

## Executive Summary

### Background

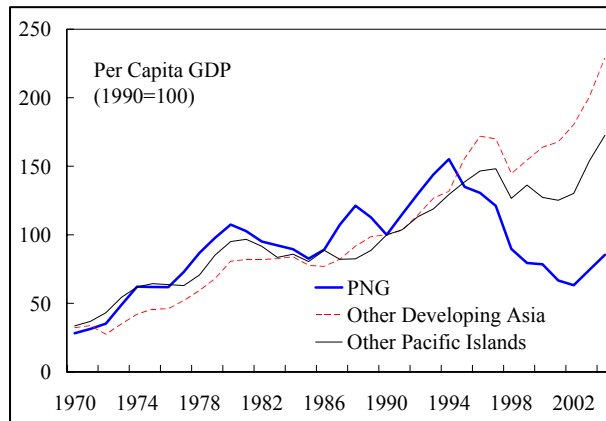
- The economy continues to perform well as the recovery maintains its momentum and the authorities adhere to disciplined fiscal and monetary policies. The central government budget was estimated to be once more in surplus in 2005, as mining and petroleum revenue remain strong and overall expenditure is kept in check, resulting in a further reduction in public sector debt.
- Monetary policy has achieved a favorable combination of relatively low interest rates and inflation. In response to these conditions, as well as to the more stable political environment, credit to the private sector has picked up for the first time in four years. International reserves are strong and the kina remains broadly stable.
- Mining and gas prospects have improved, but the overall medium-term outlook remains vulnerable. Structural problems that continue to discourage private activity need to be addressed, including improving governance, strengthening law and order, upgrading infrastructure, and simplifying investment regulations.

### Key Issues and Policy Discussions

- The staff supports the authorities' medium-term development strategy, which aims to maintain the current stable macroeconomic environment while moving the economy to a higher sustainable growth path and reducing poverty. The risks remain substantial, however, including the possibility of increasing spending pressures and slowing momentum for reform ahead of the 2007 parliamentary elections.
- The authorities' medium-term fiscal strategy of budget balance and progressively reducing public debt relative to GDP is appropriate and feasible. To achieve these objectives and safeguard progress to date, further reform is needed including extending expenditure controls more broadly, reducing the wage bill, and improving tax administration. These steps would also make room for the increased social and capital expenditure planned to address development needs.
- On monetary policy, the staff endorsed the central bank's continuing commitment to maintaining inflation at a low level, along with the retention of the flexible exchange rate regime.
- Further structural reforms are key to higher private activity, greater job creation, and reduced poverty, the mission and the authorities agreed. The mission pressed for more rapid action on steps needed to attract private investment.

## I. INTRODUCTION

1. **From the mid-1990s until the early years of 2000, Papua New Guinea’s economic and social performance had been poor** (Figures 1–4). Real GDP was broadly unchanged since the early 1990s and per capita income little higher than at the time of independence in 1975, as political instability and a rapid succession of governments hampered the implementation of appropriate economic policies (Box 1). Private activity was stagnant, poverty increased and social indicators, already among the worst for comparable countries, further deteriorated.



	HDI Rank 2/	GDP per Capita in US\$ (2004)	Real GDP per Capita Annual Growth Average 1995-2004
Pacific Islands 3/	94	1556	-1.2
Developing Asia	106	978	5.5
Papua New Guinea	137	441	-2.9
Sub-sahara Africa	148	730	1.3

Sources: UN *Human Development Report*, 2005; IMF *World Economic Outlook*.

1/ Country groups are based on WEO groups, unless specified.

2/ Rank out of 177 countries. Country groups are averages of member rankings.

3/ Fiji, Kiribati, Maldives, Samoa, Solomon, Tonga, and Vanuatu.

2. **The current government, led by Prime Minister Sir Michael Somare, has made strides in addressing the economic challenges that it inherited upon taking office in 2002.** It progressively tightened fiscal policy, in tandem with supportive monetary policy, in a bid to support growth while putting the economy on a more stable footing for the future. As a result, and aided by improving global commodity price developments, the country’s economic position has improved and macroeconomic stability has been restored. Real GDP growth turned positive in 2003, after contracting in the previous three years, and inflation dropped sharply. The government additionally set out a medium-term development strategy focusing on economic reform needed to boost growth to a higher sustainable level (Box 2).

3. **The political environment has stabilized in advance of parliamentary elections in 2007.** Prime Minister Somare is likely to complete a full five-year term through 2007, the first time for any government since independence. Installation of an autonomous government on Bougainville Island in June 2005 appears to have quieted the 15-year conflict there.

### Box 1. Challenges to Growth

**Papua New Guinea has experienced volatile growth** since 1960, with GDP increasing at an average annual rate of 5½ percent during 1960–75, then falling to 2.3 percent during 1976–2004.

A **growth accounting exercise** for 1960–2004 finds that the growth slowdown during 1976–2004 may be largely explained by a significant slowing of capital inputs and TFP growth.<sup>1/</sup> Investment has been trending downward, except for spikes during periods of mineral booms. The performance during 1996–2004 was even more disappointing, with trend TFP contributing negatively to GDP growth.

Sources of Growth, 1965-2004			
	1965-1975	1976-2004	1996-2004
<b>Real GDP growth</b>	<b>5.6</b>	<b>2.3</b>	<b>0.8</b>
	Factor growth rates (percent)		
Capital	6.9	1.6	0.3
Labor	1.9	2.4	2.6
TFP	2.0	0.1	-1.0
	Contributions (percentage points)		
Capital	2.3	0.5	0.1
Labor	1.3	1.6	1.7
TFP	2.0	0.1	-1.0
Memorandum items:			
<b>Potential output growth</b>	<b>5.3</b>	<b>2.3</b>	<b>0.6</b>
Trend TFP growth	1.7	0.1	-1.2

Sources: NSO, IFS, and staff estimates.

More recently Papua New Guinea has **met many of the theoretical requisites for stronger growth**, including a more stable political and macroeconomic environment and an open trade regime, but a longer track record may be needed to change global perceptions.

Available information suggests that other **structural factors leading to low total factor productivity may still underlie the poor growth performance** by providing a drag on the economy. The rugged terrain raises the cost of *transportation infrastructure*, which remains weak: less than 4 percent of roads and of airport runways are paved. In addition, adult *literacy* is low (66 percent). More generally, *governance and law and order issues* continue to be disincentives to investment. Addressing these weaknesses should yield considerable gains for growth.

Political Risk Points By Component							
	Corruption	Bureaucracy quality	Ethnic tensions	Law and Order	Socioecon conditions	Government Stability	Internal Conflict
Papua New Guinea	1.0	2.0	2.0	2.5	3.5	7.0	10.0
Indonesia	1.0	2.0	2.0	3.0	5.5	7.0	8.5
Bangladesh	1.5	2.0	2.5	2.5	2.5	10.0	6.5
Mongolia	2.0	2.0	5.0	4.0	3.0	7.0	11.0
Sri Lanka	2.5	2.0	1.5	3.0	3.5	6.0	6.0

Source, ICRG, 2005. First 3 columns ranked 0-6, 2nd 3 columns ranked 0-12; the lower the number, the higher the risk.

<sup>1/</sup> Assuming a Cobb-Douglas production function with shares of labor and capital of 67 and 33 percent respectively, total factor productivity (TFP) is derived as a residual.

## **Box 2. The Medium-Term Development Strategy**

The April 2005 Medium-Term Development Strategy (MTDS) sets out the government's development priorities for 2005-2010, which are consistent with their Millennium Development Goals. The MTDS aims at: (i) establishing good governance; (ii) promoting export-driven growth in agriculture, forestry, fisheries and tourism; and (iii) accelerating rural development and poverty reduction. These goals are to be met through:

- public sector reform through improved accountability, reduced costs, more efficient service delivery, and fiscal sustainability;
- a more favorable climate for private sector business through improved law and justice, expanded telecommunications, development of human resources, and upgraded transportation infrastructure; and
- redirecting public expenditure toward the "priority areas" of rural and transportation infrastructure, basic education, law and justice, and preventive health care programs, including HIV/AIDS prevention.

Achievement of the fiscal strategy is dependent on firm implementation of the Public Sector Reform Program and Public Expenditure Review and Rationalization (PERR) to secure savings in lower-priority budgetary expenditure that can be redirected to priority areas.

The financing of the MTDS was mapped out by the Minister of Finance and Treasury in a medium-term macroeconomic framework. Growth is expected to rise gradually, reflecting a recovery in the agricultural and mining sectors. Inflation should remain modest, as prudent fiscal and monetary policies are maintained and the exchange rate is assumed to be broadly stable. Continued fiscal restraint is expected to contribute to a further decline in the public debt level.

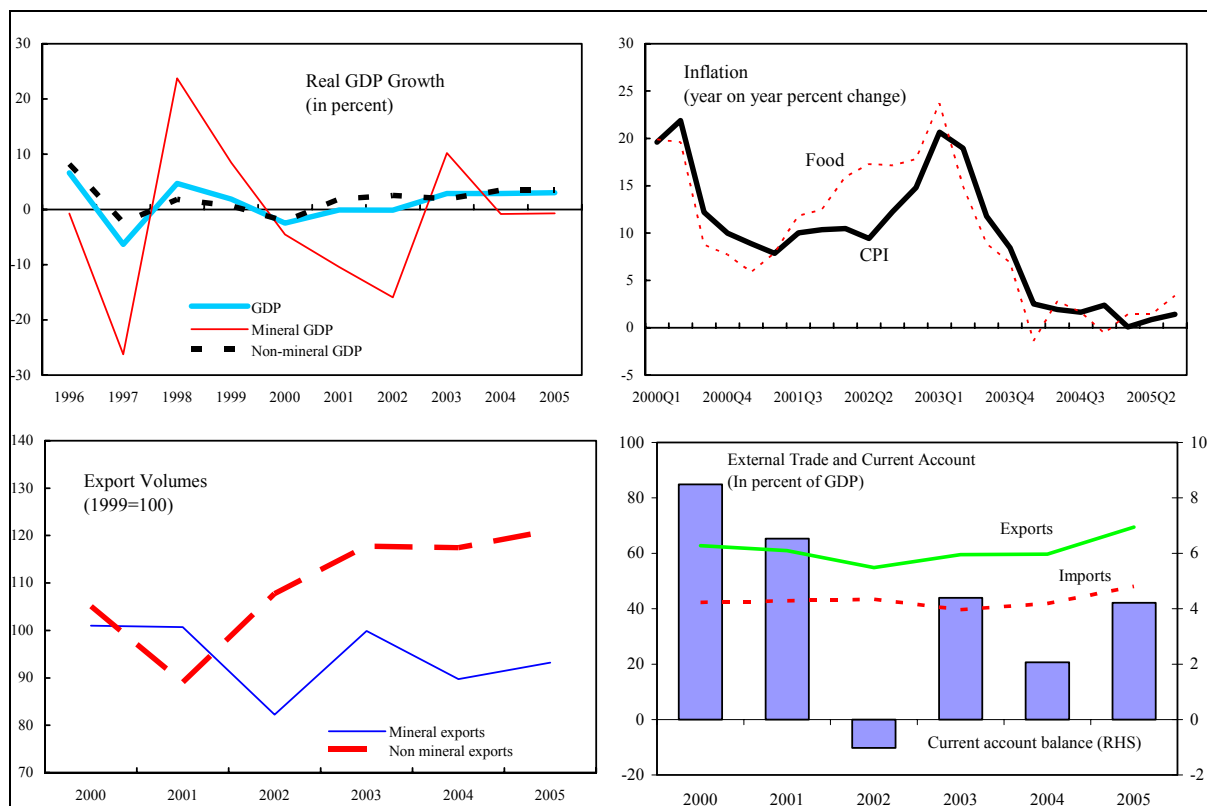
4. **Australia and Papua New Guinea have reached tentative agreement to revive a streamlined Enhanced Cooperation Package (ECP).** Under the 2003 ECP, Australia provided personnel to improve the functioning of the judicial system and the police force, and to assist the finance and treasury departments in improving their budget management, financial control, and procurement procedures. The ECP was suspended in May 2005 after the Supreme Court ruled that the immunity granted to the Australian federal police was unconstitutional. Under the revived proposal, the ECP will shift from a focus on strengthening law and order to improving governance and reducing corruption. The 30 officials serving as economic advisors to the government will remain in place.

