energy, Petroleum, and Water Resources.

Table 11. Gabon: Mineral Production, Exports, and Prices, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In thousands of metric tons)						
Manganese							
Production	1,930	1,983	1,884	2,092	1,908	1,743	1,417
Minerals	1,885	1,920	1,841	2,046	1,839	1,706	1,209
Mineral R1 R2 S D	1,611	1,643	1,455	1,658	1,501	1,440	952
Hydrometal	175	134	117	115	133	266	257
Mineral F1 F2	99	143	268	273	205	...	...
Bioxide	45	63	43	46	69	37	33
Bioxide G	43	60	40	44	67		33
Bioxide P	2	3	3	3	2	...	...
Exports	2,010	2,063	1,995	2,064	1,944	1,939	1,315
Variation in stock	-76	-6	92	16	...	-196	104
	(In thousands of CFA francs per metric ton)						
Export prices							
Minerals	34.9	37.6	39.3	40.6	41.3	42.9	43.3
Bioxide	113.3	115.0	113.3	115.0	118.4	118.4	118.4
	(In metric tons)						
Uranium							
Production	650	600	513	737	358	0	0
Exports	650	650	513	737	350	0	0
Variation in stock	0	-50	0	0	8	0	0
	(In thousands of CFA francs per metric ton)						
Export prices	23.9	23.5	22.8	22.3	21.8	...	...

Sources: Compagnie Minière de l'Ogooué; and Bank of Central African States (BEAC).

Table 12. Gabon: Production and Export of Timber, 1995–2000 1/

	1995	1996	1997	1998	1999	2000
	(In thousands of cubic meters)					
Production	2,298.5	2,408.9	2,775.4	2,163.9	2,339.7	2,908.2
Okoumé/Ozigo	1,740.4	1,903.0	1,993.0	1,392.7	1,587.3	1,878.5
Other	558.1	505.9	782.4	771.2	752.4	1,029.7
Exports	2,219.0	2,350.7	2,671.2	1,763.9	2,292.5	2,629.3
Okoumé	1,553.0	1,788.0	1,850.0	1,026.0	1,559.9	1,694.1
Ozigo	158.0	119.0	140.0	47.8	15.0	76.6
Other	508.0	443.7	681.2	690.1	717.6	858.6
Consumption by local industries	160.9	169.2	194.3	278.3	113.0	156.0
Okoumé/Ozigo	103.0	108.6	124.4	278.3	95.4	...
Other	57.9	60.6	69.9	0.0	17.6	...
Variation in stock	79.5	58.2	104.1	121.7	-98.8	122.0
Okoumé/Ozigo	-65.0	-28.0	-48.0	40.6	...	...
Other	144.5	86.2	152.1	81.1	...	...
Memorandum items:	(In thousands of CFA francs per cubic meter)					
Producer prices						
Okoumé	63.8	59.7	65.4	63.4	61.9	64.0
Ozigo	46.2	41.8	44.8	40.0	39.0	43.0
Other	...	...	...	...	...	72.0
Export prices						
Okoumé	81.2	80.7	83.6	71.3	93.0	95.0
Ozigo	56.6	58.8	62.4	51.5	64.0	66.0
Other	93.6	88.5	73.7	76.8	109.3	111.0

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ The authorities have provided data through 2000.

Table 13. Gabon: Marketing of Timber by SNBG, 1995–2001 1/

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In thousands of cubic meters)						
Okoumé							
Purchases in domestic market	1,530	1,779	1,836	1,341	1,124	1,693	1,032
Total sales	1,582	1,810	1,878	1,030	1,577	1,594	...
Exports	1,553	1,788	1,850	1,026	1,565	1,584	931
Sales in domestic market	29	19	27	4	12	12	...
Variation in stock	-52	-31	-42	311	25	99	...
Ozigo							
Purchases in domestic market	141	124	157	52	61	69	98
Total sales	479	124	164	50	49	72	...
Exports	158	119	140	48	48	71	18
Sales in domestic market	5	5	9	2	1	1	...
Variation in stock	-21	...	8	2	15	-3	...
	(In thousands of CFA francs per cubic meter)						
Average purchase price							
Okoumé	64	60	65	63	63	64	66
Ozigo	47	42	44	40	39	43	39
Average export price							
Okoumé	81	81	84	71	93	96	...
Ozigo	57	59	62	52	64	63	...

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ Société Nationale des Bois du Gabon. Authorities have provided data through 2000, and partial data for 2001.

Table 14. Gabon: Production in Agriculture, Livestock, and Fishing, 1995–2000 1/

	1995	1996	1997	1998	1999	2000
	(In thousands of tons)					
Agriculture						
Cassava	202.0	214.0	215.8	227.0	255.5	228
Plantains	237.0	258.0	263.3	274.0	267.8	274.5
Taro	53.5	55.0	55.2	59.0	57.0	60
Rice	0.1	0.1	0.1	0.1	0.1	0.1
Maize	28.9	29.1	28.1	27.1	26.8	27.4
Peanuts	15.9	17.1	17.9	19	19.3	17.6
Palm oil	85.5	88.8	86.9	66.3	55.7	41.5
Coffee	0.1	0.1	0.2	0.3	0.5	0.2
Cocoa	1.8	1.8	0.7	0.5	0.5	0.5
Soya	1.5	0.6	1.9	0.3	...	...
Sugarcane	199.3	185.0	190.6	...	152.1	236.5
Refined sugar	14.4	16.1	14.4	23.8	18.5	19.8
	(In thousands of heads)					
Livestock population						
Cattle	36.1	33.0	30.5	20.2	19.5	6.5
Sheep	150.1	25.9	18.6	...	...	...
Goats	580.0	40.7	25.4	...	...	...
Pigs	150.0	180.7	220.0	...	...	...
	(In thousands of tons)					
Industrial fishing						
Fish	10.2	10.4	8.8	11.5	10.3	16.1
Shrimp	0.8	0.9	1.6	2.5	1.1	2.7

Sources: Ministry of Agriculture, Livestock, and Rural Development; Ministry of Water and Forests, Fishing and Reforestation, Environment and Protection of Nature; and Ministry of Economy, Finance, Budget, and Privatization.

1/ Authorities have provided data through 2000.

Table 15. Gabon: Industrial Production, 1994–2000 1/

(Period averages; 1989 = 100)

	Food-stuffs	Beverages and Tobacco	Textile Products	Wood Products	Printing	Chemical Products	Refining	Cement	Electricity and Water	General Index
1994	91.3	98.0	60.5	112.4	150.8	86.2	107.9	129.0	108.0	105.1
I	48.9	101.9	48.8	155.2	129.7	82.9	131.5	115.7	107.8	...
II	57.9	97.4	60.0	127.4	184.3	79.5	85.3	125.4	111.0	...
III	172.5	94.9	51.8	72.0	116.5	94.9	114.5	148.7	102.4	...
IV	85.9	98.0	57.4	95.1	172.6	87.5	100.4	126.1	110.9	...
1995	88.8	104.4	54.9	173.5	157.5	85.2	137.9	133.8	113.6	116.0
I	63.2	105.1	48.6	167.0	164.1	73.9	131.0	90.6	113.8	...
II	57.5	110.0	61.3	186.4	141.1	79.8	122.5	124.8	116.3	...
III	176.0	103.9	52.3	140.0	164.1	110.1	147.2	182.5	110.5	...
IV	88.8	98.6	57.4	200.6	159.4	76.9	151.1	137.2	113.9	...
1996	103.7	106.4	53.9	192.1	154.8	156.0	137.9	161.6	119.6	125.5
I	53.7	100.1	53.0	207.8	112.7	134.3	116.8	130.4	124.0	...
II	65.9	107.7	54.9	216.8	128.4	175.6	155.7	174.3	124.8	...
III	215.3	109.3	54.7	155.6	128.5	167.0	147.1	179.5	111.2	...
IV	79.8	108.6	53.1	188.1	249.5	146.9	132.1	162.3	118.3	...
1997	102.7	108.9	84.9	160.5	141.9	168.9	148.2	174.6	121.5	126.9
I	47.8	108.5	102.3	166.8	126.2	144.7	176.5	166.2	122.4	...
II	58.1	106.5	0.0	170.4	143.5	166.4	83.9	178.0	122.8	...
III	204.6	109.5	88.7	161.2	128.5	197.3	161.3	192.5	114.7	...
IV	100.4	111.1	0.0	143.6	169.3	167.4	171.0	161.8	126.2	...
1998	98.2	120.3	...	145.2	170.3	151.1	165.4	172.9	138.4	136.4
I	61.0	115.8	...	162.2	152.0	144.9	170.2	156.4	139.2	...
II	53.7	119.9	...	155.6	160.8	143.1	145.9	169.6	143.3	...
III	168.9	122.9	...	136.4	166.4	180.2	189.7	215.1	132.1	...
IV	109.2	122.6	...	126.3	201.8	136.1	155.7	150.6	138.8	...
1999	87.5	121.6	...	198.5	179.3	149.9	181.8	141.2	138.3	139.5
I	60.3	126.6	...	209.0	169.7	122.2	189.5	122.3	141.7	...
II	51.9	125.2	...	245.2	184.7	167.8	164.5	159.6	144.4	...
III	175.7	111.4	...	194.1	202.7	162.4	183.5	172.8	132.4	...
IV	62.3	123.2	...	145.9	159.9	147.2	189.6	110.1	134.9	...
2000	97.0	134.1	...	126.9	201.4	141.4	132.7	144.5	134.6	133.0
I	42.5	127.3	...	144.3	186.2	98.6	157.9	117.3	135.3	...
II	47.8	139.7	...	140.1	189.2	153.2	157.2	124.0	135.8	...
III	219.1	129.4	...	94.1	190.0	175.3	149.9	184.3	126.8	...
IV	78.5	139.8	...	128.9	240.3	138.2	65.8	152.4	140.4	...

Source: Ministry of Planning, Development Programming, and Land Development.

1/ Revised index; authorities have provided data through 2000.

Table 16. Gabon: Wood Production and Prices, 1995–2000 1/

	1995	1996	1997	1998	1999	2000
	(In thousands of cubic meters)					
Intermediate consumption of logs						
Total	203.5	252.0	282.4	359.3	...	...
Wood peeling	118.1	113.6	128.7	126.4	...	...
Sawing	85.4	138.4	153.7	232.9	...	...
Production						
Plywood	53.5	51.5	58.3	54.3	64.0	37.4
Sawed wood	41.0	30.1	30.4	37.7	34.7	49.2
	(In thousands of CFA francs per cubic meter)					
Production prices						
Plywood	285.6	282.6	275.3	313.7	350.0	345.6
Sawed wood	167.1	113.4	173.8	111.5	...	...

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ Authorities have provided data through 2000.

Table 17. Gabon: Production and Distribution of Electricity and Water, 1995–2001 1/

	1995	1996	1997	1998	1999	2000	2001 Est.
Electricity	(In millions of kilowatt-hours)						
Production	1,024	1,040	1,082	1,161	1,145	1,129	987
Libreville	655	665	697	759	762	771	667
Port-Gentil	171	167	168	184	177	165	137
Franceville	138	143	145	146	134	131	127
Other	61	65	72	72	72	62	56
Sales and transfers	811	887	917	1,011	1,056	999	879
Low voltage	367	407	453	519	533	521	444
Medium voltage	412	447	430	453	482	434	390
Internal transfers	33	33	34	39	41	44	45
Number of subscriptions	84,113	94,422	99,621	104,155	115,245	118,405	123,972
Low voltage	83,681	93,984	99,164	103,661	114,553	117,672	123,189
Medium voltage	432	438	457	494	692	733	783
Water	(In millions of cubic meters, unless otherwise indicated)						
Production	40.3	41.9	42.3	45.9	47.4	49.9	44.8
Libreville	27.9	29.1	29.0	31.2	33.3	34.9	31.5
Port-Gentil	4.3	4.5	4.5	4.7	4.5	5.2	4.8
Franceville	2.9	3.2	2.0	2.4	2.5	5.7	5
Other	5.2	5.1	6.8	7.6	7.1	4	3.5
Sales and transfers	30.3	34.9	34.5	39.7	41.0	41.8	38.0
Private customers	25.3	29.1	29.5	34.1	35.2	...	...
Industrial customers	4.3	5.2	4.5	5.2	5.4	...	...
Internal transfers	0.7	0.6	0.5	0.4	0.4	0.3	...
Number of subscriptions	44,295	51,489	59,200	64,925	72,954	75,565	75,809
Private customers	41,489	43,326	49,589	55,903	63,572	...	...
Industrial customers	2,806	8,163	9,611	9,022	9,382	...	...
Memorandum items:	(In billions of CFA francs)						
Turnover	54.0	59.6	57.8	61.1	59.2	...	...
Electricity	45.0	48.4	48.5	51.6	49.8	...	...
Water	9.0	11.2	9.3	9.5	9.4	...	...

Source: Société d'Energie et d'Eau du Gabon (SEEG).

1/ Data for 2000 and 2001 are still being compiled.