5. **The direction of the authorities' economic policies has been in line with Fund advice.** A medium-term strategy to foster faster real GDP growth on a sustained basis in order to raise living standards and alleviate poverty has been formulated and launched. The medium-term fiscal position has improved with further consolidation and debt reduction, as urged by Executive Directors. The authorities have maintained the flexible exchange rate

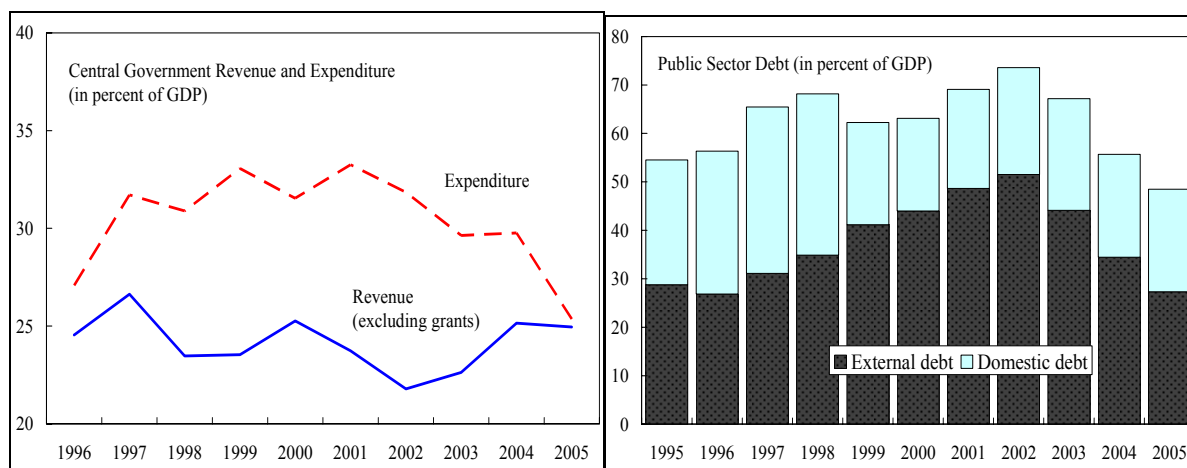
regime, as recommended, noting that it has been essential in maintaining low inflation while supporting the economic recovery. With regard to structural reform, the outcome has been mixed. The public wage bill remains high, though some progress has been made in switching expenditure resources to priority areas. A controversial proposal in 2004 to borrow externally on commercial terms was set aside. However, advancement on other longstanding structural problems needed to promote private sector activity was slower than envisaged, including addressing weaknesses in governance, law and order, infrastructure, and investment regulations.

## II. THE CURRENT ECONOMIC SETTING

6. **The economy is performing well as the recovery maintains its momentum, the external position remains healthy, and inflation is low.** Real GDP rose by about 3 percent in 2004, in line with the previous year, and a similar rate of growth is expected for 2005 (Table 1). The mining and agricultural sectors were the initial drivers behind the recovery, boosted by an upswing in commodity prices and improved weather. Fiscal and monetary discipline, together with exchange rate appreciation, led to a sharp reduction in average CPI inflation in 2004 to around 2 percent from 14.7 percent in the preceding year, and inflation is estimated to average 1 percent in 2005. The external accounts are expected to be in surplus in 2005, buoyed by high commodity prices for minerals and oil, but also reflecting the start of oil refinery operations and increased non-mineral export volume.

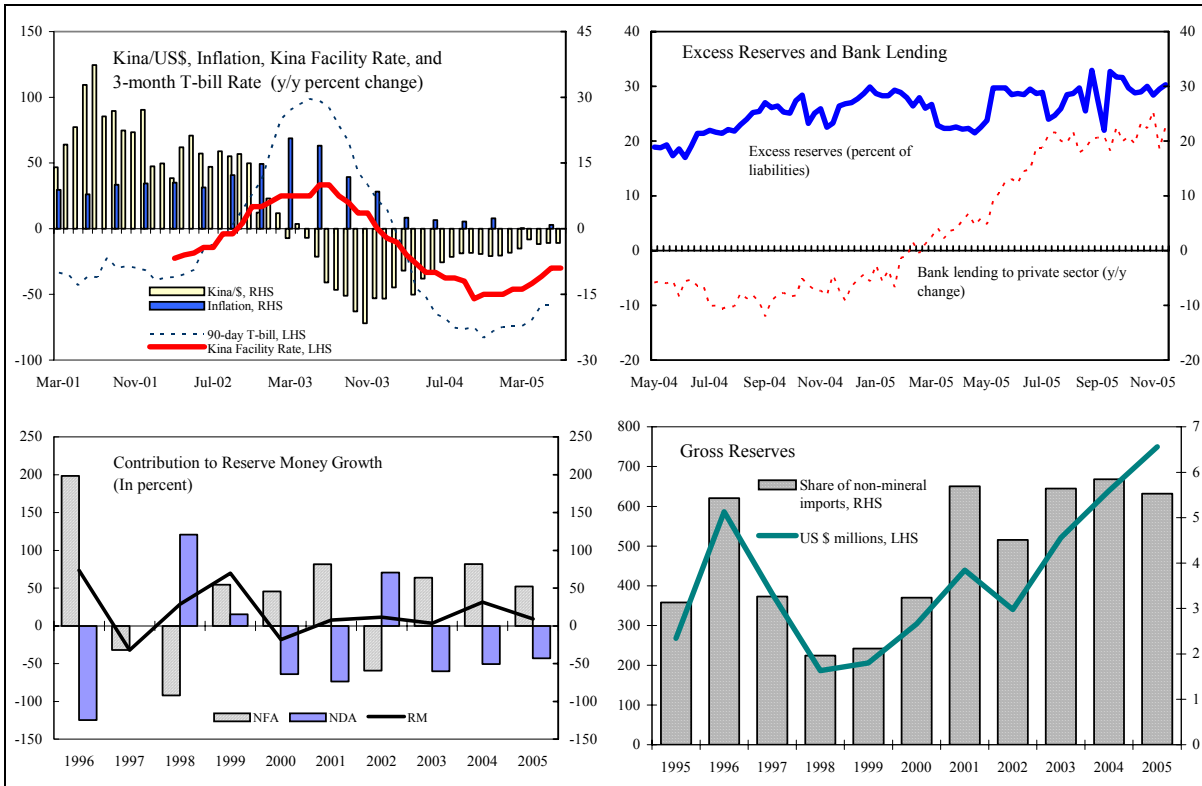


7. **The government continued to consolidate the fiscal position in 2005, with the projected outcome for the year stronger than budgeted** (Table 2). High mineral and non-mineral revenue (buoyed by continued high commodity prices and stronger than expected growth), and lower than expected expenditure (including on interest payments) generated net savings for the year of about 5 percentage points of GDP. Under the authorities' revised budget, about half of the savings was used to reduce the stock of domestic arrears and increase spending in priority areas. Another 2.5 percent of GDP of savings were set aside for a future equity acquisition in the Highlands-Queensland gas pipeline project and recorded as an expenditure. As a result, the authorities estimated a budget deficit of 0.6 percent compared to the original budget projection of a deficit of 0.9 percent of GDP. Adjusting for the funds set aside but not actually spent in 2005, the staff estimates the budget balance to be in a surplus of about 2.7 percent of GDP.<sup>1</sup> The improved fiscal outcome resulted in a further reduction in total public sector debt, about half of which is external debt, to 49 percent of GDP in 2005 from 72 percent in 2002.

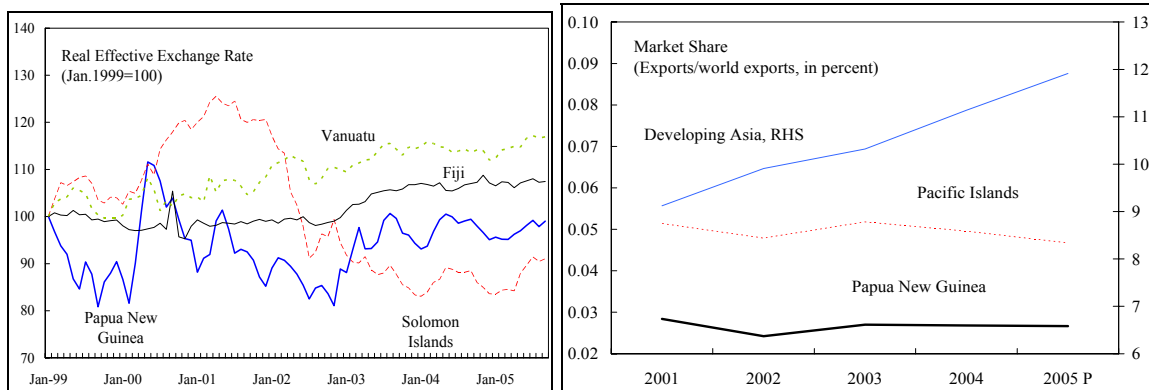


8. **As monetary policy has been relaxed in line with the tightening of fiscal policy, credit to the private sector revived while inflation remains low** (Table 3). In the absence of inflationary or exchange rate pressure, the central bank progressively lowered the signaling Kina Facility Rate from a 16 percent peak in July 2003 to 6 percent in September 2005. Broad money is expected to rise by about 15 percent in 2005, reflecting increased net foreign assets. In response to lower interest rates, abundant liquidity and more stable economic and political conditions, private sector credit picked up for the first time in four years, increasing by about 20 percent from a low base.

<sup>1</sup> The other major difference between the authorities' and the staff's estimates for the budget in 2005 and 2006 relates to grants and expenditure under the revived ECP. In the staff's estimates, ECP grants and expenditure are lower reflecting the reduction in Australian personnel working in Papua New Guinea.



9. **Over the past two years, the kina has remained roughly unchanged on a real effective exchange rate basis, while external reserves have increased.** The kina appreciated against the U.S. dollar by about 15 percent in nominal terms during this period, mainly reflecting strong export receipts along with a gradual restoration of confidence in economic management. Gross international reserves are expected to close 2005 at 5.5 months of non-mineral imports (Table 4). External competitiveness appears adequate, given increased non-mineral export volume and a relatively stable share of Papua New Guinea's exports in total world exports. In addition, Papua New Guinea's aggregate ranking (64 out of 155 countries globally) in the World Bank's ease of doing business database compares relatively favorably overall with others in the region.



Doing Business: Papua New Guinea and Comparators									
	Overall Ease	Starting a Business	Dealing w/ Licenses	Hiring/ Firing	Getting Credit	Protecting Investors	Trading	Enforcing Contracts	Closing a Business
Papua New Guinea	64	60	84	32	98	31	47	105	117
East Asia and Pacific	69	75	58	48	94	74	56	104	104
South Asia	79	44	66	62	102	60	107	85	94

Source: World Bank, 2005.

10. **The authorities have taken steps to improve public sector efficiency and the investment environment, but overall progress in implementing structural reform has been slow.** Positive steps have been made through the adoption of stricter controls on recurrent public expenditure. However, advancement of the broader reform of the public sector was slow, particularly in revenue administration and provincial government operations. Movement on infrastructure investment and land reform also was limited and privatization stalled. The financial system overall remains healthy. The financial condition of the government-owned Rural Development Bank has improved somewhat, but it remains to be seen whether sufficient measures are in place to avoid a return to past financial difficulties. Political analysts continue to give poor marks to Papua New Guinea regarding corruption and quality of the bureaucracy, although the country's ratings are comparable to others in the region (Box 1). Relations with the World Bank are strained over governance questions in connection with loans for forestry management.