Table 18. Gabon: Production and Consumption of Refined Oil Products, 1995–2001 1/

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In thousands of metric tons)						
Production of refined products	749.4	745.1	695.8	751.2	786.8	593.4	584.3
Butane	10.7	10.6	9.7	10.6	11.4	8.2	6.9
High-test gasoline	79.1	78.7	71.1	78.3	77.7	60.2	59.9
Regular gasoline	4.7	4.6	4.2	4.0	0.0	0.0	0.0
Naphtha	5.0	4.0	3.0	0.0	0.0	0.0	0.0
Kerosene	91.7	91.3	81.1	89.3	96.8	67.5	67.4
Diesel and gas oil	241.2	240.2	233.3	245.9	256.7	194.7	187.4
Fuel oil and asphalt	317.0	315.7	293.4	323.1	344.2	262.8	262.7
Sales of refined products by SOGARA							
Domestic market							
Butane	13.6	14.7	16.0	16.6	17.5	17.2	17.7
Fuel oil and asphalt	28.8	37.4	32.8	30.9	24.9	54.5	44.6
	(In thousands of cubic meters)						
High-test gasoline	41.1	39.0	51.0	56.3	63.1	...	...
Regular gasoline	4.9	5.6	5.2	5.1	0.0	...	...
Refined oil	38.3	36.1	36.7	32.2	34.9	...	...
Kerosene	63.5	67.5	101.5	99.1	91.3	...	...
Diesel and gas oil	244.7	267.2	298.3	348.4	302.8	...	...
	(In thousands of tons)						
Exports 1/							
Fuel oil	164.4	170.1	186.0	210.8	264.7	...	...
	(In thousands of cubic meters)						
High-test gasoline	17.9	18.2	15.0	13.2	13.6	...	...
	(In CFA francs per liter)						
Price structure for premium gasoline 2/							
1. C.I.F. price (Platt's)	...	...	...	...	...	172.0	194.7
2. Customs duty and other protection	...	...	...	...	...	20.1	22.8
3. Ex-refinery price (1+2)	...	...	...	...	...	192.1	217.5
4. Adjustment for transportation, distribution and, other costs	...	...	...	...	...	58.4	57.2
5. VAT and other taxes	...	...	...	...	...	94.4	99.0
6. Equalization fund	...	...	...	...	...	55.1	56.3
7. Retail price (3+4+5+6)	...	...	...	...	...	400.0	430.0

Source: Société Gabonaise de Raffinage (SOGARA).

1/ Authorities have provided export data through 1999, and partial data for 2000–01.
2/ End of year; for 2001, end of April.

Table 19. Gabon: Transportation, 1995–2000 1/

(In thousands of tons, unless otherwise indicated)

	1995	1996	1997	1998	1999	2000
Railroad transportation						
Number of passengers	175,788	191,909	195,492	215,000	...	...
Parcels	4.7	4.8	5.0	...	...	...
Merchandise	3,012.9	2,973.0	2,959.0	...	...	...
Total	3,016.5	2,977.8	2,964.0	...	...	...
Merchandise traffic	3,014	2,973	2,944	3,291	2,893	3,130
Timber	943	821	865	806	890	1,061
Clinker	23	27	37	39	27	26
Quarry materials	106	58	72	186	...	27
Oil	15	39	44	39	25	30
Manganese	1,845	1,952	1,859	2,110	1,951	1,885
Other	82	76	67	111	...	101
Number of passengers (thousands)	176	192	195	178	202	237
Merchandise traffic in harbors						
Owendo						
In	477.9	540.5	570.8	760.2	704.8	782.6
Out	2,816.1	2,937.2	2,728.1	2,905.5	2,939.4	3,198.1
Total	3,294.0	3,477.6	3,269.7	3,665.7	3,644.4	3,980.70
Port-Gentil						
In	155.0	158.6	208.2	136.2	147.1	184.9
Out	17,293.1	17,533.3	18,756.9	9,792.6	14,778.1	13,428
Total	17,448.2	17,692.0	18,965.1	9,928.8	14,925.2	13,613
Air transportation						
Number of passengers	580,168	639,519	754,181	870,939	807,159	753,557
Number of flights	37,986	37,227	41,413	44,436	38,766	38,828
Shipping and mailing	12	15	17	18	15	15

Source: Ministry of Planning, Development Programming, and Land Development.

1/ Authorities have provided incomplete data through 2001.

Table 20. Gabon: Accounts of the Corporate Sector, 1995–2000 1/

	1995	1996	1997	1998	1999	2000
Total 2/	(In billions of CFA francs)					
Production	2,590.3	2,670.0	2,953.2	2,381.7	2,759.6	3,853.0
Value added	1,561.1	1,901.2	2,018.6	1,433.9	1,816.1	2,419.8
Wage bill	353.4	370.6	400.9	399.6	412.6	421.7
Investment	370.5	327.1	539.3	569.1	450.1	635.6
Oil sector 3/						
Production	1,445.0	1,418.8	1,463.7	885.0	1,232.8	2,058.8
Value added	1,021.0	1,258.9	1,284.9	708.9	1,047.5	1,615.0
Wage bill	97.5	63.7	65.6	57.5	62.6	65.4
Investment	273.3	202.2	372.6	356.3	256.1	386.9
Non-oil sector						
Production	1,145.3	1,251.2	1,489.5	1,496.7	1,526.8	1,794.2
Value added	540.1	642.3	733.7	725.0	768.6	804.8
Wage bill	255.9	306.9	335.4	342.1	350.0	356.3
Investment	97.2	125.0	166.7	212.8	194.0	248.7
Total 2/	(In percent)					
Value added/production	60.3	71.2	68.4	60.2	65.8	62.8
Wage bill/value added	22.6	19.2	19.9	27.9	22.7	17.4
Investment/value added	23.7	20.7	26.7	39.7	24.8	26.3
Oil sector 3/						
Value added/production	70.7	88.7	87.8	80.1	85.0	78.4
Wage bill/value added	9.5	7.3	5.1	8.1	6.0	4.0
Investment/value added	26.8	21.0	29.0	50.3	24.4	24.0
Non-oil sector						
Value added/production	47.2	51.3	49.3	48.4	50.3	44.9
Wage bill/value added	47.4	46.4	45.7	47.2	45.5	44.3
Investment/value added	18.0	20.2	22.7	29.4	25.2	30.9

Source: Ministry of Planning, Development Programming, and Land Development.

1/ Authorities have provided data through 2000.

2/ Excluding financial institutions.

3/ The corporate oil sector comprises companies involved in oil extracting, refining, research, and oil services. The oil sector includes some small unincorporated enterprises (see Table 1).

Table 21. Gabon: Price Indices in Libreville, 1995–2001 1/

(Index 1975=100; period averages)

	Food-stuffs	Clothing	Housing	Hygiene and Medical Care	Transport and Telecom-munications	Leisure and Other	General Index	Local Products	Imported Products
Index for African households 2/									
1995	406.3	325.3	406.0	1058.3	690.1	540.3	431.2	383.2	522.4
1996	410.6	369.6	396.9	633.2	630.5	700.0	444.4	400.5	515.6
1997	436.5	384.6	400.2	644.4	686.1	701.4	454.4	423.5	535.4
1998	449.7	385.5	393.9	631.7	709.1	704.5	464.9	429.9	541.4
1999	446.8	379.6	390.5	627.9	708.3	705.3	461.6	427.9	534.9
2000	454.0	377.5	398.1	616.9	741.2	695.0	463.5	435.1	538.6
2001	467.8	365.7	401.1	596.2	727.5	695.1	473.2	443.9	534.6
Memorandum item:									
Weights used in the index for African households	547.0	175.0	130.0	19.0	63.0	66.0	1,000.0	656.0	344.0

Source: Ministry of Planning, Development Programming, and Land Development.

1/ From 1997 onward, the consumer price index (CPI) is computed based on the index for African households. The index for high-income families was discontinued in September 1997. Work is in progress to update the CPI basket and to base it on a more recent base year.

2/ Index of 125 items.

Table 22. Gabon: Salaried Employment in the Formal Sector, 1995–2000 1/

	1995	1996	1997	1998	1999	2000
	(Number of employees)					
Public sector	66,503	66,735	65,709	69,516	66,180	65,827
Civil service	47,715	48,484	49,476	53,620	50,650	50,452
Central government	36,172	37,040	37,693	40,486	40,136	39,944
Local governments	3,379	3,500	3,758	3,758	3,890	3,890
Temporary workers	8,164	7,944	8,025	9,376	6,756	6,618
Public enterprises 2/	18,788	18,251	16,233	15,896	15,530	15,375
Private sector	31,362	34,829	37,745	39,062	40,449	41,507
Total employment	97,865	101,564	103,454	108,578	106,629	107,334
	(Annual percentage changes)					
Public sector	3.5	0.3	-1.5	5.8	-4.8	-0.5
Civil service	3.9	1.6	2.0	8.4	-5.5	-0.4
Central government	5.7	2.4	1.8	7.4	2.3	-0.5
Local governments	-9.9	3.6	7.4	0.0	3.5	0.0
Temporary workers	2.5	-2.7	1.0	16.8	-36.5	-2.0
Public enterprises 2/	2.6	-2.9	-11.1	-2.1	-2.3	-1.0
Private sector	6.2	11.1	8.4	3.5	3.6	2.6
Total employment	4.4	3.8	1.9	5.0	-1.8	0.7
	(In percent of total employment)					
Public sector	68.0	65.7	63.5	64.0	62.1	61.3
Civil service	48.8	47.7	47.8	49.4	47.5	47.0
Central government	37.0	36.5	36.4	37.3	37.6	37.2
Local governments	3.5	3.4	3.6	3.5	3.6	3.6
Temporary workers	8.3	7.8	7.8	8.6	6.3	6.2
Public enterprises 2/	19.2	18.0	15.7	14.6	14.6	14.3
Private sector	32.0	34.3	36.5	36.0	37.9	38.7

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ Authorities have provided data through 2000.

2/ Including three public agencies, namely the National Social Security Fund (Caisse Nationale de Nationale de Sécurité Sociale (CNSS)), the National Security Guarantee Fund (Caisse Garantie Sociale (CNGS)), and the International Medical Research Center of Franceville (Centre International de Recherches Médicales de Franceville (CIRMF)).

Table 23. Gabon: Salaried Employment by Sector of Activity, 1995–99 1/

	1995	1996	1997	1998	1999
	(Number of employees)				
Primary sector	12,619	13,442	13,332	13,492	14,400
Agriculture	2,216	2,090	2,075	2,162	2,168
Oil and oil research	1,742	1,799	1,733	1,797	1,581
Mining	1,842	1,796	1,575	1,531	1,419
Forestry and wood industries	6,819	7,757	7,949	8,002	9,232
Secondary sector	12,263	12,792	13,224	13,338	13,042
Agro-industries	2,669	2,483	2,202	2,249	2,270
Other industries	3,221	3,572	3,566	3,532	3,486
Electricity and refining	2,022	1,911	1,912	1,921	1,921
Construction	4,351	4,826	5,544	5,636	5,365
Tertiary sector	72,983	75,330	76,898	81,748	81,725
Transportation	9,550	9,804	9,530	9,763	9,494
Services	8,385	9,462	10,127	10,245	11,186
Commerce	5,338	5,577	5,689	5,979	5,867
Financial institutions	1,995	2,003	2,076	2,141	1,990
Civil service 2/	47,715	48,484	49,476	53,620	53,188
	(In percent of total employment)				
Primary sector	12.9	13.2	12.9	12.4	13.2
Secondary sector	12.5	12.6	12.8	12.3	11.9
Tertiary sector	74.6	74.2	74.3	75.3	74.9
Memorandum items:					
Total employment	97,865	101,564	103,454	108,578	109,167
Public sector	66,503	66,735	65,709	69,516	68,718
Civil service 2/	47,715	48,484	49,476	53,620	53,188
Public enterprises	18,788	18,251	16,233	15,896	15,530
Private sector	31,362	34,829	37,745	39,062	40,449

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ Authorities have provided data through 1999.
2/ Comprising the central and local government employees.

Table 24. Gabon: Financial Performance of Public Enterprises, 1995–98 1/

(In millions of CFA francs, unless otherwise indicated)

	Acronym	Total Equity Base	Government Share in Total 2/	Net Income				Employees			
				1995	1996	1997	1998	1995	1996	1997	1998
Agriculture, forestry, and livestock		26,797	62	-5,824	313	-9,783	18,290	4,645	4,912	4,694	4,110
Société Agricole de Port Gentil	AGRIPOG	120	55	-18	-14	-204	-405	225	216	205	201
Société de Développement d'Agriculture et d'Elevage au Gabon	AGROGAB	2,788	96	-1,269	-1,416	-3,599	...	1,235	1,235	1,108	1,108
Compagnie Forestière du Gabon	CFG	6,785	52	-845	698	-956	...	713	723	778	808
Société des Eaux Minerales de Leconi	EAULECO	557	54	-311	23	...	...	40	41	50	50
Société de Développement de l'Hévéaculture au Gabon	HEVEGAB	5,500	95	-72	-53	170	-2,735	783	732	779	747
Société Industrielle d'Agriculture et d'Elevage de Boumango	SIAEB	2,100	35	-2,054	-812	-1,353	...	240	241	220	224
Société Meunière et Agricole du Gabon	SMAG	910	39	-1,068	-100	101	281	410	350	195	227
Société Nationale des Bois du Gabon	SNBG	4,000	51	410	2,356	-3,063	-15,215	293	271	309	290
Société de Café et de Cacao du Gabon	SOCAGAB	1,250	66	-8	-122	-43	-216	40	38	38	38
Société Gabonaise de Développement d'Elevage	SOGADEL	2,287	94	...	...	...	...	...	511	457	417
Société Sucrière du Haut-Ogooué	SOSUHO	500	41	-589	-247	-836	...	666	554	555	...
Transportation		396,786	80	-422	8,851	-9,250	118	3,188	4,061	4,111	4,069
Compagnie Nationale Air Gabon	AIR GABON	6,500	80	-1,644	584	-97	50	875	1,192	1,246	1,238
Compagnie Nationale de Navigation Intérieure	CNI	500	100	...	...	...	...	...	55	55	55
Office du Chemin de Fer Transgabonais	OCTRA 3/	346,855	100	...	-10,540	-10,779	...	1,894	1,968	1,959	1,959
Office des Ports et Rades du Gabon	OPRAG	40,831	100	...	481	970	...	...	465	473	473
Société Nationale d'Acconage et de Transit	SNAT	600	51	153	203	348	68	381	340	337	344
Société Nationale de Transports Maritimes	SONATRAM	1,500	51	1,069	421	308	...	38	41	41	...