### III. POLICY DISCUSSIONS: GROWTH AND STRUCTURAL REFORM

11. **The consultation discussions focused on the policies needed to maintain the current stable macroeconomic environment while moving the economy to a higher sustainable growth path and reducing poverty.** To meet this objective, the authorities have adopted a Medium-Term Development Strategy (MTDS) that targets improved governance, stronger export-driven growth, and accelerated rural development. The mission endorsed this strategy, which is based on: (a) an improvement in the outlook for medium-term fiscal sustainability through public sector reform (Box 3), (b) a continuation of the current low inflation by maintaining an appropriate monetary stance, and (c) a more vigorous effort on reform to remove longstanding impediments to private sector development and growth, including by redirecting public spending toward infrastructure, law and order, education, and health. However, the discussions also looked at the scope for additional steps, including measures to strengthen non-mineral revenue and improve the environment for private sector activity, to help ensure success in achieving the MTDS's objectives.

#### A. Medium-Term Outlook: Prospects and Risks

12. **The macroeconomic outlook is positive provided that the authorities continue their prudent fiscal and monetary policies and progress more rapidly on their structural reform agenda** (Table 5). Growth is expected to rise gradually to about



### **Box 3. Fiscal Reform to Meet Growth Objectives**

A key component of the authorities' medium-term development strategy to raise growth and reduce poverty is the **Public Sector Reform Program**. Key elements include:

- “Right-sizing” the public sector to shift the government’s focus to core business and improve service delivery; a draft plan and recommendations for overhauling the government’s structure has been submitted to the cabinet.
- Introducing public expenditure reform to free resources for priority expenditure, including a gradual reduction in the size of civil service by 10 percent by 2007.
- Improving accountability and compliance by strengthening monitoring and audit systems.
- Continuing the privatization program.
- Strengthening the performance of provincial and local governments.

A detailed action plan for public expenditure reform was provided under the 2004 World Bank-led **Public Expenditure Review and Rationalization (PERR)**, including:

- Steps to reduce the size of the civil service, including through introduction of a new payroll system.
- Strengthening budget systems, including through greater transparency and remedial action for breaches of agreed budgets.
- Detailing expenditure prioritization at an agency or sector level.
- Improving health and education spending.

An August 2005 PERR review found that progress had been made in improved debt management, greater budget transparency, and higher health and education spending. At the same time, greater efforts were needed in areas such as:

- Securing control of expenditure, including the payroll.
- Benchmarking existing processes to identify next steps needed and monitor progress.
- Further strengthening transparency and accountability.
- Strengthening leadership and management.
- Improving capacity of managers and individual staff.

4.5 percent by 2010, as private activity responds to improved macroeconomic policies and structural reform and new mineral projects come on line only toward the end of the forecast period (Box 4). Sustained real growth on this order would represent a break from past poor performance; given the current rate of population growth, the annual real per capita growth rates would be over 2 percent. A more rapid rate of economic growth would require a stronger effort to address structural factors impeding growth. Inflation should remain subdued below 4 percent annually.

#### Box 4. Prospects for the Mining Sector

The mining sector (including petroleum) dominates Papua New Guinea's economy. Recent positive developments regarding projects already underway, partly related to current strong world prices, suggest a brighter outlook than previously expected. In addition, new mining exploration applications rose sharply in 2004-05 in response to higher world commodity prices and tax incentives introduced in 2003.

**Queensland-Highlands Gas Project:** The project calls for the construction of a 2,655 km gas pipeline from the Highlands to northern Australia. After being stalled for many years owing to the failure to secure sufficient customer sales contracts, a critical mass of preliminary purchase agreements have now been signed. The front-end engineering and design phase is nearing completion and financing is being arranged. Initial gas deliveries are targeted for 2009, if all goes to schedule, and the revenue accruing to the government is expected to offset declining oil sector proceeds.

**Oil** (25 percent exports): Oil production declined in recent years, and current reserves are expected to be exhausted by 2012. However, the largest producer, InterOil, has announced new bids for oil and gas exploration.

**Gold and silver** (30 percent exports): Although gold output is in decline, prospects have recently been brightened with the start of two new gold mines in 2005 and the key Hidden Valley and other smaller projects beginning production by 2008.

**Copper** (17 percent exports), **nickel and other minerals:** Annual production of the declining Ok Tedi copper mine now is expected to be higher and last longer than previously envisaged. The prospective Ramu nickel/cobalt deposit could also contribute to higher mineral output in the longer run.

Selected Mineral Sector Indicators, 1992-2010

	1992	2000	2001	2002	2003	2004	2005E	2010P
Mineral sector/GDP	24.0	25.3	23.1	18.4	19.7	20.8	24.5	23.0
Total mineral revenue/GDP	2.0	5.5	5.7	3.2	4.4	5.8	7.0	5.6
Taxes	1.6	5.5	5.3	3.1	3.9	5.3	6.4	5.1
Non-tax revenue	0.4	0.0	0.4	0.1	0.6	0.4	0.6	0.5
Mineral tax/total tax	8.8	23.1	24.2	15.4	18.6	22.9	27.7	24.8
Mineral revenue/total revenue	7.3	18.1	19.4	11.5	15.6	18.4	21.2	21.3
Total exports (goods)	2045.5	2215	1878	1646	2153	2554	3352	4003
Mineral exports (U.S. \$ millions)	1516	1804	1598	1228	1635	1863	2494	2912
Mineral exports/total exports	74.1	81.5	85.1	74.6	75.9	73.0	74.4	72.7

Source: PNG authorities and staff estimates.

13. **The medium-term outlook and success in improving development indicators is subject to significant downside risks.** These largely relate to continued uncertainties regarding the nickel and gas projects, to commodity price volatility, and to prospects for the continuation of current macroeconomic and structural policies. The delay or suspension of the large mineral projects would sharply curtail the outlook for the fiscal position and the external sector. Also, a reduction by 5 percent in the prices of Papua New Guinea's main commodity exports would reduce government revenue by about 0.3 percent of GDP each

year. Other potential downside risks include weak execution of the reform agenda, particularly ahead of the 2007 elections. The downside risks support a continuation of the authorities' conservative approach to fiscal policy. If more favorable conditions were to materialize instead, an acceleration of spending toward priority areas would be possible, provided implementation capacity is not over taxed.

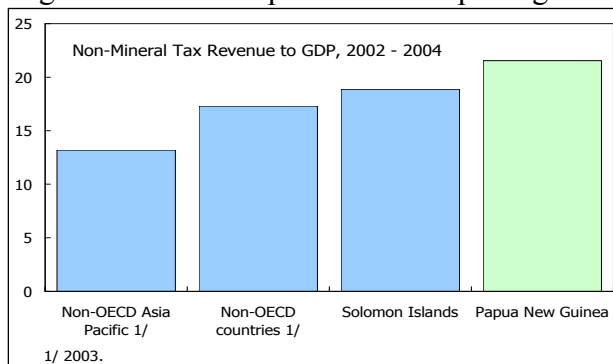
14. **The staff's analysis of debt sustainability underscores the need to continue prudent macroeconomic policies and reforms** (Annex VI). The updated debt sustainability analysis using the low-income country framework suggests that the public sector debt outlook is particularly vulnerable to changes in real GDP growth. A return to the low levels of real GDP growth experienced in the recent past would increase projected debt-to-GDP ratios by 4 percentage points of GDP in 2010. The authorities acknowledged these risks, and noted that their debt strategy, which monitors the Fund's debt sustainability indicators, is designed to reduce these vulnerabilities.

## B. Maintaining Macroeconomic and Financial Stability

### *Fiscal policy: continuing fiscal prudence and accelerating fiscal reform*

15. **The government's medium-term fiscal strategy (MTFS) aims at keeping the central government's budget close to balance and progressively reducing public debt relative to GDP.** Within this framework, the government's 2006 budget targets an overall deficit of 0.6 percent of GDP. The mission supported the government's fiscal objectives, and views them as achievable and appropriate as they would imply a gradual reduction in the nonmineral overall and primary balances and in the debt-to-GDP ratio between 2006 and 2010. However, the mission noted that risks to the medium-term strategy may derive from commodity price and mineral revenue volatility, pressure for slower reform and unprioritized spending ahead of the 2007 parliamentary elections, and financing participation in the Queensland-Highlands gas pipeline project. To ensure that the consolidation to date is safeguarded and medium-term sustainable fiscal balance is achieved, the mission encouraged an acceleration and intensification of the public sector reform outlined in the MTDS (Boxes 2 and 3).

16. **The government introduced a tax policy package with the 2006 budget aimed at encouraging investment and complemented by improvements in revenue collection.** The negative revenue impact of the tax package is estimated at about 0.5 percent of GDP in 2006,



mainly resulting from a progressive reduction in personal income tax rates and an increase in the exemption threshold (text table). At the same time, initiatives to improve tax collection include upgrading audit capacity to assist in arrears recovery, particularly from large taxpayers. The mission viewed the tax package as a step toward an investment-friendly tax system, but recommended that the revenue loss

from the tax package and previously scheduled tax cuts (including under the ongoing tariff reform) be offset by additional revenue-enhancing measures to guarantee the integrity of the non-mineral tax base and support the MTDS. In particular, the mission pointed to PFTAC technical assistance recommendations that could achieve this objective, such as through the creation of a large taxpayer unit and the introduction of a presumptive tax regime for small businesses. The authorities agreed with the need to safeguard the non-mineral revenue base through improved tax administration and were receptive to the PFTAC proposals, although they raised concerns that limited capacity could stymie effective implementation of reforms. They also pointed to the possibility of raising goods and service tax (GST) rates if needed in the future.

**FY2006-07 Main Tax Policy Measures 1/**

**Personal income tax**

- Increase in the tax-free threshold from K6,000 to K6,300 in 2006 and to K6,600 in 2007.
- Create a new tax bracket at a 30 percent rate, reducing the existing income bracket at the 35 percent rate.
- Increase the top income bracket from K95,000 to K150,000 in 2006 and to K250,000 in 2007.
- Reduce the top marginal tax rate from 47 percent to 45 percent in 2006 and to 42 percent in 2007.
- Partial elimination of double taxation of dividends with a final withholding tax.

**Tourism industry incentives**

- Double deduction for promotion costs.
- Accelerate depreciation for facilities expenses.
- Removal of some import duties.

**Excises**

- Cap on inflation adjustment for excise tax rates.
- Introduction of a reduced excise rate for low margin tobacco products.

1/ Permanent measures introduced in the 2006 budget.

17. **In line with the MTDS, the authorities view expenditure re-orientation toward development areas as a first priority.** The mission welcomed the shift in 2006 budget expenditure toward infrastructure, the increase in education and health spending, as well as the improvements in the integrated payroll system that will continue to help control salary expenditure. However, overall progress has been slow on expenditure reprioritization. While large cuts were made in payrolls in nonpriority areas in 2004 and 2005, these were offset by hiring in priority areas (including teachers and health workers). As a result, overall public employment has remained broadly unchanged and the wage bill will remain large. Against this background, the mission argued in favor of more front-loaded retrenchment instead of the current gradual employment reduction plan, and accelerated time-bound execution of the forthcoming recommendations from the “right-sizing” initiative’s to streamline the government’s structure and refocus it on core business. The authorities recognized that little progress had been made to date in reducing the wage bill, although it had been contained as a share of total expenditure and no new wage increase was budgeted for 2006, and that

redoubled efforts were needed. These were expected to follow from the “right-sizing” recommendations, including plans for retrenchment in nonpriority areas.

18. **The authorities have made progress in improving expenditure management and plan to further strengthen budget preparation and financial and reporting systems under their Public Expenditure Review and Rationalization (PERR) program.** The current monthly cash budget system and the introduction of financial controllers have helped to keep spending within ceilings and limit the accumulation of new domestic arrears, although unauthorized expenditure reallocations across spending items continue to occur. The government has also made progress on trust accounts, including reducing the number by half since 2004, and tagging another 350 for closure.<sup>2</sup> To capitalize on recent progress, the mission suggested introducing a time-bound plan to close the remaining trust accounts not subject to standard financial management controls. In addition, as statutory authorities do not follow basic accountability procedures, the mission suggested that their budget operations should be subject to standard expenditure reporting obligations.