Table 24. Gabon: Financial Performance of Public Enterprises, 1995–98 1/

(In millions of CFA francs, unless otherwise indicated)

	Acronym	Total Equity Base	Government Share in Total 2/	Net Income				Employees			
				1995	1996	1997	1998	1995	1996	1997	1998
Services		3,041	54	2,031	3,254	4,827	1,933	959	427	896	389
Africa No. 1	AFRICA 1	100	35	92	169	121	-1,896	95	93	137	126
Aéroport de Libreville	ADL	340	26	137	148	545	560	98	105	110	120
Laboratoire du Bâtiment et des Travaux Publics	LBTPG	320	100	2	-35	-131	...	34	38	39	39
Société d'Exploitation Commerciale Africaine Société Gabonaise de Distribution	CECAGADIS	437	29	1,751	1,336	1,395	1,927	528	...	433	...
Société Gabon Informatique	GABINFORM	364	36	-73	...	...	...	40	40	...	...
Société de l'Hotel de Mandji	SHM	630	55	-72	-19	330	...	70	69	77	...
Société Nationale Immobilière	SNI	750	77	136	1,555	2,418	1,153	75	61	68	70
Société Nationale de Presse et d'Edition	SONAPRESSE	100	73	58	100	149	189	19	21	32	34
Energy and petroleum		4,550	41	-22	2,920	16	3,947	2,135	1,986	509	512
Société Pizo de Formulation de Lubrifiants	PIZOLUB	500	49	151	15	-216	-229	33	25	26	27
Société Gabonaise d'Entrepôt des Produits Pétroliers	SGEPP	900	25	394	915	964	1,117	72	80	80	86
Société Gabonaise de Raffinage	SOGARA	1,200	25	285	404	-732	3,059	416	376	403	399
Société d'Energie et d'Eau du Gabon	SEEG 4/	1,950	64	-852	1,586	...	...	1,614	1,505	...	...

Table 24. Gabon: Financial Performance of Public Enterprises, 1995–98 1/

(In millions of CFA francs, unless otherwise indicated)

	Acronym	Total Equity Base	Government Share in Total 2/	Net Income				Employees			
				1995	1996	1997	1998	1995	1996	1997	1998
Financial and social security		14,867	89	2,259	2,381	...	...	234	3,032	3,027	3,029
Banque Gabonaise de Développement	BGD	10,500	69	2,758	2,400	...	...	204	201	192	194
Banque Nationale de Crédit Rural	BNCR	1,017	98	-499	-19	...	...	30	34	43	43
Crédit Foncier du Gabon	CREFOGA	2,000	66	...	...	...	...	...	48	43	43
Société Nationale d'Investissement du Gabon	SONADIG	100	100	...	...	...	...	...	15	15	15
Caisse Nationale de Garantie Sociale	CNGS	1,250	100	...	...	...	...	...	134	134	134
Caisse Nationale de Sécurité Sociale	CNSS	...	100	...	...	...	...	...	2,600	2,600	2,600
Post and telecommunications		601	100	525	-235	761	14,220	2,103	2,180	2,157	2,392
Office des Postes et Télécommunications	OPT	601	100	525	-235	761	14,220	2,103	2,180	2,157	2,392
Industry		12,905	75	-843	111	-39	-44	326	326	325	327
Société des Ciments du Gabon 5/	CIMENTGAB	12,505	91	-981	88	-2	...	305	305	307	307
Société Gabonaise de Fûts	SOGAFUTS	400	59	138	23	-37	-44	21	21	18	20
Total		459,547	64	-2,296	17,595	-13,468	38,464	13,590	16,924	15,719	14,828

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ Authorities have provided data through 1998.
2/ In percent of total.
3/ The management of The rail roads was privatized end-1999 under a new company (Transgabonais).
4/ Privatized in 1997.
5/ Privatized in 2000.

Table 25. Gabon: Fiscal Operations of the Central Government, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
			(In billions of CFA francs)				
Total revenue and grants	730.6	755.1	1,029.8	912.1	813.6	1,207.6	1,190.1
Revenue	730.6	755.1	1,029.8	912.1	813.6	1,207.6	1,190.1
Oil revenue	442.4	449.1	643.9	498.3	368.6	814.7	781.4
Non-oil revenue	288.2	306.0	386.0	413.8	445.0	392.9	408.8
Direct taxes	76.8	80.2	100.3	107.6	91.6	81.9	99.0
Indirect taxes	61.7	43.0	72.5	72.8	58.2	80.2	70.7
Taxes on international trade	128.7	147.8	190.9	214.5	164.6	214.7	211.0
Import duties	110.7	125.2	168.3	200.8	146.7	186.1	184.1
Export taxes	18.0	22.6	22.6	13.7	17.9	28.6	26.9
Other revenue	21.0	35.0	22.3	18.8	130.6	16.1	28.2
Foreign grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	660.9	684.3	980.2	1,281.6	779.5	786.1	934.2
Current expenditure	524.9	530.0	630.6	918.8	660.6	674.8	790.9
Wages and salaries	178.1	184.8	195.7	204.9	214.0	216.6	213.4
Purchases of goods and services	112.9	142.6	140.1	204.2	124.2	128.3	135.5
Transfers and subsidies	23.0	21.6	102.8	308.1	126.5	117.8	139.2
Interest payments	211.0	181.0	192.0	201.6	195.9	212.0	302.8
Capital expenditure	136.0	154.3	349.6	362.8	118.9	105.1	118.3
Primary balance	280.6	251.8	241.6	-167.9	230.0	633.5	558.7
Overall balance (on a commitment basis)	69.7	70.8	49.6	-369.4	34.1	421.5	255.9
Change in arrears	-53.6	-106.7	-54.0	80.9	3.3	-276.2	-42.0
External	0.0	0.0	0.0	97.8	103.5	-201.3	28.9
Domestic	-53.6	-106.7	-54.0	-16.8	-100.2	-74.9	-70.9
Overall balance (on a cash basis)	16.1	-35.9	-4.4	-288.5	37.4	145.4	214.0
Financing	-16.1	35.9	4.4	288.5	-37.4	-145.4	-214.0
External (net)	64.4	72.1	-4.0	-14.2	-5.1	160.2	-209.2
Drawings	83.0	80.7	53.8	28.9	29.2	22.7	5.1
Project financing	45.1	45.7	53.8	28.9	29.2	22.7	5.1
Program financing	37.9	35.0	0.0	0.0	0.0	0.0	0.0
Amortization	-212.9	-181.4	-200.7	-191.6	-194.5	-242.1	-297.7
Arrears (- = reduction)	0.0	0.0	0.0	129.5	142.1	-271.6	31.0
Debt rescheduling	171.8	150.8	122.9	0.0	0.0	649.5	29.4
Debt cancellation	22.4	21.9	20.0	19.0	18.0	17.0	17.0

Table 25. Gabon: Fiscal Operations of the Central Government, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Domestic (net)	-80.4	-36.2	8.4	302.7	-32.3	-305.7	-4.7
Banking system	13.3	-0.7	-31.6	122.0	-24.6	-175.6	144.7
Nonbank sources	-93.7	-35.5	40.0	180.8	-7.8	-130.1	-149.4
	(In percent of total GDP)						
Total revenue (excluding grants)	17.9	15.4	20.7	18.8	13.0	22.8	23.1
Oil revenue	11.6	10.5	12.4	15.6	15.7	11.0	12.1
Non-oil revenue	26.7	23.5	31.5	48.5	27.5	22.0	27.6
Total expenditure	18.2	17.3	25.4	40.8	20.6	16.0	18.6
Total expenditure, excluding interest	21.2	18.2	20.3	34.7	23.3	18.9	23.3
Current expenditure	7.2	6.3	6.3	7.7	7.5	6.1	6.3
Wage bill	5.5	5.6	7.8	19.4	8.8	6.9	8.1
Other current spending	8.5	6.2	6.2	7.6	6.9	5.9	8.9
Interest	5.5	5.3	11.2	13.7	4.2	2.9	3.5
Capital expenditure	0.0	0.0	0.0	2.3	1.9	1.8	1.9
Primary balance (on a commitment basis)	2.8	2.4	1.6	-14.0	1.2	11.8	7.6
Overall balance (on a commitment basis)	0.6	-1.2	-0.1	-10.9	1.3	4.1	6.3
	(In percent of non-oil GDP)						
Non-oil revenue	12.1	11.5	10.8	10.8	12.1	11.8	11.0
Wage bill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:	(In billions of CFA francs, unless otherwise indicated)						
GDP at market prices	1,471.0	1,611.7	1,818.7	1,902.7	1,772.6	1,841.0	1,937.4
Non-oil GDP at market prices	2,782.4	2,582.1	2,686.3	2,688.5	2,919.4	2,650.8	2,402.6
Stock of public debt (including domestic)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stock of public debt including IMF (in percent of GDP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 26. Gabon: Central Government Revenue and Grants, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
Total revenue and grants	730.6	755.1	1,029.8	912.1	813.6	1,207.6	1,190.1
Total revenue	730.6	755.1	1,029.8	912.1	813.6	1,207.6	1,190.1
Oil revenue	391.7	482.5	643.9	498.3	368.6	814.7	781.4
Profits tax	191.0	269.3	337.8	272.6	172.3	553.3	443.2
Royalties	158.4	182.7	198.6	129.5	165.8	223.3	180.2
Production sharing and assets	12.3	15.5	6.0	4.4	7.6	6.5	88.5
Dividends	30.0	15.0	60.5	48.8	22.8	30.8	60.6
Other	...	..	41.0	43.0	...	0.9	8.8
Non-oil revenue 1/	288.2	306.0	386.0	413.8	445.0	392.9	409.5
Tax revenue	277.7	293.9	377.1	405.8	420.9	384.6	395.3
Direct taxes	76.8	80.2	100.3	107.6	91.6	81.9	99.0
Company taxes	42.7	45.0	61.2	69.2	53.7	55.7	67.8
Mining companies	...	...	...	...	...	...	...
Other	42.7	...	...	...	...	...	...
Individual taxes	34.1	35.2	39.0	38.4	37.9	26.2	31.2
Individual income tax	16.1	...	...	...	...	...	...
Complementary taxes	13.3	...	...	...	...	...	...
Other taxes	2.8	...	...	...	...	...	...
Taxes on wages and salaries	2.0	...	...	...	...	...	...
Indirect taxes	61.7	43.0	72.5	72.8	58.2	80.2	70.7
Of which							
Value-added tax	29.2	59.5	62.0	57.0	44.4	71.9	60.7
Turnover taxes	...	...	...	...	...	...	...
Domestic turnover	45.9	...	...	...	...	...	...
Tax on transactions	5.7	...	...	...	...	...	...
Taxes on goods and services	10.1	13.6	8.0	13.8	13.8	8.2	9.0
Of which							
Taxes on refined oil products	4.3	0.0	2.5	2.5	2.0	3.8	2.3

Table 26. Gabon: Central Government Revenue and Grants, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
Taxes on international trade							
and transactions	128.7	147.8	190.9	214.5	164.6	214.7	211.0
Import taxes	110.7	125.2	168.3	200.8	146.7	186.1	184.1
Of which							
Tax on domestic turnover							
and value-added tax 2/	43.1	62.4	80.1	95.4	71.9	83.6	90.2
Export duties	18.0	22.6	22.6	13.7	17.9	28.6	26.9
Other revenue	21.0	35.0	22.3	18.8	130.6	16.1	28.9
Other taxes	10.5	22.9	13.4	10.8	106.5	7.8	15.6
Taxes on rent incomes	8.3	0.0	0.0	0.0	0.0	0.0	0.0
Property change taxes	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Nontax revenue	10.4	12.1	8.9	8.0	24.9	8.3	13.3

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ For 1999, includes CFAF 94.9 billion (3.4 percent of GDP) in tax arrears recovered as a result of the audit of the domestic public debt carried out by the Ministry of Economy, Finance, Budget, and Privatization during that year.

2/ Tax on domestic turnover until March 1995, after which it is replaced by value-added tax.

Table 27. Gabon: Central Government Revenue, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Total revenue	730.6	755.1	1,029.8	912.1	813.6	1,207.6	1,190.1
Oil revenue 1/	442.4	449.1	643.9	498.3	368.6	814.7	781.4
Non-oil revenue	288.2	306.0	386.0	413.8	445.0	392.9	408.8
Taxes on income and net profits	76.8	80.2	100.3	107.6	91.6	81.9	99.0
Taxes on goods and services	61.7	43.0	72.5	72.8	58.2	80.2	70.7
Taxes on international trade	128.7	147.8	190.9	214.5	164.6	214.7	211.0
Other revenue	21.0	35.0	22.3	18.8	130.6	16.1	28.2
	(In percent of total revenue)						
Oil revenue	60.6	59.5	62.5	54.6	45.3	67.5	65.7
Non-oil revenue	39.4	40.5	37.5	45.4	54.7	32.5	34.3
Taxes on income and net profits	10.5	10.6	9.7	11.8	11.3	6.8	8.3
Taxes on goods and services	8.4	5.7	7.0	8.0	7.2	6.6	5.9
Taxes on international trade	17.6	19.6	18.5	23.5	20.2	17.8	17.7
Other revenue	2.9	4.6	2.2	2.1	16.1	1.3	2.4
	(In percent of GDP)						
Total revenue	29.5	25.9	33.1	34.5	28.7	33.8	35.1
Oil revenue	17.9	15.4	20.7	18.8	13.0	22.8	23.1
Non-oil revenue	11.6	10.5	12.4	15.6	15.7	11.0	12.1
Taxes on income and net profits	3.1	2.8	3.2	4.1	3.2	2.3	2.9
Taxes on goods and services	2.5	1.5	2.3	2.8	2.0	2.2	2.1
Taxes on international trade	5.2	5.1	6.1	8.1	5.8	6.0	6.2
Other revenue	0.8	1.2	0.7	0.7	4.6	0.4	0.8
	(In percent of non-oil GDP)						
Non-oil revenue	10.4	11.9	14.4	15.4	15.2	14.8	17.0
Taxes on income and net profits	2.8	3.1	3.7	4.0	3.1	3.1	4.1
Taxes on goods and services	2.2	1.7	2.7	2.7	2.0	3.0	2.9
Taxes on international trade	4.6	5.7	7.1	8.0	5.6	8.1	8.8
Other revenue	0.8	1.4	0.8	0.7	4.5	0.6	1.2
Memorandum items:	(In billions of CFA francs)						
Nominal GDP	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
Total expenditure	660.9	684.3	980.2	1,281.6	779.5	786.1	934.2

Source: Staff calculations, based on data provided in Table 26.