19. **The mission noted that should mineral revenue remain strong, maintaining the 2006 budget deficit target would imply an increase in expenditure and a deterioration in the non-mineral balance.** The mission advocated using any savings in 2006 to finance some increase in priority infrastructure or social spending, as long as the capacity to implement the spending effectively is not overtaxed. The bulk of any additional revenue should be used to reduce government debt, which would provide a continuing flow of resources in the form of lower interest payments and a hedge against the risks discussed above. Over the longer term, as budget dependence on mineral revenue could increase as the large gas and mineral projects underway come on line, the government should strengthen the current fiscal framework to address the impact of mineral revenue volatility on expenditure policy.

20. **The government has developed new guidelines for debt management that aim to reduce costs and risks.** The strategy is based on limiting acquisition of new debt to either domestic or concessional sources and lengthening the maturity. The mission cautioned on lengthening the maturity of government debt at high cost at a time when domestic interest rates were coming down. It noted in particular that the recent oversubscriptions of longer-term maturity (and more costly) Inscribed Stocks auctions had resulted in yields well below coupon rates. The authorities viewed these developments as reflecting the limited options for longer-term investment in a liquid market. Nonetheless, they indicated that they planned to proceed cautiously in order to avoid an inordinate rise in interest costs. The mission also emphasized the importance of avoiding the contracting of new external debt on commercial terms, and expressed concern about possible growing implicit contingent liabilities given state-owned enterprises’ borrowing plans.

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<sup>2</sup> Trust accounts are used to hold third party funds (e.g., donor counterpart funds or court orders). Use of the funds does not require treasury authorization and they do not need to be cleared at year end.

21. **The government is attentive to the need to strengthen financing and monitoring of sub-national governments' activities.** Sub-national governments manage resources amounting to about 20–25 percent of central government's total expenditures, but are not subject to basic control and reporting standards, while service delivery in rural areas remains poor. The authorities acknowledged these concerns and noted their intention to proceed quickly to clarify the legal framework underlying sub-national governments' activities and responsibilities, reform financing arrangements and the system of grants, and enforce a reporting system for sub-national governments spending and debt. In addition, the district service improvement program places local governments under the direct monitoring of the central government treasury by creating small treasury offices in each district. The mission welcomed these plans, and in particular noted the need to subject the district support grants, which are outside budget oversight, to standard public expenditure controls and scrutiny pending eventual elimination.

22. **The mission cautioned regarding the prospective contracting of additional debt to finance equity investment in the new gas pipeline.** Although the details of the transaction have not been finalized, early indications are that the government would finance a share of the pipeline during 2006–07. The authorities viewed the gas pipeline project as essential to the economy's future and saw their participation as necessary for its finalization. However, they acknowledged the risks associated with an equity investment, and intended to minimize any increase in debt.

***Monetary policy and exchange rate policy: anchoring low inflation and maintaining competitiveness***

23. **The central bank reaffirmed its commitment to the objective of maintaining low inflation.** The authorities and the mission agreed that if fiscal policy remains prudent and the current cautious monetary policy stance continues, inflation should remain subdued over the medium term. However, as the combination of high excess reserves and low interest rates have begun to revive credit growth, the mission cautioned the authorities about further easing. Notwithstanding the apparent absence of inflationary pressure, the authorities recognized that the current high liquidity held risks and noted that additional measures were under consideration to supplement open market operations if needed, including levying mineral taxes in kina. The authorities also plan to develop a secondary market for government securities to assist in effective monetary policy implementation.

24. **The authorities and the mission agreed that the current floating exchange rate arrangement remains appropriate, as it has helped to promote adjustments to economic shocks and allowed the authorities to pursue an independent monetary policy.** In the last two years, the appreciation of the kina against the U.S. dollar helped bring down inflation and ease the external debt service burden, without an apparent loss in competitiveness. The authorities reaffirmed their commitment to the floating exchange rate and indicated that their policy remained to intervene only to smooth volatility in the market.

25. **The authorities relaxed foreign exchange controls on a range of capital transactions in June 2005.** They noted that an initial assessment indicated that the impact on the foreign exchange market had been minimal, notwithstanding negative interest rate differentials with foreign partners. The authorities indicated that additional actions to eliminate foreign exchange restrictions were under consideration.

26. **The central bank has made good progress in developing its monetary policy framework over the past year.** To bring a more medium-term focus to monetary policy, the forecasting horizon was extended to three years with the assistance of an MFD expert. The mission welcomed plans to further develop the central bank's inflation forecasting capacity and understanding of the monetary transmission mechanism, along with better coordination with the Treasury on liquidity and debt management policies. Communication with the public through the semi-annual Monetary Policy Statement has improved, helping to promote confidence in the central bank and its policy regime, in addition to increasing public accountability. The mission also drew attention to the need to implement the recommendations of the recent STA mission on monetary statistics, in particular to address weaknesses in the accounts of the central government at the central bank.

***Private sector development through institution and capacity building: structural reforms needed to reduce vulnerabilities and foster economic growth***

27. **As noted in the MTDS, removing longstanding impediments to private investment are essential to achieving higher growth and more rapid job creation.** The mission welcomed steps taken recently to improve the environment for private activity, including the relaxation of restrictions on visa and work permits, greater resources for road maintenance, reduction of the tax burden, and an improved dialogue with the business community. Accelerated implementation of the MTDS is needed to address remaining structural shortcomings hampering the private sector. These include further improving telecommunication and transportation infrastructure (particularly in rural areas), strengthening law and order, improving governance, addressing land tenure issues, reviving an efficient "one-stop shop" for investment, strengthening contract enforcement through judicial and legal training, and increasing transparency in public procurement. These steps would also help to diversify the export base, reduce dependence on the mineral sector and vulnerability to world commodity market developments, and promote job creation, which in turn would help in improving the law and order climate.

28. **A strengthening of the regulatory framework for the central bank, banks, and superannuation funds has improved financial sector soundness.** Although a full set of indicators is not available, available data show nonperforming loans continue to be low and capital adequacy ratios remain above the minimum requirement. Steps are now needed to complete reforms, including the implementation of the recommendations of Fund technical assistance on financial sector supervision. Both the mission and the authorities agreed that the rise in lending to the private sector in 2005 was a welcome sign that the financial sector was providing support for growth. At the same time, the authorities promised to remain vigilant to possible emerging risks, particularly regarding sector concentration of bank credit.

The authorities also indicated their intention to promptly implement the recently passed AML/CFT legislation and create a Financial Intelligence Unit.

Financial Sector Indicators (In percent)						
	2000	2001	2002	2003	2004	2005 1/
Capital Base to Risk Weighted Assets	18.0	18.6	16.3	23.2	28.7	31.2
Tier 1 to Risk Weighted Assets	15.0	14.8	12.5	15.3	21.3	16.7
NPLs to Total Loans	3.5	3.1	7.3	7.1	3.9	4.2
Return on Assets 2/	1.2	1.6	-0.8	3.6	3.0	4.3

Source: Bank Papua New Guinea.  
1/ September.  
2/ 2005 is June.

29. **The government acted to rehabilitate the Rural Development Bank (RDB) after its declared insolvency in July 2004.** The deterioration of the RDB's financial position in recent years had reflected poor loan management due to weak governance. The financial recovery plan for this bank: (a) replaced the previous board of directors and managing director, (b) temporarily stopped lending activity, (c) recapitalized the bank through a 0.3 percent of GDP injection, (d) cut staff by one third with assistance of a 5 million kina retrenchment grant, and (e) brought in experienced commercial lending officers to manage the bank's portfolio. The mission urged the passage of new legislation, scheduled for submission to Parliament in early 2006, which would establish new corporate rules to ensure the RDB operates on commercial grounds and limits political interference.

30. **The government reported that the larger public enterprises' financial positions have improved under outside management, but they indicated that additional measures are needed to improve long-term prospects and the efficiency of these enterprises.** Among such measures were the introduction of a competition and regulatory framework for each sector where public enterprises had a dominant or monopoly position. Also, prompt publication of financial statements for these enterprises would enhance transparency and governance. The mission noted that the establishment of a competition and regulatory framework would also provide a foundation for reviving the privatization program. It also welcomed the pass-through of increases in world oil prices to domestic petroleum product prices and the increases in the tariff structure for utilities, and stressed the need to keep prices in line with world prices or the costs of production. The authorities also observed that Telikom's monopoly status would be reviewed in 2007 when its current contract expired. They indicated that privatization for some public enterprises in the future might be considered.

31. **The mission encouraged the maintenance of the current open trade regime in Papua New Guinea, which is among the least restrictive in the region.** The elimination of the copra marketing board, which helped stimulate copra exports in 2005, was also noted. A seven-year tariff reform launched in 1999 is expected to be completed in early 2006. The



tariff structure will be compressed to four rates (zero, 30, 40, and 55 percent), resulting in a reduction in the average nominal import tariff. Papua New Guinea does not face major difficulties in accessing foreign markets.

32. **The mission urged rapid action on the authorities' plans under MTDS to improve governance through increased transparency and accountability.** Governance remains an important issue to be addressed, as acknowledged by the authorities. The mission urged strengthening the transparency of fiscal operations by reinforcing the Office of the Auditor General through additional resources and better compliance from government entities to allow publication of the final audited accounts of the central and provincial governments within one year as provided for under the law. The authorities agreed that further strengthening of the auditing function required increased attention.

33. **Data provision for surveillance purposes has improved and is generally adequate.** Nevertheless, shortcomings in the quality, coverage, consistency, and timeliness of national accounts, balance of payments, and fiscal data still affect the monitoring of macroeconomic developments. Further strengthening of the statistical framework is needed including through rehabilitation of the National Statistics Office. The authorities agreed with this assessment and sought technical assistance from the Fund in improving the data base.

#### IV. STAFF APPRAISAL

34. **Since 2003, impressive progress has been made in reversing the difficult macroeconomic conditions present earlier this decade.** Macroeconomic stability has been restored as the authorities adhered to disciplined fiscal and monetary policies against the background of improved commodity prices. The key challenge ahead is to sustain recent gains and move the economy to a higher growth path to reduce poverty. Implementation of the Medium-Term Development Strategy (MTDS), which the staff supports, will help meet this challenge. Achieving the medium-term fiscal objective of maintaining budget balance and supporting higher growth will require structural fiscal reform. Monetary policy, at the same time, should continue to focus on maintaining relatively low and stable inflation. In addition, further structural reform is needed to remove longstanding impediments to private investment and economic growth. The current favorable domestic and external economic environment provides a window of opportunity for moving forward on MTDS reforms.

35. **The re-orientation of government expenditure toward needed infrastructure and social spending under the MTDS is welcomed.** The government is encouraged to follow through with plans to reduce public employment, particularly in non-core areas, and reduce the wage bill which continues to crowd out needed development expenditure. Accordingly, a more front-loaded retrenchment in government employment should be considered. The staff supports rapid implementation of the right-sizing initiative recommendations to streamline the government and refocus it on core activities.

36. **The 2006 tax policy package improves incentives for private activity, and can be financed easily in an environment of mineral revenue windfalls.** The authorities are

cautioned about using such windfalls to finance permanent changes in the tax system, however. To support the Medium-Term Fiscal Strategy over the long term, the non-mineral revenue base should be strengthened through implementation of measures to improve tax administration, including the establishment of a large taxpayer unit.

37. **Should mineral revenue remain high and surpluses emerge over the medium term, the government is urged to continue the practices followed in the recent past.** Any windfall savings should be used to finance priority infrastructure or social spending, as long as it can be spent effectively, and to repay government debt. Conversely, should the risks to the medium-term outlook materialize, the authorities would need to consider steps to safeguard the MTFS.