1/ For 1999, includes CFAF 94.9 billion (3.4 percent of GDP) in tax arrears recovered as a result of the audit of the domestic public debt.

Table 28. Gabon: Central Government Expenditure, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Total expenditure	660.9	684.3	980.2	1,281.6	779.5	786.1	934.2
Current expenditure	524.9	530.0	630.6	918.8	660.6	674.8	790.9
Wages and salaries	178.1	184.8	195.7	204.9	214.0	216.6	213.4
Goods and other services	112.9	142.6	140.1	204.2	124.2	128.3	135.5
Transfers and subsidies	23.0	21.6	102.8	308.1	126.5	117.8	139.2
Interest payments	211.0	181.0	192.0	201.6	195.9	212.0	302.8
Capital expenditure	136.0	154.3	349.6	362.8	118.9	105.1	118.3
Net lending	0.0	0.0	0.0	0.0	0.0	6.2	25.1
	(In percent of total expenditure)						
Current expenditure	79.4	77.5	64.3	71.7	84.7	85.8	84.7
Wages and salaries	26.9	27.0	20.0	16.0	27.5	27.6	22.8
Goods and other services	17.1	20.8	14.3	15.9	15.9	16.3	14.5
Transfers and subsidies	3.5	3.2	10.5	24.0	16.2	15.0	14.9
Interest payments	31.9	26.4	19.6	15.7	25.1	27.0	32.4
Capital expenditure	20.6	22.5	35.7	28.3	15.3	13.4	12.7
Net lending	0.0	0.0	0.0	0.0	0.0	0.8	2.7
	(In percent of GDP)						
Total expenditure	44.9	42.5	53.9	67.4	44.0	42.7	48.2
Current expenditure	35.7	32.9	34.7	48.3	37.3	36.7	40.8
Wages and salaries	12.1	11.5	10.8	10.8	12.1	11.8	11.0
Goods and other services	7.7	8.9	7.7	10.7	7.0	7.0	7.0
Transfers and subsidies	1.6	1.3	5.7	16.2	7.1	6.4	7.2
Interest payments	14.3	11.2	10.6	10.6	11.1	11.5	15.6
Capital expenditure	9.2	9.6	19.2	19.1	6.7	5.7	6.1
Net lending	0.0	0.0	0.0	0.0	0.0	0.3	1.3
	(In percent of total revenue)						
Total expenditure	121.0	125.3	179.5	234.7	142.7	65.1	78.5
Current expenditure	96.1	97.0	115.5	168.2	121.0	55.9	66.5
Wages and salaries	32.6	33.8	35.8	37.5	39.2	17.9	17.9
Goods and other services	20.7	26.1	25.7	37.4	22.7	10.6	11.4
Transfers and subsidies	4.2	4.0	18.8	56.4	23.2	9.8	11.7
Interest payments	38.6	33.1	35.2	36.9	35.9	17.6	25.4
Capital expenditure	24.9	28.3	64.0	66.4	21.8	8.7	9.9
Net lending	0.0	0.0	0.0	0.0	0.0	0.5	2.1
Memorandum items:	(In billions of CFA francs)						
Nominal GDP	1,471.0	1,611.7	1,818.7	1,902.7	1,772.6	1,841.0	1,937.4
Total revenue	546.1	546.1	546.1	546.1	546.1	1,207.6	1,190.1

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 29. Gabon: Monetary Survey and Summary Accounts of
the Central Bank, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs; end of period)						
Stocks							
Net foreign assets	25.2	103.5	100.7	-46.0	-44.0	177.2	-8.1
Central bank	27.2	69.5	92.4	-54.4	-42.1	72.8	-46.0
Deposit money banks	-2.1	34.0	8.4	8.3	-1.9	104.4	37.9
Net domestic assets	332.0	317.3	367.5	505.6	491.0	350.1	574.8
Net domestic credit	454.9	439.8	503.0	631.8	606.3	455.6	660.2
Net credit to the public sector	237.0	225.4	197.1	315.4	286.6	98.6	241.0
Net credit to the government	239.4	238.7	207.1	329.1	304.5	128.9	273.6
Central bank	89.4	91.2	71.4	199.0	174.7	114.2	223.6
Deposit money banks	148.2	144.7	132.8	127.6	127.4	10.9	47.7
Post office savings	1.8	2.7	2.9	2.5	2.4	3.9	2.3
Claims on public agencies, net	-2.4	-13.3	-10.0	-13.7	-17.9	-30.3	-32.6
Credit to the economy	217.9	214.4	305.8	316.5	319.6	356.9	419.2
Other items, net	-123.0	-122.5	-135.5	-126.2	-115.3	-105.4	-85.4
Broad money	357.1	420.8	468.2	459.6	447.0	527.3	566.7
Currency outside banks	98.8	110.9	121.0	124.7	105.3	116.2	128.2
Demand deposits	118.4	165.1	177.2	158.4	163.6	204.3	204.0
Time deposits	139.9	144.8	170.0	176.5	178.2	206.9	234.5
Central bank							
Net foreign assets	27.2	69.5	92.4	-54.4	-42.1	72.8	-46.0
Assets	75.0	132.7	171.4	10.7	14.1	136.5	9.9
Liabilities	-47.8	-63.2	-79.1	-65.1	-56.2	-63.7	-56.0
Net domestic assets	98.7	76.4	75.5	206.5	182.1	119.1	230.5
Net credit to the government	89.4	91.2	71.4	199.0	174.7	114.2	223.6
Claims	101.9	123.6	87.5	211.1	200.8	157.3	248.2
Statutory advances	54.6	59.3	20.7	146.1	143.1	94.5	192.6
Use of IMF credit	47.3	62.7	65.2	63.4	56.0	62.8	55.6
Deposits	12.5	32.4	16.1	12.1	26.1	43.2	24.6
Claims on deposit money banks	3.7	0.7	0.0	8.1	11.6	0.2	3.1
Claims on nonbank institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other items, net	5.5	-15.6	4.2	-0.5	-4.2	4.7	3.9
Reserve money	125.9	146.0	167.9	152.2	140.0	191.9	184.5
Currency outside banks	98.8	110.9	121.0	124.7	105.3	116.2	128.2
Banks' reserves	27.1	35.1	46.9	27.5	34.8	75.7	56.3
Deposits at BEAC	22.0	25.6	32.7	18.2	18.3	53.6	36.2
Currency in vault	5.0	9.4	11.5	9.2	16.4	22.2	20.1

Table 29. Gabon: Monetary Survey and Summary Accounts of
the Central Bank, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
Memorandum items:	(In percent of beginning-of-period broad money)						
Monetary survey							
Net foreign assets	-13.7	21.9	-0.7	-31.3	0.4	49.5	-35.1
Net domestic assets	23.3	-4.1	11.9	29.5	-3.2	-31.5	42.6
Net domestic credit	18.0	-4.2	15.0	27.5	-5.6	-33.7	38.8
Net credit to the government	4.1	-0.2	-7.5	26.1	-5.3	-39.3	27.4
Credit to the economy	12.7	-1.0	21.7	2.3	0.7	8.3	11.8
Broad money	9.6	17.8	11.3	-1.8	-2.7	18.0	7.5
	(Annual percentage change, unless otherwise indicated)						
Credit to the economy	23.4	-1.6	42.6	3.5	1.0	11.7	17.4
Broad money	9.6	17.8	11.3	-1.8	-2.7	18.0	7.5
Nominal non-oil GDP	4.5	9.6	12.8	4.6	-6.8	3.9	5.2
Velocity for non-oil GDP							
End of period	4.1	3.8	3.9	4.1	4.0	3.5	3.4
Average	4.3	4.1	4.1	4.1	3.9	3.8	3.5
Foreign assets coverage ratio 1/	54.2	74.4	93.1	6.5	10.1	71.1	5.4

Source: Banque des Etats de l'Afrique Centrale, BEAC.

1/ Defined as Gabon's gross foreign assets with the BEAC (including Gabon's share in the operations account) over the monetary base.

Table 30. Gabon: Summary Accounts of the Central Bank, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs; end of period)						
Net foreign assets	27.2	69.5	92.4	-54.4	-42.1	72.8	-46.0
Assets	75.0	132.7	171.4	10.7	14.1	136.5	9.9
Liabilities	-47.8	-63.2	-79.1	-65.1	-56.2	-63.7	-56.0
Net domestic assets	98.7	76.4	75.5	206.5	182.1	119.1	230.5
Net credit to the government	89.4	91.2	71.4	199.0	174.7	114.2	223.6
Claims	101.9	123.6	87.5	211.1	200.8	157.3	248.2
Statutory advances	54.6	59.3	20.7	146.1	143.1	94.5	192.6
Use of IMF credit	47.3	62.7	65.2	63.4	56.0	62.8	55.6
Deposits	12.5	32.4	16.1	12.1	26.1	43.2	24.6
Claims on deposit money banks	3.7	0.7	0.0	8.1	11.6	0.2	3.1
Other items, net	5.5	-15.6	4.2	-0.5	-4.2	4.7	3.9
Reserve money at BEAC	125.9	146.0	167.9	152.2	140.0	191.9	184.5
Currency outside banks	98.8	110.9	121.0	124.7	105.3	116.2	128.2
Banks' reserves	27.1	35.1	46.9	27.5	34.8	75.7	56.3
Deposits at BEAC	22.0	25.6	32.7	18.2	18.3	53.6	36.2
Currency in vault	5.0	9.4	11.5	9.2	16.4	22.2	20.1
Memorandum items:	(In percent, unless otherwise indicated)						
Implicit reserves ratio 1/	7.5	8.1	10.8	5.0	6.4	13.3	8.2
Reserve money/deposits	48.7	47.1	48.4	45.4	41.0	46.8	42.1
Reserve money multiplier (end period)	2.8	2.9	2.8	3.0	3.2	2.7	3.1

Source: Bank of Central African States (BEAC).

1/ Defined as Gabon's gross foreign assets with the BEAC (including Gabon's share in the operations account) over the monetary base.

Table 31. Gabon: Summary Accounts of the Deposit Money Banks, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs; end of period)						
Net foreign assets	-2.1	34.0	8.4	8.3	-1.9	104.4	37.9
Assets	37.1	83.3	38.7	40.2	48.9	169.0	98.5
Liabilities	-39.2	-49.3	-30.3	-31.9	-50.8	-64.6	-60.6
Net domestic assets	362.5	275.9	338.8	326.5	343.7	306.0	400.4
Net credit to the public sector	145.8	131.4	122.8	113.9	109.5	-19.4	15.1
Net credit to the government	148.2	144.7	132.8	127.6	127.4	10.9	47.7
Claims	156.8	148.2	138.1	131.4	133.1	86.1	377.2
Deposits	-8.7	-3.5	-5.3	-3.8	-5.7	-75.2	-329.5
Net credit to public agencies	-2.4	-13.3	-10.0	-13.7	-17.9	-30.3	-32.6
Claims	4.3	4.2	5.3	4.3	4.9	6.8	7.4
Deposits	-6.7	-17.5	-15.3	-18.0	-22.8	-37.1	-39.9
Credit to the private sector	216.7	214.4	305.8	316.5	319.6	356.9	419.2
Net credit from the central bank	23.3	34.3	44.2	35.6	46.4	76.0	73.6
Borrowing	3.7	0.7	0.0	8.1	11.6	0.2	0.0
Reserves	27.1	35.1	44.2	27.5	34.8	75.7	56.3
Deposits	22.0	25.6	32.7	18.2	18.3	53.6	36.2
Currency in vault	5.0	9.4	11.5	9.2	16.4	22.2	20.1
Other items, net	-125.4	-104.3	-134.0	-139.4	-131.9	-107.5	-107.5
Liabilities to the private sector	258.3	309.9	347.2	334.9	341.8	410.4	438.3
Demand deposits	118.4	165.1	177.2	158.4	163.6	203.5	203.8
Time deposits	139.9	144.8	170.0	176.5	178.2	206.9	234.5
Memorandum items:							
Implicit reserves ratio 1/	11.1	12.1	13.5	8.8	11.1	25.4	81.8
Currency/deposits	38.3	35.8	34.9	37.2	30.8	28.3	29.2
Credit to private sector/deposits	83.9	69.2	88.1	94.5	93.5	87.0	95.6
Credit to private sector/non-oil GDP	14.7	13.3	16.8	16.6	18.0	19.4	21.6
Credit to private sector/total GDP	8.8	7.4	9.8	12.0	11.3	10.0	12.4

Source: Bank of Central African States (BEAC).

1/ Defined as Gabon's gross foreign assets with the BEAC (including Gabon's share in the operations account) over the monetary base.