38. **Progress in expenditure and debt management has been made, but challenges remain to improve spending controls.** The monthly cash budget system and the introduction of financial controllers were particularly welcomed. The staff encourages the authorities to extend standard financial management control to remaining trust accounts, to statutory authorities budgets, and to sub-national government operations including district support grants. The authorities are cautioned about the need to monitor growing contingent liabilities related to state-owned enterprises' borrowing plans.

39. **The central bank's continuing focus on maintaining low inflation is welcome.** Although inflationary pressure remains at bay, high liquidity in the banking system and low interest rates are encouraging rapid credit growth. The authorities are cautioned against further policy easing and encouraged in their efforts to strengthen and develop tools for effective monetary policy implementation. The current floating exchange rate arrangement has helped to promote adjustments to economic shocks and permits the authorities to pursue an independent monetary policy.

40. **Progress has been made in strengthening the financial sector.** Steps have been taken to rehabilitate the Rural Development Bank, but the authorities will need to do more, including establishing a legal framework to ensure the bank operates on commercial terms and is free from political interference to avoid a return to past difficulties.

41. **Higher growth, employment creation, and poverty reduction over the longer term will depend on stronger private sector activity.** The accelerated implementation of the remainder of the MTDS is needed to address structural impediments hampering the private sector. Greater competition in the public enterprise sector, including through opening the sector to competition and reviving the privatization program is needed. Governance remains weak, and rapid implementation is needed of plans to increase transparency and accountability, including through greater support of the Office of the Auditor General to allow timely publication of government accounts.

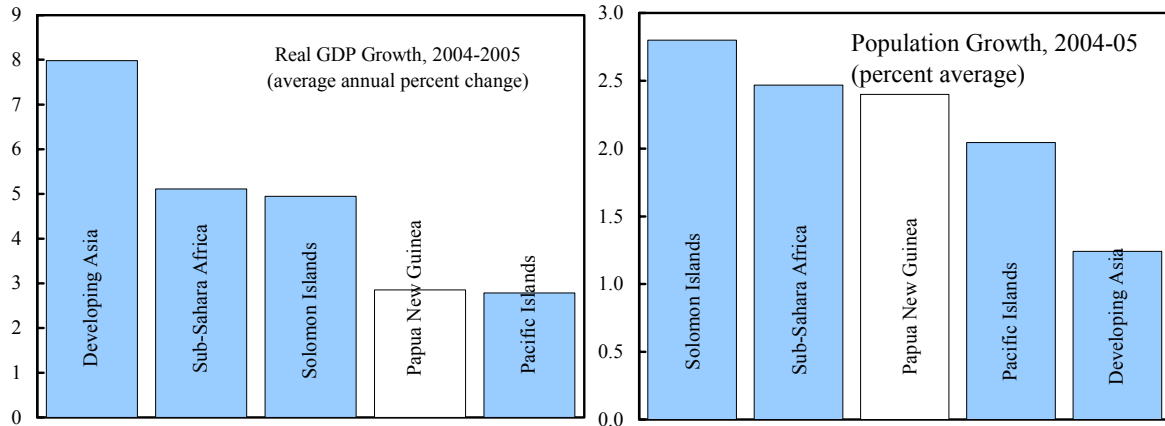
42. **Data provision for surveillance purposes is generally adequate, but further strengthening is needed to address continued weaknesses.** The authorities are urged to move rapidly to correct shortcomings in the quality, coverage, consistency, and timeliness of

national accounts, balance of payments, and fiscal data that continue to affect the monitoring of macroeconomic developments.

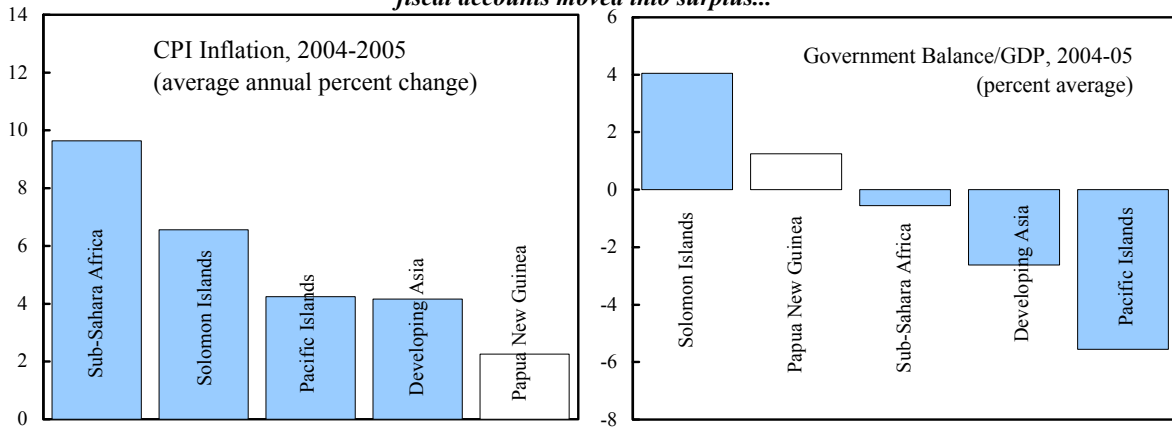
**43. The staff recommends that the next Article IV consultation be held on the standard 12-month cycle.**

Figure 1. Papua New Guinea: Regional and Global Comparators

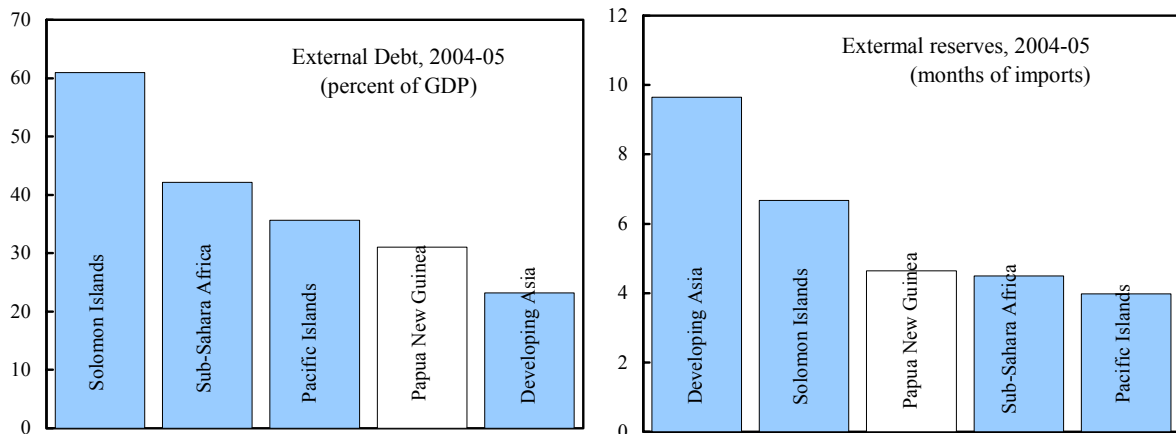
*Macroeconomic performance has improved in recent years, although growth is still below most comparators while population growth remains high.*



*However, good macroeconomic policies led to a reduction in inflation to levels that compare favorably...while fiscal accounts moved into surplus...*



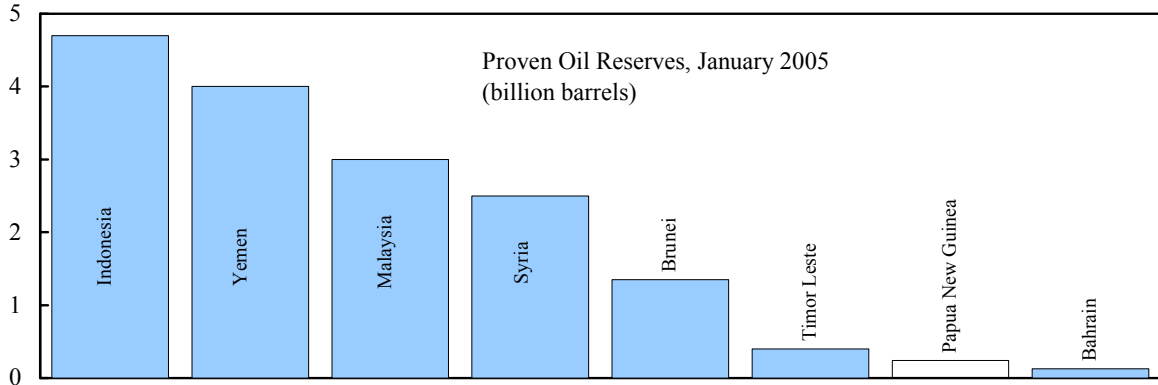
*resulting in improved external debt levels and official reserves.*



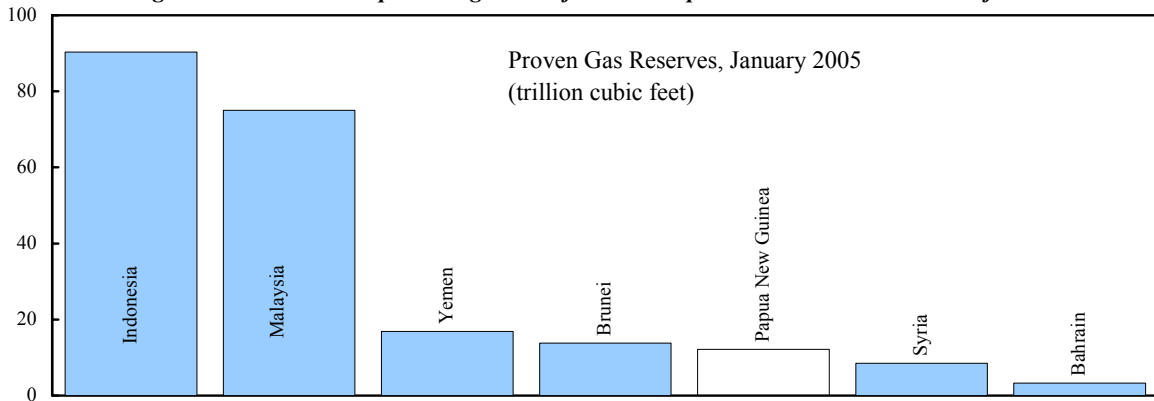
Source: IMF, *World Economic Outlook*; and Fund staff calculations.

Figure 2. Papua New Guinea: Regional and Global Comparators

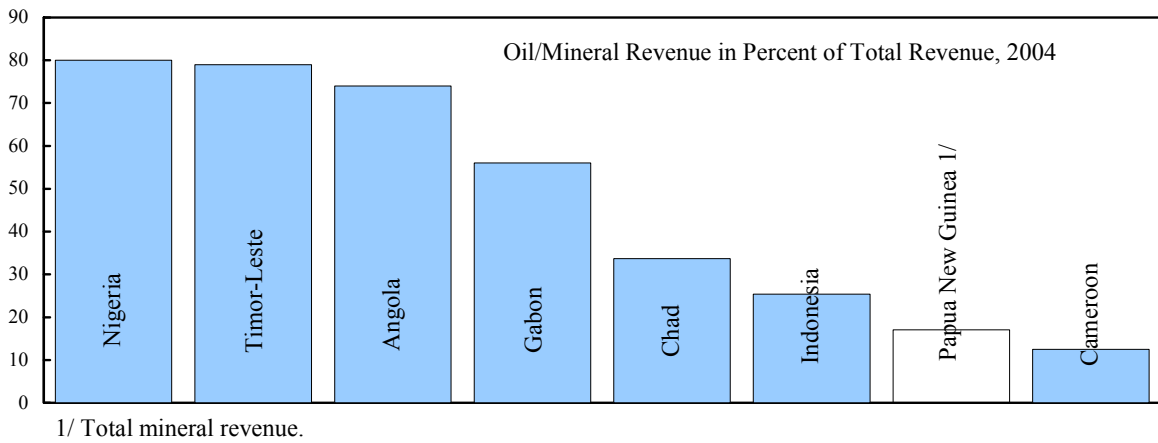
*Oil reserves are small and rapidly being depleted.*



*But gas reserves are more promising as new fields are expected to come on line in the future.*