Table 32. Gabon: Monetary Indicators, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Total GDP	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
Non-oil GDP	1,471.0	1,611.7	1,818.7	1,902.7	1,772.6	1,841.0	1,937.4
Broad money							
End of period	357.1	420.8	468.2	459.6	447.0	527.3	566.7
Five-quarter average	342.9	384.6	440.3	483.2	439.0	492.5	564.3
Average of start and end of period	346.7	393.2	450.6	484.8	444.2	504.2	561.8
Reserve money							
End of period	125.9	146.0	167.9	152.2	140.0	191.9	184.5
Five-quarter average	120.7	128.5	147.7	149.8	133.0	164.7	188.4
Average of start and end of period	116.6	131.0	158.7	149.4	138.4	169.0	184.1
Velocity (non-oil GDP)							
End of period	4.1	3.8	3.9	4.1	4.0	3.5	3.4
Five-quarter average	4.3	4.2	4.5	4.6	4.2	3.7	3.4
Average of start and end of period	4.3	4.1	4.1	4.1	3.9	3.8	3.5
Velocity (total GDP)							
End of period	6.9	6.9	6.6	5.8	6.4	6.8	6.0
Five-quarter average	7.2	7.6	7.8	6.4	6.7	7.0	6.1
Average of start and end of period	7.2	7.5	7.0	5.7	6.3	7.3	6.2
Money multiplier							
End of period	2.8	2.9	2.8	3.0	3.2	2.7	3.1
Five-quarter average	2.9	3.0	3.0	3.2	3.3	3.0	3.0
Average of start and end of period	3.0	3.0	2.8	3.2	3.2	3.0	3.1
	(Annual percentage changes)						
Non-oil nominal GDP	4.5	9.6	12.8	4.6	-6.8	3.9	5.2
Total nominal GDP	6.4	17.7	6.7	-14.9	7.4	26.0	-5.3
Broad money							
End of period	9.6	17.8	11.3	-1.8	-2.7	18.0	7.5
Five-quarter average	18.0	13.4	14.6	7.6	-8.4	13.5	11.4
Average of start and end of period	21.3	13.4	14.6	7.6	-8.4	13.5	11.4
Reserve money							
End of period	-5.9	15.9	15.1	-9.4	-8.0	37.1	-3.8
Five-quarter average	27.0	6.5	14.9	1.5	-11.2	23.8	14.4
Average of start and end of period	35.2	12.4	21.2	-5.9	-7.4	22.1	8.9

Source: Bank of Central African States (BEAC).

Table 33. Gabon: Sectoral Distribution of Credit to the Economy by Activity,
1995–2001 1/

(In billions of CFA francs; end of period)

	1995	1996	1997	1998	1999	2000	2001 July Est.
Short-term credit	148.4	131.2	195.2	186.4	253.6	203.3	174.8
Agriculture and fishing	3.4	2.5	2.9	3.4	3.5	2.0	2.5
Forestry	7.1	7.9	7.7	11.5	13.9	16.8	15.4
Mining	13.9	11.8	25.4	8.2	7.5	7.0	1.3
Industry	14.9	12.2	14.1	21.3	18.4	2.4	5.0
Water and electricity	0.5	0.4	0.1	0.5	0.7	0.1	0.4
Construction and public works	21.9	23.2	26.4	29.9	33.1	14.3	14.1
Domestic trade	24.4	21.9	31.2	36.6	51.2	47.1	31.9
Export trade	7.1	6.1	16.5	2.9	7.3	1.0	1.0
Services	31.4	23.0	33.8	31.6	61.0	47.2	35.8
Individuals	19.6	17.5	30.7	34.2	42.3	63.4	63.7
Other	4.2	4.7	6.4	6.3	14.7	2.0	3.8
Medium- and long-term credit	69.5	83.2	110.6	130.1	269.0	125.0	172.1
Agriculture and fishing	1.3	1.6	8.8	10.1	2.5	1.3	1.1
Forestry	6.6	7.4	2.4	2.5	8.7	10.6	17.0
Mining	11.1	18.3	11.9	12.9	10.2	7.3	6.1
Industry	4.4	6.4	10.9	15.9	17.6	1.2	0.6
Water and electricity	0.4	0.3	2.5	2.3	2.4	0.1	1.4
Construction and public works	2.3	1.5	4.2	4.7	4.7	7.2	11.7
Domestic trade	10.8	11.0	20.1	20.7	24.1	9.4	28.1
Export trade	0.5	0.6	3.3	2.8	2.4	0.4	0.3
Services	18.8	16.2	18.0	20.0	150.0	38.1	35.4
Individuals	12.1	15.6	22.6	32.9	41.0	47.6	66.8
Other	1.2	4.3	5.9	5.3	5.2	1.9	3.7
Total	217.9	214.4	305.8	316.5	522.6	328.3	346.9

Source: Bank of Central African States (BEAC).

1/ Data include only loans exceeding CFAF 5 million as communicated to the BEAC. Up to 1999, data include loans of closed banks.

Table 34. Gabon: Interest Rate Structure, 1995–2001 1/

(In percent per annum; end of period)

	1995	1996	1997	1998	1999	2000	2001 Est.
Central bank							
Lending operations							
Rates on advances to national treasuries	8.5	8.0	7.8	7.8	7.0	7.6	7.0	6.5
Penalty rate on advances to national treasuries	10.5	10.5	10.3	10.3	10.5	10.5	10.5	10.5
Auction rate (TIAO) 1/ 2/	8.5	8.6	7.8	7.8	7.0	7.6	7.0	6.5
Repurchase rate (TIPP) 2/ 3/	10.5	10.8	9.8	9.5	9.0	9.6	9.0	8.5
Penalty rate on lending to banks	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Absorption of liquidity							
Rate on special deposits by national treasuries	3.5	4.5	3.0	3.0	2.8	3.2	3.3	3.6
Rate on special deposits by banks	3.5	4.5	...	...	...	...	...	...
BEAC certificates (TISP) 4/							
7-day maturity	...	...	3.0	3.0	2.8	3.2	3.3	3.6
28-day maturity	...	...	3.1	3.1	2.8	3.2	3.7	3.7
84-day maturity	...	...	3.1	3.1	2.9	3.3	3.7	3.7
Commercial banks							
Maximum lending rate (TDM) 5/	16.0	16.0	22.0	22.0	22.0	22.0	22.0	18.0
Minimum deposit rate	7.5	5.5	5.0	5.5	4.8	5.0	5.0	5.0

Source: Bank of Central African States (BEAC).

1/ End-of-year data.

2/ The auction rate, which is set by the Governor of the BEAC, is derived from the money market auctions and constitutes the reference rate.

3/ Introduced in July 1994 with the adoption of indirect instruments of monetary policy.

4/ The repurchase rate is the basic rate and is set at 1.5 to 2 percentage points above the *taux d'intérêt sur les appels d'offre* (TIAO).

5/ Introduced in February 1996; the rates on certificates with maturities of 28 and 84 days are equal to the rate on the 7-day maturity certificate plus 1/16 and 1/8 of 1 percentage point, respectively.

6/ Effective January 15, 1996, the maximum lending rate (*taux débiteur maximum*, TDM) equals the penalty rate on lending operations to banks plus a fixed margin of 7 percentage points.

Table 35. Gabon: Balance of Payments, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Current account (including transfers)	78.3	308.8	86.6	-495.0	-251.1	115.9	-35.7
Exports, f.o.b.	1,319.2	1,631.6	1,790.5	1,124.8	1,540.0	2,285.3	1,929.2
Imports, f.o.b.	-448.4	-495.9	-566.3	-650.7	-521.3	-658.0	-731.4
Trade balance	870.8	1,135.7	1,224.1	474.2	1,018.7	1,627.2	1,197.7
Services (net)	-694.2	-732.9	-1,002.2	-853.1	-1,157.9	-1,476.1	-1,200.0
Of which							
Interest on public debt	-177.1	-160.0	-166.2	-180.8	-172.8	-187.0	-271.0
Profits	-72.6	-88.2	-353.0	-160.8	-539.2	-779.1	-442.1
Transfers (net)	-98.3	-93.9	-135.3	-116.1	-111.8	-35.3	-33.4
Public	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private	-98.3	-93.9	-135.3	-116.1	-111.8	-35.3	-33.4
Capital account	-293.3	-439.2	-206.7	102.1	-0.3	-179.3	-195.4
Medium- and long-term capital	-162.9	-154.8	-82.6	-41.1	-60.6	-26.4	-307.0
Government	-129.8	-100.6	-146.9	-162.7	-165.3	-219.4	-292.6
Drawings	83.0	80.7	53.8	28.9	29.2	22.7	5.1
Amortization	-212.9	-181.4	-200.7	-191.6	-194.5	-242.1	-297.7
Direct investment and portfolio investment	-9.7	-37.4	2.5	93.8	100.1	137.5	-82.7
Private debt	-23.3	-16.7	61.8	27.8	4.6	55.5	68.3
Oil sector	-23.1	-15.9	51.7	6.2	-13.7	19.9	19.9
Drawings	76.0	78.6	130.3	86.5	72.8	39.9	37.9
Amortization	-99.1	-94.4	-78.6	-80.3	-86.5	-20.0	-18.0
Non-oil sector	-0.2	-0.8	10.1	21.6	18.3	35.6	48.4
Short-term capital	-130.4	-284.4	-124.1	143.1	60.3	-152.9	111.6
Oil sector	-9.9	-34.1	-76.1	124.9	-86.5	-57.4	28.1
Non-oil sector	7.2	-51.3	-28.8	49.7	-25.3	-111.2	83.4
Errors and omissions	-127.7	-199.0	-19.2	-31.5	172.1	15.6	0.0
Overall balance	-215.0	-130.4	-120.0	-393.0	-251.4	-63.5	-231.1

Table 35. Gabon: Balance of Payments, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
			(In billions of CFA francs)				
Financing	215.0	130.4	120.0	393.0	251.4	63.5	231.1
Central bank net foreign assets (- = increase)	20.8	-42.3	-22.9	146.7	-12.2	-114.9	118.8
Debt rescheduling	171.8	150.8	122.9	0.0	0.0	649.5	29.4
Debt cancellation	22.4	21.9	20.0	19.0	18.0	17.0	17.0
Arrears (- = reduction)	0.0	0.0	0.0	227.2	245.6	-482.2	59.9
Other exceptional financing	0.0	0.0	0.0	0.0	0.0	-5.9	5.9
Memorandum items:			(In percent of GDP, unless otherwise indicated)				
Current account	3.2	10.6	2.8	-18.7	-8.8	3.2	-1.1
Oil	25.0	28.6	12.4	7.3	4.0	14.3	15.2
Non-oil	-21.8	-18.0	-9.7	-26.0	-12.9	-11.1	-16.2
Capital account	-11.9	-15.1	-6.6	3.9	0.0	-5.0	-5.8
Overall balance	-8.7	-4.5	-3.9	-14.9	-8.9	-1.8	-6.8
Stock of external public debt 1/	75.9	69.7	68.2	74.4	79.2	62.9	56.8
Debt-service ratio 2/							
Before debt relief	28.5	19.4	18.3	31.3	23.2	18.0	28.2
After debt relief	15.5	9.7	17.3	29.8	22.1	17.3	27.4
Gross official reserves (billions of CFA francs)	75.0	132.7	171.4	10.7	14.1	136.5	9.9
Oil production (millions of tons)	18.1	18.3	18.5	17.6	15.6	13.6	13.0
GDP (billions of CFA francs)	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
GDP real growth rate (percent)	5.0	3.6	5.7	3.5	-9.6	-1.9	1.5
CFA francs/U.S. dollar (average)	499.2	511.6	583.7	590.0	614.9	710.0	732.5

Sources: Bank of Central African States (BEAC); and staff estimates.

1/ Excluding IMF.
2/ In percent of exports of goods and nonfactor services.

Table 36. Gabon: Balance of Payments, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
				(In millions of U.S. dollars)			
Current account (including transfers)	156.9	603.7	148.5	-839.1	-408.3	163.2	-48.7
Exports, f.o.b.	2,642.9	3,189.5	3,067.6	1,906.7	2,504.5	3,218.5	2,633.6
Imports, f.o.b.	-898.2	-969.4	-970.3	-1,102.9	-847.8	-926.8	-998.5
Trade balance	1,744.7	2,220.1	2,097.3	803.8	1,656.7	2,291.8	1,635.1
Services (net)	-1,390.8	-1,432.8	-1,717.1	-1,446.1	-1,883.2	-2,078.9	-1,638.1
Of which							
Interest on public debt	-354.8	-312.7	-284.8	-306.5	-281.0	-263.3	-369.9
Profits	-145.4	-172.5	-604.7	-272.6	-876.9	-1,097.3	-603.6
Transfers (net)	-197.0	-183.6	-231.7	-196.7	-181.8	-49.7	-45.6
Public	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private	-197.0	-183.6	-231.7	-196.7	-181.8	-49.7	-45.6
Capital account	-587.6	-858.6	-354.1	173.0	-0.5	-252.6	-266.8
Medium- and long-term capital	-326.3	-302.6	-141.5	-69.6	-98.5	-37.2	-419.1
Government	-260.1	-196.7	-251.7	-275.8	-268.8	-309.0	-399.4
Drawings	166.3	157.8	92.2	49.0	47.5	31.9	7.0
Amortization	-426.5	-354.5	-343.8	-324.8	-316.2	-340.9	-406.3
Direct investment and portfolio investment	-19.4	-73.2	4.3	159.0	162.8	193.7	-112.9
Private debt	-46.8	-32.7	105.9	47.1	7.5	78.1	93.2
Oil sector	-46.3	-31.1	88.6	10.5	-22.3	28.0	27.2
Non-oil sector	-0.5	-1.6	17.4	36.6	29.8	50.1	66.0
Short-term capital	-261.3	-556.0	-212.6	242.6	98.0	-215.4	152.3
Oil sector	-19.9	-66.7	-130.4	211.7	-140.7	-80.8	38.4
Non-oil sector	14.4	-100.3	-49.3	84.2	-41.2	-156.6	113.9
Other errors and omissions	-255.8	-389.0	-32.9	-53.3	279.9	22.0	0.0
Overall balance	-430.7	-254.9	-205.7	-666.1	-408.8	-89.4	-315.4
Financing	430.7	254.9	205.7	666.1	408.8	89.4	315.4
Central bank net foreign assets (- = increase)	41.6	-82.6	-39.2	248.7	-19.9	-161.8	162.2
Debt rescheduling	344.2	294.8	210.6	0.0	0.0	914.8	40.1
Debt cancellation	44.9	42.8	34.3	32.2	29.3	23.9	23.2
Arrears (- = reduction)	0.0	0.0	0.0	385.2	399.4	-679.1	81.8
Other exceptional financing	0.0	0.0	0.0	0.0	0.0	-8.9	8.0

Table 36. Gabon: Balance of Payments, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
Memorandum items:	(In percent of GDP, unless otherwise indicated)						
Current account	3.2	10.6	2.8	-18.7	-8.8	3.2	-1.1
Oil	25.0	28.6	12.4	7.3	4.0	14.3	15.2
Non-oil	-21.8	-18.0	-9.7	-26.0	-12.9	-11.1	-16.2
Capital account	-11.9	-15.1	-6.6	3.9	0.0	-5.0	-5.8
Overall balance	-8.7	-4.5	-3.9	-14.9	-8.9	-1.8	-6.8
Stock of external public debt	75.9	69.7	68.2	74.4	79.2	62.9	56.8
Debt-service ratio 1/							
Before debt relief	28.5	19.4	18.3	31.3	23.2	18.0	28.2
After debt relief	15.5	9.7	17.3	29.8	22.1	17.3	27.4
Gross official reserves							
(millions of U.S. dollars)	150.2	259.5	293.7	18.2	23.0	192.2	13.6
Oil production (millions of tons)	18.1	18.3	18.5	17.6	15.6	13.6	13.0
GDP (millions of U.S. dollars)	4,958.7	5,694.1	5,326.8	4,483.4	4,618.1	5,037.6	4,624.2
GDP real growth rate (percent)	5.0	3.6	5.7	3.5	-9.6	-1.9	1.5
CFA francs/U.S. dollar (average)	499.2	511.6	583.7	590.0	614.9	710.0	732.5

Sources: Bank of Central African States (BEAC); and staff estimates.

1/ In percent of exports of goods and nonfactor services.

Table 37. Gabon: Balance of Payments of the Oil Sector, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
			(In billions of CFA francs)				
Current account	618.4	834.3	386.9	194.0	114.2	511.9	513.2
Exports, f.o.b.	1,055.4	1,335.1	1,401.9	833.4	1,143.2	1,827.8	1,509.1
Imports, f.o.b.	-104.3	-107.4	-244.4	-178.4	-179.2	-285.4	-300.2
Trade balance	951.1	1,227.7	1,157.5	655.0	964.0	1,542.5	1,208.9
Services, net	-313.8	-373.7	-752.4	-442.6	-830.6	-1,026.8	-692.1
Transport, travel, and insurance	-59.5	-59.7	-182.5	-138.5	-147.9	-73.8	-77.1
Profits and dividends	-52.5	-76.3	-320.9	-128.4	-514.2	-753.3	-415.6
Interest expenditure	-52.2	-50.2	-9.8	-5.2	-4.6	-9.3	-8.4
Other private services	-149.6	-187.4	-239.2	-170.5	-163.8	-190.4	-191.0
Private transfers	-18.9	-19.7	-18.2	-18.4	-19.2	-3.8	-3.6
Capital account	-52.7	-60.1	193.0	332.2	254.4	302.8	268.2
Long-term capital	-23.1	-15.9	51.7	6.2	-13.7	19.9	19.9
Drawings	76.0	78.6	130.3	86.5	72.8	39.9	37.9
Amortization	-99.1	-94.4	-78.6	-80.3	-86.5	-20.0	-18.0
Direct investment	-19.7	-10.1	217.4	201.1	354.6	439.1	220.1
Portfolio investment	0.0	0.0	0.0	0.0	0.0	-98.8	0.0
Long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Short-term capital	-9.9	-34.1	-76.1	124.9	-86.5	-57.4	28.1
Commercial credits	-9.9	-34.1	8.3	40.7	-30.1	-57.4	28.1
Other	0.0	0.0	-84.4	84.2	-56.4	0.0	0.0
Overall balance	565.7	774.2	579.9	526.2	368.6	814.7	781.4
Oil taxes paid to the government	436.9	418.9	358.9	412.8	433.1	699.3	...
Other domestic costs	128.8	355.3	221.0	113.4	-64.5	115.4	781.4
Memorandum items:			(In percent, unless otherwise indicated)				
Current account/GDP	25.0	28.6	12.4	7.3	4.0	14.3	15.2
Current account/oil exports	58.6	62.5	27.6	23.3	10.0	28.0	34.0
Short-term capital/oil exports	-0.9	-2.6	-5.4	15.0	-7.6	-3.1	1.9
Exports/GDP	42.6	45.8	45.1	31.5	40.3	51.1	44.6
GDP (in billions of CFA francs)	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4

Sources: Bank of Central African States (BEAC); and staff estimates.

Table 38. Gabon: Balance of Payments of the Non-Oil Sector, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
			(In billions of CFA francs)				
Current account	-540.1	-525.5	-300.2	-689.0	-365.3	-396.0	-548.9
Exports, f.o.b.	263.8	296.5	388.5	291.4	396.8	457.4	420.1
Imports, f.o.b.	-344.1	-388.5	-321.9	-472.2	-342.2	-372.7	-431.2
Trade balance	-80.3	-92.0	66.7	-180.8	54.7	84.7	-11.1
Services, net	-380.4	-359.2	-249.8	-410.5	-327.4	-449.3	-507.9
Transport, travel, and insurance	-125.5	-136.3	-94.2	-152.4	-91.4	-156.5	-150.7
Profits and dividends	-20.1	-11.9	-32.1	-32.4	-25.0	-25.8	-26.6
Interest expenditure (public)	-177.1	-160.0	-166.2	-180.8	-172.8	-187.0	-271.0
Interest expenditure (non-oil private)	-53.6	-48.0	-13.5	-14.1	-10.6	7.0	6.3
Other private services	-4.1	-3.0	56.2	-30.9	-27.6	-87.1	-65.9
Private transfers	-79.4	-74.3	-117.1	-97.7	-92.6	-31.5	-29.8
Capital account	-240.6	-379.1	-399.7	-230.1	-254.7	-482.2	-463.6
Long-term capital	-142.0	-114.8	-149.8	-155.4	-157.0	-196.2	-259.5
Public debt	-129.8	-100.6	-146.9	-162.7	-165.3	-219.4	-292.6
Drawings	83.0	80.7	53.8	28.9	29.2	22.7	5.1
Amortization	-212.9	-181.4	-200.7	-191.6	-194.5	-242.1	-297.7
Private debt	-12.2	-14.2	-2.9	7.3	8.2	23.2	33.1
Drawings	8.3	9.1	31.3	12.8	13.9	23.2	33.1
Amortization	-20.5	-23.3	-34.2	-5.5	-5.7	0.0	0.0
Direct investment	10.0	-27.3	-214.9	-107.3	-254.5	-202.8	-302.8
Long-term assets	12.0	13.4	13.0	14.3	10.1	12.4	15.3
Short-term capital	-120.5	-250.3	-48.0	18.2	146.8	-95.5	83.4
Commercial credits	-3.7	-1.9	-19.5	70.0	-45.6	-3.8	31.7
Other	10.9	-49.4	-9.3	-20.3	20.3	-107.3	51.7
Errors and omissions	-127.7	-199.0	-19.2	-31.5	172.1	15.6	0.0
Overall balance	-780.7	-904.6	-699.9	-919.2	-620.0	-878.2	-1,012.4
Memorandum items:			(In percent, unless otherwise indicated)				
Current account/GDP	-21.8	-18.0	-9.7	-26.0	-12.9	-11.1	-16.2
Current account/non-oil GDP	-36.7	-32.6	-16.5	-36.2	-20.6	-21.5	-28.3
Exports/GDP	10.7	10.2	12.5	11.0	14.0	12.8	12.4
GDP (in billions of CFA francs)	2,475.2	2,912.8	3,109.1	2,645.0	2,839.6	3,576.9	3,387.4
Non-oil GDP (in billions of CFA francs)	1,471.0	1,611.7	1,818.7	1,902.7	1,772.6	1,841.0	1,937.4

Sources: Bank of Central African States (BEAC); and staff estimates.

Table 39. Gabon: Composition of Exports, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
Petroleum	(In units indicated)						
Volume (thousands of tons)	17,688.3	17,795.5	18,012.0	17,120.0	14,892.0	12,999.0	12,364.4
Value (millions of CFA francs)	1,055.4	1,335.1	1,401.9	833.4	1,143.2	1,827.8	1,509.1
Unit value (CFA francs per ton)	59,299.0	74,657.7	75,895.8	49,145.2	74,996.8	139,011.8	119,016.4
Unit value (U.S. dollars per ton)	118.8	145.9	130.0	83.3	122.0	195.8	162.5
Unit value (U.S. dollars per barrel)	16.5	20.3	18.1	11.6	16.9	27.2	22.6
Manganese 1/							
Volume (millions of tons)	1.9	2.1	2.0	2.1	2.0	2.0	2.0
Value (millions of CFA francs)	66.4	77.6	84.8	87.0	88.3	85.8	86.7
Unit value (CFA francs per ton)	34,930.0	37,600.0	41,670.5	42,423.9	43,743.3	42,886.1	43,360.0
Unit value (U.S. dollars per ton)	70.0	73.5	71.4	71.9	71.1	60.4	59.2
Uranium							
Volume (tons)	650.0	600.0	513.0	737.0	358.0	0.0	0.0
Value (millions of CFA francs)	23.9	22.0	22.8	22.3	21.8	0.0	0.0
Unit value (CFA francs per ton)	23,883.1	22,000.0	22,800.0	22,300.0	21,800.0	0.0	0.0
Unit value (U.S. dollars per ton)	47.8	43.0	39.1	37.8	35.5	0.0	0.0
Timber (logs and processed wood) 1/							
Volume (millions of cubic meters)	2.3	2.5	2.8	1.9	2.9	2.6	2.2
Value (millions of CFA francs)	172.5	196.0	230.5	130.9	246.7	278.0	237.5
Unit value (CFA francs per cubic meter)	74,135.3	77,753.8	83,009.9	69,933.6	84,089.6	105,697.4	110,416.6
Unit value (U.S. dollars per cubic meter)	148.5	152.0	142.2	118.5	136.7	148.9	150.7
Other							
Value (millions of CFA francs)	9.4	9.8	61.5	57.1	54.1	93.7	95.8
Total							
Value (millions of CFA francs)	1,319.2	1,631.6	1,790.5	1,124.8	1,540.0	2,285.3	1,929.2
Of which							
Non-oil	263.8	296.5	388.5	291.4	396.8	457.4	420.1
	(In percent of total exports of goods, unless otherwise indicated)						
Petroleum	80.0	81.8	78.3	74.1	74.2	80.0	78.2
Manganese	5.0	4.8	4.7	7.7	5.7	3.8	4.5
Uranium	1.8	1.3	1.3	2.0	1.4	0.0	0.0
Timber	13.1	12.0	12.9	11.6	16.0	12.2	12.3
Other	0.1	0.1	2.8	4.6	2.6	4.1	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum item:							
CFA francs per U.S. dollar (period average)	499.2	511.6	583.7	590.0	614.9	710.0	732.5

Source: Bank of Central African States (BEAC).

1/ Export volumes differ slightly from Tables 11-12 due to difference in sources.

Table 40. Gabon: Composition of Imports, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Prepared foodstuffs (excluding beverages)	73.7	79.3	91.5	98.3	95.2	114.6	124.7
Beverages	7.7	8.9	11.1	12.7	11.7	11.6	13.2
Base metals and articles of base metals	23.5	24.6	36.5	33.5	27.9	28.2	33.3
Machinery and mechanical appliances	75.6	99.3	115.8	129.0	95.4	121.1	135.2
Machines and electrical appliances	24.9	34.2	37.2	39.4	32.3	64.4	58.4
Vehicles	38.5	45.0	66.6	78.1	41.3	57.6	63.2
Consumption goods (excluding foodstuffs and beverages)	69.9	78.3	90.5	109.6	76.7	90.2	111.3
Intermediary products imported by construction and public works	15.8	14.5	19.7	24.2	15.3	17.2	23.0
Other	65.2	74.9	109.1	190.2	158.8	175.1	174.7
Total	394.9	459.5	578.1	715.0	554.4	680.0	737.1
Of which							
Value of exempted imports	51.3	61.5	79.5	80.9	81.9	84.6	50.6
	(In percent of total)						
Prepared foodstuffs (excluding beverages)	18.8	17.4	16.0	13.9	17.3	16.8	16.9
Beverages	1.9	1.9	1.9	1.8	2.1	1.7	1.8
Base metals and articles of base metals	6.0	5.4	6.3	4.7	5.0	4.1	4.5
Machinery and mechanical appliances	19.1	21.6	20.0	18.0	17.2	17.8	18.3
Machines and electrical appliances	6.3	7.4	6.4	5.5	5.8	9.5	7.9
Vehicles	9.7	9.8	11.5	10.9	7.4	8.5	8.6
Consumption goods (excluding foodstuffs and beverages)	17.6	17.0	15.5	15.2	13.7	13.3	15.1
Intermediary products imported by construction and public works	4.0	3.1	3.4	3.4	2.8	2.5	3.1
Other	16.5	16.4	18.9	26.6	28.6	25.8	23.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Of which							
Value of exempted imports	13.0	13.4	13.7	11.3	14.8	12.4	6.9

Source: Ministry of Economy, Finance, Budget, and Privatization.