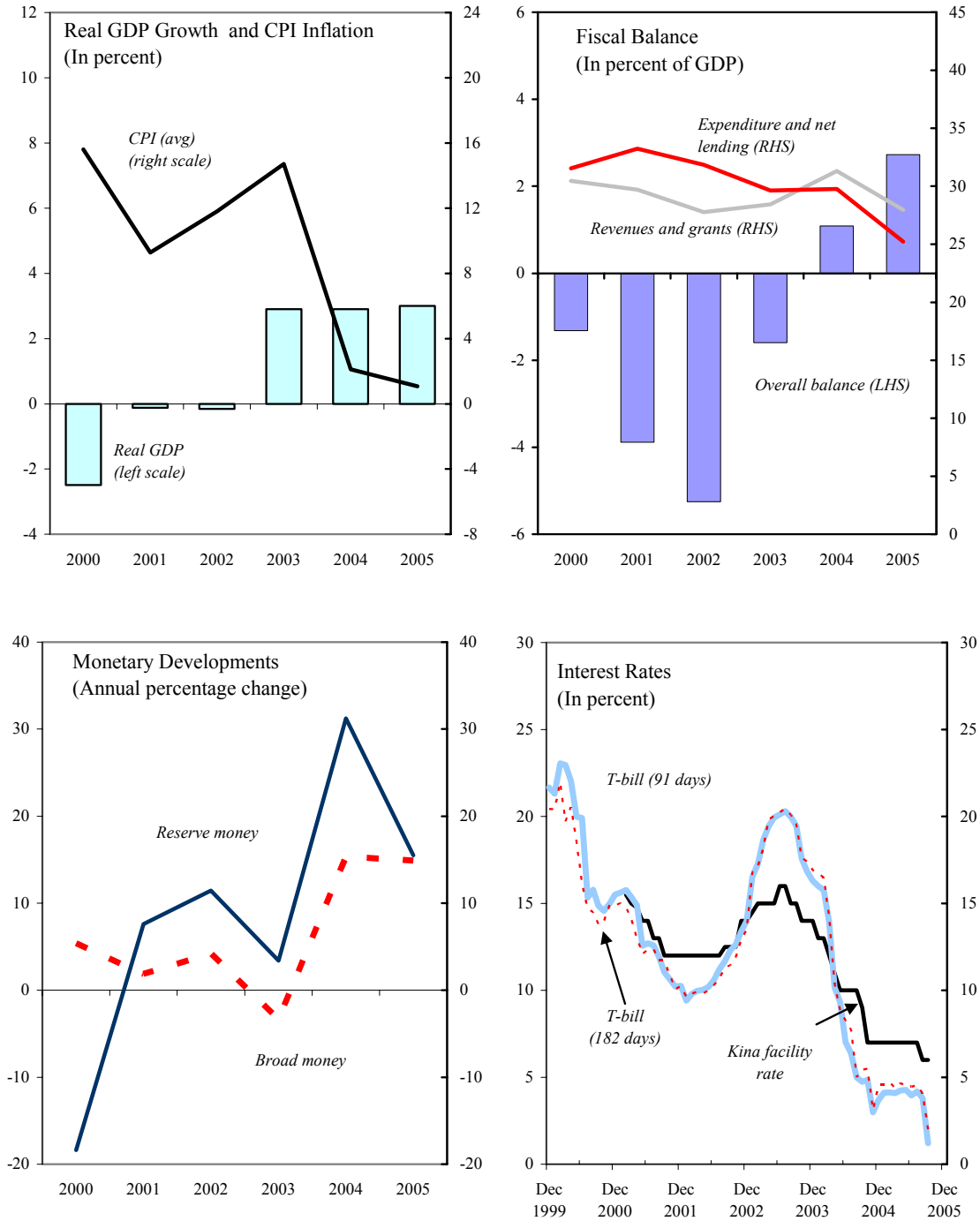


*However, currently government mineral revenue remains low and is not projected to increase significantly in the near term.*



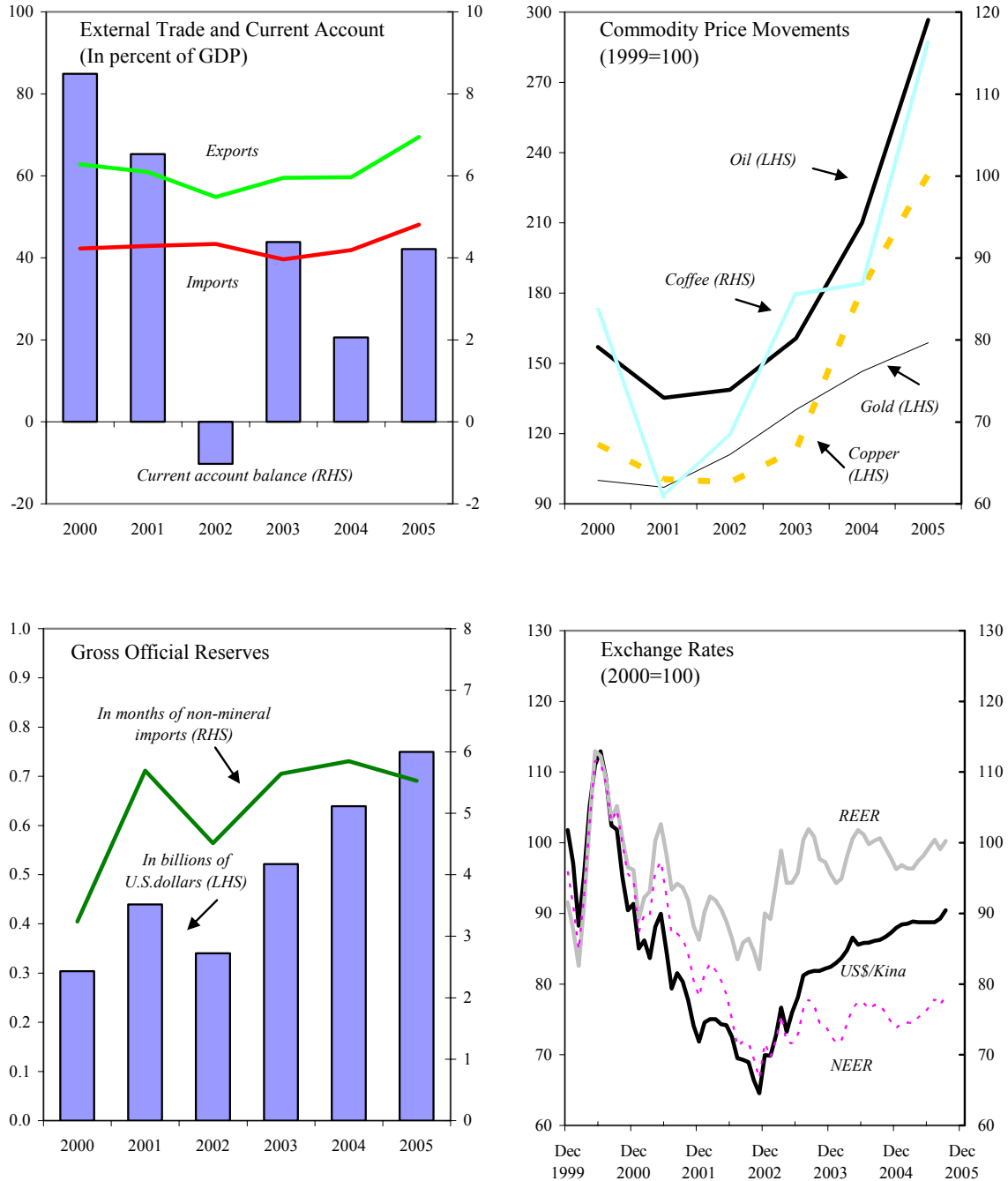
Source: Authorities; and British Petroleum Annual Report.

Figure 3. Papua New Guinea: Domestic Economic Indicators, 2000-2005



Source: Data Provided by Papua New Guinea authorities; IMF, *Information Notice System*; and Fund staff estimates.

Figure 4. Papua New Guinea: External Economic Indicators, 2000-2005



Sources: Data provided by the Papua New Guinea authorities; IMF, *Information Notice System* and *World Economic Outlook*; and Fund staff estimates.

Table 1. Papua New Guinea: Selected Economic Indicators, 2001–06

Nominal GDP (2004): US\$4.28 billion  
 Population (2004): 5.6 million  
 GDP per capita (2004): US\$764  
 Quota: SDR 131.6 million

	2001	2002	2003	2004	2005 Est.	2006 Proj.
<b>Real sector (percent change)</b>						
Real GDP growth 1/	-0.1	-0.2	2.9	2.9	3.0	3.5
Mineral	-10.4	-15.9	10.2	-0.9	-0.7	6.2
Nonmineral	1.9	2.5	1.9	3.5	3.5	3.2
CPI (annual average)	9.3	11.8	14.7	2.1	1.0	2.4
<b>Central government budget (percent of GDP)</b>						
Revenue and grants	29.7	27.8	28.4	31.3	28.0	27.7
Expenditure and net lending	33.2	31.8	29.6	29.8	25.2	27.3
Overall balance, cash basis (including grants) 2/	-3.9	-5.3	-1.6	1.1	2.7	0.4
Domestic financing (net) 3/	0.9	6.1	3.7	0.5	-1.0	0.4
External financing (net)	3.0	-0.9	-2.1	-1.6	-1.7	-0.8
<b>Money and credit (end-period percentage change)</b>						
Domestic credit	-12.3	20.4	-8.1	1.3	-1.0	24.0
Net credit to government	-26.1	80.3	-10.6	7.2	-24.7	42.8
Credit to the private sector	-1.2	-6.3	-4.3	-2.2	19.9	15.0
Broad money	1.9	4.2	-3.3	15.4	14.9	10.0
Interest rate (182-day T-bills; end-period) 4/	12.4	10.9	18.7	3.1	4.0	6.0
<b>Balance of payments (millions of U.S. dollars)</b>						
Exports, f.o.b.	1,878	1,646	2,153	2,554	3,352	3,714
Imports, c.i.f.	-1,321	-1,301	-1,435	-1,794	-2,321	-2,600
Current account (including grants)	201	-31	159	88	203	239
(In percent of GDP)	6.5	-1.0	4.4	2.1	4.2	4.6
Overall balance	66	-100	184	184	171	51
<b>Reserves and external debt (end-period; millions of U.S. dollars)</b>						
Net international reserves	331	224	398	575	749	800
(In months of nonmining imports, c.i.f.)	4.3	3.0	4.3	5.3	5.5	5.5
Gross international reserves	440	340	521	639	750	801
(In months of nonmining imports, c.i.f.)	5.7	4.5	5.6	5.8	5.5	5.5
Public external debt-service-ratio (percent of G&S exports) 5/	7.9	7.9	7.5	8.7	6.0	3.1
Public external debt-to-GDP ratio (in percent) 5/	48.7	51.5	44.1	34.5	27.3	24.9
<b>Exchange rates</b>						
US\$/kina (period-average) 4/	0.2964	0.2573	0.2814	0.3104	0.3217	...
US\$/kina (end-period) 4/	0.2658	0.2488	0.3000	0.3200	0.3230	...
Nominal GDP (millions of kina)	10,396	11,657	12,858	13,790	15,143	16,117

Sources: Data provided by the Papua New Guinea authorities; and Fund staff estimates and projections.

1/ Based on new official national account estimates (1998 prices).

2/ Measured from below-the-line in the fiscal accounts. Staff projections for 2005-06.

3/ Includes changes in check float.

4/ Figures for 2005 are as of end-October.

5/ Includes central government, Bank of Papua New Guinea, and statutory authorities.