Table 41. Gabon: Foreign Trade Indicators, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(Annual percentage changes)						
Total exports, f.o.b. 1/	0.5	23.7	9.7	-37.2	36.9	48.4	-15.6
Volume	4.2	2.0	8.6	-10.4	-5.0	-11.8	-3.6
Price	-3.6	21.2	1.0	-29.8	44.1	68.2	-12.4
Oil exports, f.o.b. 1/	3.6	26.5	5.0	-40.6	37.2	59.9	-17.4
Volume	5.3	0.5	3.3	-8.2	-10.1	-13.7	-3.6
Price	-1.6	25.9	1.7	-35.2	52.6	85.4	-14.4
Total imports, f.o.b. 1/	4.0	10.6	14.2	14.9	-19.9	26.2	11.2
Volume	4.9	10.6	9.0	16.2	-23.4	7.3	5.5
Price	-0.9	0.0	4.7	-1.1	4.5	17.7	5.3
Total imports							
Oil sector 1/	5.7	2.9	117.3	-26.2	-4.0	35.4	-0.1
Public sector 1/	4.7	12.9	-20.9	48.4	-30.7	-7.4	9.8
Private non-oil sector 1/	3.8	13.3	-33.2	35.6	7.8	14.6	11.8
Terms of trade 1/	-2.7	21.2	-3.6	-29.0	37.9	43.0	-16.9
	(In percent, unless otherwise indicated)						
Oil exports/total exports 2/	80.0	81.8	78.3	74.1	74.2	80.0	78.2
Exports, f.o.b./GDP	53.3	56.0	57.6	42.5	54.2	63.9	57.0
Imports, f.o.b./GDP	18.1	17.0	18.2	24.6	18.4	18.4	21.6
Memorandum item:							
National oil price (U.S. dollars per barrel)	16.5	20.3	18.1	11.6	16.9	27.2	22.6

Source: Bank of Central African States (BEAC).

1/ In CFA franc terms.
2/ f.o.b.

Table 42. Gabon: Direction of Trade, 1995–2000

(In percent of total)

	1995	1996	1997	1998	1999	2000 Est.
Exports, f.o.b.						
European Union	19.6	11.5	11.2	20.3	29.1	21.8
France	10.4	7.6	7.3	11.8	23.5	17.1
Germany	1.1	0.1	0.2	1.0	0.7	0.2
Italy	1.3	0.4	0.7	1.4	0.8	1.0
United Kingdom	0.3	0.2	0.3	0.3	0.2	0.2
Other	3.7	2.3	1.7	4.8	3.5	3.0
Other Europe	2.8	0.8	1.1	0.9	0.4	0.4
United States	53.0	64.1	61.4	50.4	43.3	50.2
Other Western Hemisphere	1.4	5.0	4.4	5.8	5.3	6.5
Japan	3.8	2.1	2.9	1.7	1.2	0.3
African countries	3.6	2.3	1.7	2.6	1.6	1.6
Other	18.6	15.0	18.3	19.2	19.5	19.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Imports, c.i.f.						
European Union	65.3	68.0	60.1	65.3	84.3	80.2
France	43.8	42.8	36.2	41.9	71.1	65.1
Germany	2.5	4.6	3.2	3.5	1.6	2.0
Italy	2.8	3.5	3.1	4.2	2.7	1.9
United Kingdom	4.7	4.8	4.0	3.6	1.8	2.0
Other	11.3	11.9	13.2	11.9	6.9	8.6
Other Europe	0.2	0.5	0.3	0.3	0.2	0.5
United States	6.4	10.4	7.5	6.3	3.5	5.1
Other Western Hemisphere	1.9	1.3	0.7	0.8	0.7	0.8
Japan	4.8	6.0	3.6	3.5	1.5	2.3
African countries	6.4	6.7	17.9	15.7	5.3	6.3
Other	15.2	7.5	10.3	8.3	4.8	5.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: IMF, *Direction of Trade Statistics*.

Table 43. Gabon: Services and Current Transfers, 1995–2001

(In billions of CFA francs)

	1995	1996	1997	1998	1999	2000	2001 Est.
Services, net	-694.2	-732.9	-1,002.2	-853.1	-1,157.9	-1,476.1	-1,200.0
Credit	142.9	148.2	227.6	113.9	111.3	153.2	135.9
Transportation and insurance	56.0	56.6	88.2	65.8	60.1	63.7	63.7
Travel	3.5	3.5	9.2	6.0	6.3	14.4	14.4
Investment income	6.7	6.7	6.2	6.2	6.2	16.3	15.8
Other services	76.7	81.4	123.9	35.9	38.7	56.1	39.1
Debit	-837.1	-881.2	-1,229.8	-967.0	-1,269.3	-1,629.3	-1,335.8
Freight and insurance	-59.6	-59.6	-120.0	-103.4	-93.3	-119.2	-97.1
Other transportation and travel	-86.6	-87.7	-129.6	-116.1	-97.7	-59.7	-48.2
Investment income	-362.1	-353.2	-548.7	-367.2	-733.4	-984.7	-731.1
Other services	-328.8	-380.7	-431.5	-380.3	-344.9	-465.7	-459.4
Transfers, net	-98.3	-93.9	-135.3	-116.1	-111.8	-35.3	-33.4
Private	-98.3	-93.9	-135.3	-116.1	-111.8	-35.3	-33.4
Credit	2.2	2.3	3.1	2.6	2.7	3.4	3.2
Debit	-100.5	-96.3	-138.4	-118.6	-114.5	-38.7	-36.7
Public	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:							
Services (net) of the oil sector	-313.8	-373.7	-752.4	-442.6	-830.6	-1,026.8	-692.1
Receipts	51.1	53.2	5.5	5.7	6.5	30.8	13.3
Payments	-364.9	-427.0	-757.9	-448.3	-837.1	-1,057.6	-705.4
Freight and insurance	-33.9	-34.7	-86.4	-64.2	-73.3	-71.6	-74.9
Transportation and travel	-27.6	-27.6	-98.3	-76.5	-76.8	-2.2	-2.2
Investment income	-109.2	-131.3	-334.0	-137.1	-522.5	-776.4	-437.3
Other	-194.1	-233.3	-239.2	-170.5	-164.4	-207.4	-191.0

Sources: Bank of Central African States (BEAC); and staff estimates.

Table 44. Gabon: International Reserves, 1995–2001

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In millions of SDRs)						
Total reserves minus gold 1/	99.6	173.0	209.4	10.9	13.1	121.5	96.8
SDRs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve position in the Fund	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Foreign exchange	99.6	172.9	209.4	10.9	13.0	121.3	96.6
Gold (national valuation)	3.3	3.3	2.8	2.6	0.0	0.0	0.0
Operations account 2/	94.6	174.6	210.4	10.2	13.2	141.9	33.1
	(In billions of CFA francs)						
Monetary authorities							
Foreign assets	75.0	132.7	171.4	10.7	14.1	136.5	9.9
Foreign liabilities	47.8	63.2	79.1	65.1	56.2	63.7	56.0
Deposit banks							
Foreign assets	37.1	83.3	38.7	40.2	48.9	169.0	98.5
Foreign liabilities	39.2	49.3	30.3	31.9	50.8	64.6	60.6

Sources: IMF, *International Financial Statistics;* BEAC; and staff estimates (for end-2001).

1/ As of November 31, 2001.
2/ Creditor position, end of period; data through October 2001.

Table 45. Gabon: Effective Exchange Rate and Consumer Price Indices, 1990–2001

(Index 1990=100, end of period; unless otherwise indicated)

| | Q1 | Q2 | Q3 | Q4 | Variation 1/ | | | | |
					Q1	Q2	Q3	Q4	Q1–Q4
Effective exchange rate									
Nominal									
1990	97.2	99.5	100.8	102.6	...	2.4	1.3	1.8	5.6
1991	102.6	99.1	99.2	101.9	0.0	-3.4	0.1	2.8	-0.6
1992	103.4	105.2	109.4	110.2	1.5	1.7	4.0	0.8	6.6
1993	110.1	111.0	109.3	111.4	-0.1	0.8	-1.5	1.9	1.1
1994	57.5	58.8	60.3	60.3	-48.4	2.2	2.6	0.1	4.9
1995	61.0	61.4	62.0	62.5	1.0	0.7	0.9	0.9	2.5
1996	62.3	61.8	62.1	61.8	-0.3	-0.8	0.5	-0.5	-0.9
1997	60.5	59.8	58.7	60.5	-2.0	-1.2	-1.8	2.9	-0.1
1998	60.5	61.0	61.9	62.2	0.0	0.9	1.4	0.5	2.9
1999	61.2	60.0	59.5	58.7	-1.6	-2.1	-0.8	-1.3	-4.0
2000	57.7	56.7	56.2	55.8	-1.9	-1.7	-0.8	-0.8	-3.3
2001	57.6	56.9	57.3	57.6	3.3	-1.3	0.8	0.5	0.0
Real									
1990	98.5	100.7	99.3	101.5	...	2.3	-1.5	2.2	3.0
1991	91.1	86.0	82.3	79.0	-10.2	-5.6	-4.3	-4.0	-13.3
1992	75.6	74.2	78.3	77.3	-4.4	-1.8	5.6	-1.3	2.3
1993	75.8	74.5	72.6	73.3	-2.0	-1.7	-2.5	1.0	-3.3
1994	44.4	49.2	52.6	53.6	-39.5	10.8	7.0	1.9	20.8
1995	53.8	54.7	55.3	56.7	0.3	1.8	1.0	2.5	5.4
1996	55.7	53.9	53.8	54.7	-1.8	-3.3	-0.2	1.8	-1.7
1997	53.7	53.9	53.5	53.9	-1.9	0.4	-0.8	0.8	0.4
1998	55.1	54.9	56.1	56.2	2.3	-0.4	2.2	0.2	1.9
1999	54.8	53.0	52.2	52.1	-2.5	-3.3	-1.6	-0.1	-4.9
2000	50.7	49.5	48.8	49.0	-2.8	-2.3	-1.3	0.3	-3.4
2001	50.4	49.8	50.2	50.8	2.9	-1.1	0.7	1.3	0.9
Consumer price 2/									
1990	98.4	100.5	99.4	101.7	...	2.1	-1.2	2.3	3.3
1991	92.7	91.6	89.0	84.6	-8.8	-1.2	-2.9	-4.9	-8.8
1992	81.0	79.5	81.8	81.4	-4.3	-1.8	2.9	-0.5	0.5
1993	81.3	80.7	81.4	82.2	-0.1	-0.8	0.9	1.0	1.0
1994	98.8	109.5	115.9	118.9	20.2	10.9	5.8	2.6	20.3
1995	118.9	120.8	121.7	124.4	0.0	1.6	0.7	2.2	4.7
1996	123.4	121.1	120.7	124.1	-0.8	-1.9	-0.3	2.9	0.6
1997	124.9	127.3	129.2	127.0	0.6	1.9	1.5	-1.7	1.7
1998	130.2	129.2	130.5	130.4	2.5	-0.8	1.0	-0.1	0.1
1999	129.3	128.2	127.7	129.8	-0.8	-0.8	-0.4	1.6	0.4
2000	127.6	127.2	127.5	129.5	-1.7	-0.3	0.2	1.5	1.5
2001	129.7	131.0	131.3	132.4	0.2	1.0	0.2	0.9	2.1

Source: IMF, Information Notice System.

1/ Relative change vis-à-vis previous quarter in percent and Q4 relative to Q1; a decline in the index
for nominal and real effective exchange rates indicates a depreciation of the local currency.

2/ Seasonally adjusted for the purposes of the Information Notice System.

Table 46. Gabon: External Public Debt, 1995–2001 1/

	1995	1996	1997	1998	1999	2000	2001 Est.
	(In billions of CFA francs)						
Outstanding debt	1,878.3	2,109.6	2,229.1	2,061.1	2,302.5	2,312.7	1,980.5
Bilateral creditors	1,516.8	1,626.5	1,688.5	1,511.0	1,841.5	1,889.4	1,627.5
Paris Club creditors	1,496.5	1,608.2	1,672.7	1,498.6	1,757.9	1,846.2	1,588.9
Other official creditors	20.3	18.2	15.8	12.4	83.6	43.3	38.6
Multilateral	284.3	410.8	478.2	496.6	406.3	382.4	324.8
Commercial banks	77.1	72.3	62.4	53.5	54.7	41.0	28.2
Debt service (accrual basis)	414.4	344.1	369.0	385.8	382.3	436.0	576.8
Debt cancellation	189.1	172.7	20.0	19.0	18.0	17.0	17.0
Debt service after debt relief	225.3	171.4	349.0	366.8	364.3	419.0	559.8
Change in arrears (-=reduction)	0.0	0.0	0.0	227.2	245.6	-482.2	59.9
Debt rescheduling and deferral 2/	0.0	0.0	122.9	0.0	0.0	649.5	29.4
Debt service paid	225.3	171.4	226.1	139.5	118.7	251.7	470.4
	(In percent, unless otherwise indicated)						
Debt-service ratio 3/							
Before debt relief	28.5	19.4	18.3	31.3	23.2	18.0	28.2
After debt relief	15.5	9.7	17.3	29.8	22.1	17.3	27.4
Debt/GDP 4/	47.7	52.4	59.9	56.2	61.5	73.1	71.8
Debt (millions of U.S. dollars)	3,933.6	4,028.3	3,722.6	3,666.1	3,744.5	3,162.3	2,756.9

Source: Ministry of Economy, Finance, Budget, and Privatization.

1/ End-of-period data, excluding publicly guaranteed debt.
2/ For 2000, Paris Club rescheduling; for 2001, rescheduling with non-Paris Club creditors under negotiation.
3/ In percent of exports of goods and nonfactor services.
4/ Including IMF.