Table 2. Papua New Guinea: Summary of Central Government Operations, 2001–06

(In percent of GDP)

	2001	2002	2003	2004	2005		2006	
					Rev. Budget	Staff Est.	Budget	Staff Proj.
Revenue and grants	29.7	27.8	28.4	31.3	33.0	28.0	29.0	27.7
Revenue	23.7	21.8	22.6	25.1	24.6	24.7	22.8	23.5
Tax revenue	22.1	20.3	20.8	23.3	23.1	23.2	21.4	21.9
Mineral taxes	5.3	3.1	3.9	5.3	6.4	6.6	5.5	6.5
Nonmineral taxes	16.7	17.2	17.0	18.0	16.6	16.6	15.9	15.4
Nontax revenue	1.6	1.5	1.8	1.8	1.5	1.5	1.4	1.5
Grants	6.0	6.0	5.8	6.2	8.5	3.2	6.2	4.2
Total expenditure and net lending	33.2	31.8	29.6	29.8	33.7	25.2	29.5	27.3
Recurrent expenditure	23.2	21.8	20.8	20.5	19.4	19.1	19.5	19.3
National departments	11.9	11.6	9.3	11.4	11.5	11.5	10.8	11.2
Salaries and wages	5.2	4.9	4.8	4.9	4.6	4.6	4.6	4.6
Arrears payments	0.9	0.1	0.1	0.3	0.6	0.6	0.4	0.4
Education funding	0.0	1.2	0.2	0.3	0.3	0.3	0.3	0.3
Goods and services 1/	3.7	4.9	4.1	5.5	5.6	5.6	5.1	5.6
Other	2.2	1.7	0.2	0.8	0.7	0.7	0.7	0.7
Provinces	5.7	5.0	4.6	4.9	4.2	4.2	4.4	4.3
Salaries and wages	4.0	4.2	3.9	4.3	3.6	3.6	3.8	3.7
Goods and services	0.9	0.4	0.5	0.5	0.4	0.4	0.4	0.3
Conditional grants	0.7	0.5	0.2	0.2	0.2	0.2	0.2	0.3
Statutory authorities	1.6	1.4	1.6	1.5	1.3	1.3	1.3	1.3
Interest	4.0	3.7	5.4	2.7	2.3	2.1	3.1	2.5
Domestic	2.4	2.1	4.1	1.7	1.6	1.3	2.4	1.9
Foreign	1.6	1.6	1.3	1.0	0.7	0.8	0.7	0.6
Development expenditures and net lending	10.0	10.0	8.8	9.2	14.3	6.1	10.0	8.0
Development expenditure	10.1	10.0	8.9	9.3	11.7	6.1	10.0	8.0
Foreign financed	6.7	8.0	7.3	6.9	9.4	3.8	7.2	5.2
Project grants	5.3	5.8	5.8	6.2	8.5	3.2	6.2	4.2
Project concessional loans	1.4	1.0	1.0	0.5	0.9	0.5	1.0	1.0
Nonconcessional loans	0.0	1.2	0.4	0.2	0.1	0.1	0.0	0.0
Domestically funded	3.4	2.0	1.6	2.4	2.3	2.3	2.8	2.8
Net lending 2/	0.0	0.0	-0.1	-0.1	2.6	0.0	0.0	0.0
Overall balance (from above the line)	-3.6	-4.1	-1.2	1.5	-0.6	2.7	-0.6	0.4
Primary balance (from below the line)	0.5	-0.3	4.2	4.2	1.7	4.8	2.5	2.9
Residual deficit	-0.3	-1.2	-0.4	-0.5	0.0	0.0	0.0	0.0
Overall balance (from below the line)	-3.9	-5.3	-1.6	1.1	-0.6	2.7	-0.6	0.4
Primary balance (from below the line)	0.1	-1.5	3.8	3.8	1.7	4.8	2.5	2.9
Financing	3.9	5.3	1.6	-1.1	0.6	-2.7	0.6	-0.4
External financing (net)	3.0	-0.9	-2.1	-1.6	-1.0	-1.7	-0.8	-0.8
Disbursements	6.0	2.2	1.5	1.3	0.9	0.6	1.0	1.0
Amortization	-3.0	-3.1	-3.5	-2.9	-2.0	-2.4	-1.8	-1.7
Domestic financing (net)	0.9	6.1	3.7	0.5	1.7	-1.0	1.3	0.4
Banking sector 2/	-2.4	4.8	-1.0	0.6	...	-2.0	...	2.4
Nonbanks 2/	2.0	0.9	4.4	-1.2	...	0.9	...	-2.1
Float	1.2	-1.3	0.0	0.9	...	0.0	...	0.0
Asset sales	0.0	1.7	0.3	0.2	...	0.0	...	0.0
<i>Memoranda items:</i>								
Overall balance with equity acquisition 2/	...	...	...	...	...	0.1	...	...
Nonmineral overall balance	-9.6	-8.5	-6.0	-4.7	-7.6	-4.4	-6.7	-6.7
Nonmineral primary balance	-5.6	-4.7	-0.7	-2.0	-5.3	-2.4	-3.6	-4.2
Total central government gross debt (% of GDP)	72	72	62	54	49	49	48	46
Nominal GDP (in millions of kina)	10,396	11,657	12,858	13,790	15,143	15,143	16,117	16,117

Sources: Data provided by the Papua New Guinea authorities; and Fund staff estimates.

1/ In 2006, expenditures are above budget ceilings as they include projected saving from interest payments.

2/ In 2005, the authorities treat savings for a future acquisition of an equity participations in the PNG gas project as an expenditure. Under IMF's GFS standards, these are treated as savings below the line. These savings are then used in 2006 and the transaction is registered below the line under nonbanks domestic financing. A memo item shows IMF staff projections according to the authorities' treatment.

Table 3: Papua New Guinea: Summary Accounts of the Banking System, 2001-06

	2001	2002	2003	2004	2005 Est.	2006 Proj.
<b>Bank of Papua New Guinea</b>						
	(In millions of kina, end period)					
Net foreign assets	1,249	908	1,317	1,862	2,316	2,498
Foreign assets	1,656	1,379	1,735	2,063	2,318	2,500
Foreign liabilities	406	471	418	201	2	2
Net domestic assets	-671	-264	-651	-988	-1,307	-1,381
Domestic credit	527	760	676	630	270	574
Net credit to government	472	705	622	601	242	545
Claims	746	790	706	702	709	711
Central government deposits	275	86	84	101	467	166
Credit to other sectors	56	56	55	29	29	29
Other items net	-1,199	-1,024	-1,327	-1,618	-1,577	-1,955
Reserve money	578	644	666	874	1,009	1,116
Currency in circulation	385	472	512	531	583	621
Deposits of commercial banks	188	162	153	332	415	485
Other deposits	4	9	0	10	10	10
<b>Monetary Survey</b>						
	(In millions of kina, end period)					
Net foreign assets	1,580	1,419	1,616	2,157	2,641	2,843
Net domestic assets	1,507	1,798	1,494	1,430	1,481	1,691
Domestic credit	2,367	2,850	2,620	2,655	2,628	3,259
Net credit to central government	697	1,257	1,123	1,204	907	1,295
Claims on other sectors	1,670	1,594	1,497	1,451	1,721	1,965
Claims on the private sector	1,543	1,445	1,383	1,352	1,620	1,863
Other items, net	-860	-1,052	-1,126	-1,225	-1,147	-1,569
Broad money	3,087	3,217	3,109	3,587	4,122	4,534
Narrow money	1,321	1,535	1,708	2,215	2,642	2,989
Currency outside banks	272	366	399	420	452	472
Demand deposits	1,049	1,169	1,309	1,795	2,190	2,516
Quasi money	1,766	1,682	1,401	1,373	1,480	1,545
	(Annual percentage change)					
Net foreign assets	50.0	-10.2	13.9	33.5	22.4	7.7
Net domestic assets	-23.8	19.3	-16.9	-4.3	3.6	14.2
Net domestic credit	-12.3	20.4	-8.1	1.3	-1.0	24.0
<i>Of which:</i> Private sector	-1.2	-6.3	-4.3	-2.2	19.9	15.0
Broad money	1.9	4.2	-3.3	15.4	14.9	10.0
<i>Memoranda items:</i>						
Reserve money (percentage change)	7.6	11.4	3.4	31.2	15.5	10.6
Gross international reserves (in millions of US dollars)	440	340	521	639	750	801
Broad money velocity	3.4	3.6	4.1	3.8	3.7	3.6
Nominal nonmineral GDP/Broad money	2.6	3.0	3.3	3.0	2.8	2.7

Sources: Data provided by the Papua New Guinea authorities; and Fund staff estimates.

Table 4. Papua New Guinea: Balance of Payments, 2001-06

(In millions of U. S. dollars)

	2001	2002	2003	2004	2005 Est.	2006 Proj.
<b>Current account balance</b>	<b>201</b>	<b>-31</b>	<b>159</b>	<b>88</b>	<b>203</b>	<b>239</b>
Mineral	802	473	728	793	1,100	1,105
Nonmineral	-601	-503	-569	-705	-897	-866
Trade balance	556	344	718	760	1,031	1,115
Exports (f.o.b.)	1,878	1,646	2,153	2,554	3,352	3,714
Mineral	1,598	1,228	1,635	1,863	2,494	2,756
Nonmineral	280	417	518	690	858	959
Imports (c.i.f.)	-1,321	-1,301	-1,435	-1,794	-2,321	-2,600
Mineral	-394	-397	-325	-482	-693	-840
Nonmineral	-927	-904	-1,109	-1,312	-1,628	-1,759
Services balance	-497	-571	-795	-853	-1,025	-1,122
Mineral (net)	-401	-358	-582	-588	-701	-811
Nonmineral (net)	-96	-213	-213	-265	-324	-312
Unrequited transfers (net)	142	196	235	182	198	246
Official	184	174	199	142	157	219
Private	-42	22	36	40	41	27
<b>Capital account balance</b>	<b>-252</b>	<b>-104</b>	<b>-23</b>	<b>35</b>	<b>-33</b>	<b>-188</b>
Medium- and long-term loan disbursements	-218	-154	-151	-213	-190	-110
Official (net)	-60	-26	-100	-101	-84	-40
Private capital flows (net)	-158	-128	-51	-113	-107	-70
Foreign direct investment (net)	74	19	97	26	68	88
Change in net foreign assets of commercial banks	2	-33	-60	-1	88	4
Other (net)	-110	63	90	224	2	-170
<b>Exceptional financing</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Overall balance</b>	<b>66</b>	<b>-100</b>	<b>184</b>	<b>184</b>	<b>171</b>	<b>51</b>
<b>Change in net international reserves (- increase)</b>	<b>-66</b>	<b>100</b>	<b>-184</b>	<b>-184</b>	<b>-171</b>	<b>-51</b>
Gross official reserves	-136	100	-181	-118	-111	-51
IMF (net)	70	0	-6	-62	-60	0
Purchases	72	0	0	0	0	0
Repurchases	-1	0	-6	-62	-60	0
Other foreign liabilities	-1	0	3	-4	1	0
<b>Memoranda items:</b>						
Current account (in percent of GDP)	6.5	-1.0	4.4	2.1	4.2	4.6
Mineral	26.0	15.8	20.1	18.5	22.6	21.3
Nonmineral	-19.5	-16.8	-15.7	-16.5	-18.4	-16.7
Net international reserves						
In millions of U.S. dollars	331	224	398	575	749	800
Gross official reserves (end-year)						
In millions of U.S. dollars	440	340	521	639	750	801
In months of nonmineral imports	5.7	4.5	5.6	5.8	5.5	5.5
Public external debt-service-exports ratio (in percent) 1/	7.9	7.9	7.5	8.7	6.0	3.1
Public external debt-GDP ratio (in percent) 1/	48.7	51.5	44.1	34.5	27.3	24.9

Sources: Data provided by the Papua New Guinea authorities; and Fund staff estimates.

1/ Public external debt includes central government, central bank external debt, and statutory authorities.