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1. Tax on income and profits		Consumer and agricultural cooperatives are exempt.	The higher of the following two rates: 35 percent of taxable profits or 1.1 percent of turnover, with a minimum of CFAF 600,000.
1.1 Tax on corporations	Levied on the profits of companies and public agencies engaging in commercial or industrial activities.		
1.11 Taxes on non-oil companies	Tax liabilities are paid in three installments. The first is equal to 25 percent of the tax liability of the preceding year (t-1), to be paid on November 30 of current year t; the second one is equal to one-third of the tax liability of the preceding year (t-1), to be paid on January 30 of the following year (t+1). The balance is to be paid on a self-assessment, voluntary-compliance basis at the time of the submission of the tax declaration by April 30 of the following year (t+1), at the latest. A withholding regime—at a rate of 9.5 percent of the sales value of the service —applies for enterprises and persons subject to income on profit tax and which are not subject to the VAT. The withholding is applied by the purchaser of services, who transfers the amount to the treasurer.	The tax is assessed on the net profits generated from business activities in Gabon, after deducting all charges incurred in the process, including production costs, taxes paid with the exception of the corporate profit tax, depreciation, and interest. However, deductions are subject to a ceiling corresponding to one-third of the tax paid during years in which a company incurred losses. **The following are exempt from the tax on profits:** (a) cooperatives involved in production, processing, storing, and marketing of agricultural products, as well as associations of cooperatives engaged in producing, processing, storing, and marketing, provided they are operating in conformity with their rules and regulations, with 73 percent of turnover accounted for by agricultural products, except for the following transactions: (i) sales through a retail business that is distinct from sales at headquarters; (ii) processing activities relating to products or derivatives other than foodstuffs for humans and livestock or that could be used as raw material in agriculture and industry; and	

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
		(iii) activities conducted by cooperatives or unions in partnership with nonmembers; (b) agricultural trade unions and suppliers and consumer cooperatives (*coopératives d'approvisionnement et d'achat*) that are operating in conformity with applicable governing provisions; (c) mutual agricultural credit funds (*caisses de crédit agricoles mutuels*); (d) corporations and unions of relief funds (*unions de sociétés de secours mutuel*); (e) benefits of nonprofit associations (*associations sans but lucratif*) generated from fairs, exhibitions/shows, sporting events, and other public events organized jointly with municipalities or local public agencies, which are in conformity with the purpose defined in their respective charters and feature an economic and social purpose; (f) local governments and their public utilities providers; (g) corporations or agencies that are deemed to be of public interest in charge of rural development; (h) offices for low-cost public housing; (i) educational mutual cooperatives (*mutuelles scolaires*); (j) private clubs and associations for their activities other than food and beverage; (k) the national branch of the regional central bank, the BEAC, which is subject to a statutory levy (*redevance statutaire*) under Article 158	

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
		of Law 14/81; (l) profits generated by economic interest groupings (*groupements d'intérêt économiques*) and, more generally, partnerships (*sociétés de personnes assimilées*); however, the profit shares accruing to each partner are taxed as specified in Law 06/99; (m) export-oriented agricultural companies, agricultural companies, livestock companies, and agribusinesses, excluding timber and wood-processing companies and fisheries (as specified in Law 13/99), during the first years of operation; and (n) companies involved in tourist hotels during their first three years of operation (Law 13/99).	
1.12 Tax on oil companies	Levied on the profits of oil companies as follows: (a) by the 28th of each month, monthly advances are paid during current year t in amounts equal to 6.25 percent of the estimated proft tax liabilities for that year, based on the financial plans of the oil companies (approved by the company's board or the equivalent body) at the end of the preceding year t-1; (b) by January 28 of year t+1, 90 percent of the balance of the tax liabilities is paid based on the expected closing accounts of the oil company for current year t as determined by the company's board or other equivalent body; and (c) by	The tax base is determined according to the specific agreements with individual oil companies. No profit tax is levied under production-sharing agreements, under which the government receives a specific share of the profit on oil (i.e., oil revenue minus royalties minus oil cost).	73 percent.

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

Tax	Nature of Tax	Exemptions and Deductions	Rates
	April 28 of year $t+1$, any remaining balance of tax liabilities is paid based on the actual closing accounts of the oil company for year t.		
	Should the tax advances paid by any given oil company during year t be higher than the actual tax liabilities for that year, the excess payments are to be deducted from the nearest tax obligations due by the oil company.		
	If, at the end of a month following any given quarter of the year t, it appears that expected profits for the year as a whole would be 25 percent higher than initially projected (i.e., at the end of the preceding year t-1), the oil company and the tax administration are expected to meet to agree on the necessary adjustments to be made to the remaining tax payments.		
1.13 Tax on oil subcontractors	Flat rate on corporate profit tax and tax on wages and salaries, based on actual turnover as indicated in contracts with oil companies.	Expenses related to mobilizing and winding down equipment and crew. Full reimbursement is allowed.	Levied on actual turnover at a rate of 6.8 percent, which is revised every three years.
1.14 Profit tax on wood companies	Withholding tax on transactions settled by log traders. Credited against tax liability.	Companies meeting the following requirements: equity base>CFAF 200 million; one corporate enterprise among shareholders to	5 percent in first zone. 2.5 percent in second zone.

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
		be current on tax liabilities.	
1.2 Tax on individuals	Levied on households' net annual income from all sources.		
1.21 Personal income tax (IRPP)	A withholding regime—at a rate of 9.5 percent of the sales value of the service—applies to enterprises and persons subject to income or profit tax and which are not subject to the VAT. The withholding is applied by the purchaser of services, who transfers the amount to the treasurer.	The taxpayer's family situation is taken into account by splitting income into parts (*quotient familial*): one part for the taxpayer; one part for the spouse; and one-half of a part for each dependent child, up to a limit of 6 children. A flat deduction, equivalent to 20 percent of income from wages and salaries is authorized. The tax is withheld at source by the employer.	Tax rate is applicable to taxable income for one part:

Tax rate is applicable to taxable income for one part:

(In CFA francs)		(In percent)
0–	1,200,000	0
1,200,001–	1,500,000	5
1,500,001–	1,920,000	10
1,920,001–	2,700,000	15
2,700,001–	3,600,000	20
3,600,001–	5,160,000	25
5,160,001–	7,020,000	30
7,020,001–	9,840,000	35
9,840,001–	13,740,000	40
13,740,001–	19,230,000	50
More than	19,230,001	55

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.22 Income tax for foresters	Tax withheld as in 1.14 above.		
1.3 Tax on unearned income			
1.31 Tax on capital income	Tax levied on dividends, interest, directors' fees, allocated portions of profit, lotteries, and redemption	Dividends distributed by the oil companies that have signed the 1971 agreement with the government are exempt.	20 percent for dividends; and 22 percent for directors' fees and allocated portions of profit, with rates

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
	premiums.		applicable to mining companies of 15 percent and 13 percent, respectively. 30 percent for lotteries and redemption premiums. 15 percent for interest paid on commercial paper issued by banks. 5 percent for income generated from bonds with a maturity of at least 5 years.
1.4 Special taxes on income			
1.41 Supplementary tax on wages and salaries	Levied on gross amount of all wages and salaries earned.	Wage earners with total monthly compensation and benefits of CFAF 100,000 or less are exempt.	1 percent for monthly salaries up to CFAF 100,000; and 5.5 percent for monthly salaries exceeding CFAF 100,000.
2. Property tax			
2.1 Special tax on rental income	Levied on gross income from the rental of housing and other buildings and unimproved land.	Rental of housing, buildings and improved land owned by taxpayers subjected to the VAT, if the property is part of their enterprises' assets.	15 percent of gross rental income (Law 32/93).
2.2 Tax on land	Levied on urban lands that have not been subject to adequate improvements, as well as on unused rural land.	Urban lands of less than 4,000 square meters are exempt. Land leased on a provisional basis and land used for commercial and industrial purposes are also exempt.	Urban land; first category: CFAF 200 per square meter. Urban land; second category: CFAF 40 per square meter. Rural land: CFAF 1,000 per hectare.

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
2.3 Capital asset tax on real estate companies	Levied on real estate owned by corporations and associations in lieu of inheritance tax. Assessed on the gross value of the property.	Partnerships and corporations whose activity is buying or selling real estate are exempt.	0.25 percent of the value of the taxable property.
2.4 Tax on buildings	Levied on the net income from renting buildings and business plants. The taxable income is equal to 75 percent of the gross rental value.	Newly built constructions are exempt for a period of ten years.	25 percent rate applied to taxable income, which is 75 percent of gross rental value.
2.5 Tax on unimproved land	Levied on unimproved urban and rural land. The taxable income is the rental value determined on the basis of square meters or hectares according to the classification of the land.	Land intended for educational, sport, humanitarian, or social purposes. Temporary exemption for three years if the land is set aside for stockbreeding or for coffee plantations (four years in that case).	A tax of 25 percent is applicable to the taxable rental value, which is 80 percent of the rental value of the land or 10 percent of the market value of the land.
2.6 Contribution to road development	Levied on companies, employees, earners of income on rental and savings. Also levied on imported vehicles and their parts.		CFAF 1,500 for wages and salaries lower or equal to CFAF 250,000 CFAF 3,000 for wages between CFAF 250,000 and CFAF 400,000 CFAF 9,500 for wages and salaries over CFAF 400,000. 25 percent of rental income; Contribution ranging from CFAF 30,000 to CFAF 150,000 for individual companies depending on turnover. Contribution ranging from CFAF 200,000 to CFAF 1,300,000 according to turnover of corporations.

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates

3. Taxes on goods and services

3.1 Value-added tax (effective 4/1/95)	Applicable to all companies with commercial taxable activities equal to or higher than (a) CFAF 60 million for services; (b) CFAF 80 million for general economic activities; and (b) CFAF 500 million for the forestry sector. Certain activities or professions are subject to the VAT if the turnover reaches CFAF 40 million (transit activities, restaurants, etc...).	Essential goods (bread, eggs, sugar, rice, schoolbooks, pasta, edible vegetable oils, canned sardines, and pilchards), medicines, agricultural fertilizers, and phytosanitary products, as well as the medical or paramedical professions, are exempt. The following items are also exempt: (a) printing and related activities and sale of newspapers; (b) social, educational, cultural, and religious services provided to members of nonprofit entities; (c) agricultural equipment for agricultural, stockbreeding, livestock, and related activities; (d) equipment and personalized supplies for hotels and the tourism sector; (e) imported goods and services that are exempt under Article 241 of the Customs Code; (f) imported goods and services by companies in the mining sector, and depreciating goods and equipment that are not available in Gabon as specified in the list established jointly by the Ministry of Economy, Finance, Budget, and Privatization and the Ministry of Mining, Energy, Petroleum, and Water Resources; and (g) services rendered to their members by economic interest groupings (*groupements d'intérêt économique constitués de personnes physiques et morales*) whose activities have been specifically exempted from the value-added tax, provided these services are	General rate of 18 percent. 10 percent rate applicable to mineral water, chicken, sugar, and cement. 0 percent rate applicable to exports.

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
	directly linked to those activities.		
3.11 Excise taxes	Levied on selected consumer goods: (a) alcoholic beverages (beer and wine); (b) other beverages (including mineral water); and (c) tobacco and cigarettes.		Applicable rates: (a) 16 percent for beer; (b) 22 percent for wine; (c) 32 percent for other beverages; and (c) 28 percent for tobacco and cigarettes.
3.12 Taxes on horse-race and lottery 3.2 Business and license fees	Gambling activities and lottery.	None.	4.5 percent of the amounts of bets.
3.21 Business fees	Levied on taxpayers engaging in a gainful activity in Gabon. The fee consists of a flat rate and a variable fee.	None.	Variable, depending on the nature and importance of the activity.
3.22 License fees	An additional tax levied at a flat rate, on top of the business tax, on sellers of beer, wine, and other alcoholic beverages.	None.	Applicable taxes are (a) CFAF 90,000 for retailers of beer and wine; (b) CFAF 180,000 for retailers of other alcoholic beverages; and (c) CFAF 300,000 for owners of bars and restaurants.

4. Taxes on international trade

   4.1 Import taxes

| 4.11 Customs duty (*droit de douane*) | Levied on the c.i.f. value of all imports. The duties are identical for all member countries of the CEMAC (Communauté économique et monétaire de l'Afrique centrale), | All products originating from CEMAC countries are exempt. | Four categories: (a) 5 percent; (b) 10 percent; (c) 20 percent; and (d) 30 percent. These percentages represent the maximum tariff collected on imports originating from countries |

Table 47. Gabon: Summary of the Tax System, as of End-January 2002

(All amounts are in CFA francs, unless otherwise indicated)

Tax	Nature of Tax	Exemptions and Deductions	Rates
	except for the temporary surcharge (see 4.13 below).		that have not been granted a most-favored-nation clause by the CEMAC.
4.12 Value-added tax on imports	Levied on all imports, assessed on the c.i.f. value plus applicable customs duties.	Equipment imported by firms that are already exempt from the value-added tax or customs duty and imports by embassies, international organizations, etc. Essential goods, imports by the mining sector, and railroad, naval, or aeronautical equipment, as well as goods covered by the investment charter, are also exempt.	General rate of 18 percent. 10 percent for imports of cement, chicken, mineral water, and sugar. 0 percent for exports.
4.13 Temporary surcharge on selected imported goods	Introduced in 1995, following the (former) Central African Customs and Economic Union (UDEAC) customs tariff reform, as a temporary measure to protect selected locally produced goods. Levied on the c.i.f. value of selected imports.		30 percent for a limited number of goods (essentially edible fats and oils, soap, poultry products, mineral water, cigarettes, and industrial lubricants).
4.2 Export taxes			
4.21 Export duty (*droit de sortie*)	The tax is assessed on the f.o.b. value of manganese, timber, and uranium exports.	All export goods other than manganese, timber, and uranium are exempt.	Manganese: 5 percent. Timber (unprocessed): 20 percent. Uranium: 5 percent.

Source: Ministry of Economy, Finance, Budget, and Privatization.