Table 5. Papua New Guinea: Medium-Term Scenario, 2001–10

	2001	2002	2003	2004	2005 Est.	Projections				
						2006	2007	2008	2009	2010
<b>Growth and prices (change in percent)</b>										
Real GDP	-0.1	-0.2	2.9	2.9	3.0	3.5	3.5	3.5	4.1	4.5
Mineral	-10.4	-15.9	10.2	-0.9	-0.7	6.2	4.3	2.5	9.4	11.4
Nonmineral	1.9	2.5	1.9	3.5	3.5	3.2	3.4	3.7	3.3	3.4
CPI (period average)	9.3	11.8	14.7	2.1	1.0	2.4	3.5	3.8	3.9	3.9
<b>Savings and investment (in percent of GDP)</b>										
Foreign savings	6.5	-1.0	4.4	2.1	4.2	4.6	-2.0	-2.6	-1.3	3.9
Public saving-investment balance 1/	-3.9	-5.3	-1.6	1.1	2.7	0.4	0.1	-0.1	0.3	0.0
Private saving-investment balance	-2.6	6.3	-2.8	-3.1	-6.9	-5.0	2.0	2.7	1.1	-3.9
<b>Central government operations (in percent of GDP)</b>										
Total revenue and grants	29.7	27.8	28.4	31.3	28.0	27.7	28.4	27.9	26.8	26.3
<i>Of which:</i> Mineral tax revenue	5.3	3.1	3.9	5.3	6.6	6.5	6.2	5.6	5.1	5.1
<i>Of which:</i> Grants	6.0	6.0	5.8	6.2	3.2	4.2	4.9	4.8	4.5	4.2
Total expenditure	33.2	31.8	29.6	29.8	25.2	27.3	28.3	28.0	26.8	26.0
Primary balance 2/	0.1	-1.5	3.8	3.8	4.8	2.9	2.7	2.5	2.4	2.6
Overall balance 2/	-3.9	-5.3	-1.6	1.1	2.7	0.4	0.1	-0.1	-0.1	0.3
Domestic financing (net) 3/	0.9	6.1	3.7	0.5	-1.0	0.4	0.2	0.5	0.5	-0.1
Foreign financing (net)	3.0	-0.9	-2.1	-1.6	-1.3	-0.8	-0.3	-0.3	-0.4	-0.1
<b>Central government debt (in percent of GDP)</b>										
Domestic	71.8	72.3	61.7	53.6	48.6	46.3	50.4	49.1	45.6	42.9
External	23.2	20.7	17.6	19.1	21.3	21.4	21.5	21.3	20.2	19.2
Overall	48.7	51.5	44.1	34.5	27.3	24.9	28.9	27.8	25.5	23.7
<b>Balance of payments (in millions of U.S. dollars)</b>										
Exports, f.o.b.	1,878	1,646	2,153	2,554	3,352	3,714	3,747	3,693	3,695	4,003
<i>Of which:</i> Mineral	1,598	1,228	1,635	1,863	2,494	2,756	2,738	2,669	2,639	2,912
Imports, c.i.f.	-1,321	-1,301	-1,435	-1,794	-2,321	-2,600	-3,057	-3,038	-2,975	-2,971
Current account	201	-31	159	88	203	239	-109	-144	-79	242
(In percent of GDP)	6.5	-1.0	4.4	2.1	4.2	4.6	-2.0	-2.6	-1.3	3.9
Overall balance (including exceptional financing)	66	-100	184	184	171	51	165	9	20	150
<b>Net official reserves (in millions of U.S. dollars)</b>										
(In months of nonmining imports, c.i.f.)	331	224	398	575	749	800	965	975	995	1,145
	4.3	3.0	4.3	5.3	5.6	5.5	6.2	6.1	6.0	6.5
<b>Gross official reserves (in millions of U.S. dollars)</b>										
(In months of nonmining imports, c.i.f.)	440	340	521	639	750	801	966	975	996	1,146
	5.7	4.5	5.6	5.8	5.5	5.5	6.2	6.1	6.0	6.5
<b>Public external debt service-export ratio (in percent)</b>										
	7.9	7.9	7.5	8.7	6.0	3.1	3.1	3.2	3.3	3.1
<i>Memoranda items:</i>										
Nominal GDP (in millions of kina)	10,396	11,657	12,858	13,790	15,143	16,117	16,757	17,473	19,104	20,754
Nominal GDP (in millions of U.S. dollars)	3,081	2,999	3,618	4,280	4,872	5,188	5,328	5,466	5,874	6,275

Sources: Department of Treasury; Bank of Papua New Guinea; and Fund staff estimates and projections.

1/ Central government operations only.

2/ Measured on a below-the-line basis.

3/ Includes changes in check float.

Table 6. Papua New Guinea: Indicators of External Vulnerability, 2000–05

(In percent of GDP, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005 Est.
<b>Financial indicators</b>						
Gross central government debt 1/	58.7	71.8	72.3	61.7	53.6	48.6
Broad money (percent change, 12-month basis)	5.4	1.9	4.2	-3.3	15.4	14.9
Private sector credit (percent change, 12 month basis)	3.0	-1.2	-6.3	-4.3	-2.2	19.9
182 day T-bill yield 1/	17.0	12.4	10.9	18.7	3.1	4.0
182 day T-bill yield (real) 2/	6.4	1.8	-3.4	9.5	0.7	2.6
<b>External indicators</b>						
Exports (percent change, 12-month basis in U.S. dollars)	9.6	-15.2	-12.4	30.8	18.6	31.3
Imports (percent change, 12-month basis in U.S. dollars)	1.2	-11.3	-1.5	10.2	25.1	29.4
Current account balance	8.5	6.5	-1.0	4.4	2.1	4.2
Capital and financial account balance	-275.3	-252.3	-104.2	-23.4	35.4	-32.8
<i>Of which:</i> Inward foreign direct investment	146.3	116.1	77.4	99.8	25.8	103.0
Gross official reserves (millions of U.S. dollars)	304.2	439.7	340.1	521.4	639.1	750.0
Central Bank short-term foreign liabilities (millions of U.S. dollars)	0.8	0.5	1.0	0.7	0.2	0.8
Commerical bank foreign assets (millions of U.S. dollars)	96.5	112.2	153.1	151.4	116.6	129.5
Commerical bank foreign liabilities (millions of U.S. dollars)	18.1	24.2	26.0	28.5	21.9	24.4
Gross official reserves (months of nonmineral imports, c.i.f.)	3.2	5.7	4.5	5.6	5.8	5.5
Broad money to gross reserves (ratio)	3.2	1.9	2.4	1.8	1.8	1.8
Total short-term external debt to reserves (percent) 3/	6.0	5.5	7.6	5.5	3.4	3.2
Public external debt to GDP ratio (in percent)	40.7	48.7	51.5	44.1	34.5	27.3
Public external debt service to exports (percent)	6.8	7.9	7.9	7.5	8.7	6.0
<b>Financial market indicators</b>						
Foreign currency long-term government debt rating 1/						
Moody's 4/	B1(neg.)	B1(stab.)	B1(stab.)	B1(stab.)	B1(stab.)	B1(stab.)
Standard & Poors 5/	B+(neg.)	B(stab.)	B(neg.)	B(stab.)	B(pos.)	B(pos.)

Sources: Department of Treasury; Bank of Papua New Guinea; and Fund staff estimates.

1/ End of period.

2/ Ex-post real rate.

3/ Covers only banking system short-term external debt.

4/ Initial rating of B1 (stable) in January 1999.

5/ Initial rating of B+ (stable) in January 1999.

Table 7. Papua New Guinea: Millennium Development Goals Progress, 1990-04

	1990	1994	1997	2000	2003	2004
Goal 1: Eradicate extreme poverty and hunger						
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day						
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger						
Percentage share of income or consumption held by poorest 20%	..	..	4.5	..	..	..
Poverty headcount, national (% of population)	..	..	37.5	..	..	..
Goal 2: Achieve universal primary education						
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling						
Net primary enrollment ratio (% of relevant age group)	66	..	74.8	78.2	74.3	..
Primary completion rate, total (% of relevant age group)	51.1	50.3	51.7	57.6	52.6	..
Proportion of pupils starting grade 1 who reach grade 5	59.1	..	68	50.6	..	..
Youth literacy rate (% ages 15-24)	..	..	..	66.7	..	..
Goal 3: Promote gender equality and empower women						
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015						
Proportion of seats held by women in national parliament (%)	0	..	0	2	1	1
Ratio of girls to boys in primary and secondary education (%)	78.7	..	88.9	88.8	86.8	..
Ratio of young literate females to males (% ages 15-24)	..	..	..	92.7	..	..
Share of women employed in the nonagricultural sector (%)	20.3	25	28.5	32.1	35.4	35.4
Goal 4: Reduce child mortality						
Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate						
Immunization, measles (% of children ages 12-23 months)	67	73	41	68	49	49
Infant mortality rate (per 1,000 live births)	74	72	..	70	69	69
Under 5 mortality rate (per 1,000)	101	98	..	95	93	93
Goal 5: Improve maternal health						
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio						
Births attended by skilled health staff (% of total)	..	..	53.2	..	..	..
Maternal mortality ratio (modeled estimate, per 100,000 live births)	..	..	..	300	..	..
Goal 6: Combat HIV/AIDS, malaria, and other diseases						
Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS						
Prevalence of HIV, total (% of population aged 15-49)	..	..	..	0.4	0.6	0.6
Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases						
Contraceptive prevalence rate (% of women ages 15-49)	..	..	25.9	..	..	..
Incidence of tuberculosis (per 100,000 people)	267.2	256.9	249.5	242.3	235.3	235.3
Tuberculosis cases detected under DOTS (%)	..	..	0.9	7	15.3	15.3
Goal 7: Ensure environmental sustainability						
Target 9: Integrate the principles of sustainable development into country policies and program and reverse the loss of environmental resources						
Forest area (% of total land area)	70.1	..	..	67.6	..	..
Nationally protected areas (% of total land area)	..	..	..	..	2.3	2.3
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation						
Access to an improved water source (% of population)	39	..	..	..	39	..
Target 11: Have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers						
Access to improved sanitation (% of population)	45	..	..	..	45	..
CO2 emissions (metric tons per capita)	0.6	0.6	0.5	0.5	..	..
Goal 8: Develop a global partnership for development						
Target 12: Various						
Aid per capita (current US\$)	103.8	73.5	72.8	53.7	40.1	40.1
Debt service (% of exports)	18	12	11	8	7	7
Fixed line and mobile phone subscribers (per 1,000 people)	8	9.4	12.4	14.3	14.5	..
Internet users (per 1,000 people)	..	..	1.1	8.8	13.7	..
Personal computers (per 1,000 people)	..	..	41.5	54.6	58.7	..
General Indicators						
Fertility rate, total (births per woman)	5.6	4.8	4.6	..	4.3	4.3
GNI per capita, Atlas method (current US\$)	860	1200	990	670	490	580
GNI, Atlas method (current US\$) (billions)	3.4	5.3	4.7	3.4	2.7	3.3
Gross capital formation (% of GDP)	24.4	21.4	21.1	16.4	15	17.7
Life expectancy at birth, total (years)	55.1	..	57.2	..	57.2	57.2
Literacy rate, adult total (% of people ages 15 and above)	..	..	..	57.3	..	..
Population, total (millions)	4	4.4	4.8	5.1	5.5	5.6
Trade (% of GDP)	89.6	94.3	92.4	90	..	..

Source: World Development Indicators database, April 2005.

Note: Figures in italics refer to periods other than those specified.

**PAPUA NEW GUINEA: FUND RELATIONS**  
(As of November 30, 2005)

**I. Membership Status:** Joined October 9, 1975; Article VIII

<b>II. General Resources Account:</b>	<b>SDR Million</b>	<b>Percent Quota</b>
Quota	131.60	100.00
Fund holdings of currency	131.16	99.67
Reserve position in Fund	0.44	0.33

<b>III. SDR Department:</b>	<b>SDR Million</b>	<b>Percent Allocation</b>
Net cumulative allocation	9.30	100.00
Holdings	0.02	0.20

**IV. Outstanding Purchases and Loans:** None

**V. Financial Arrangements:**

<b>Type</b>	<b>Approval Date</b>	<b>Expiration Date</b>	<b>Amount Approved (SDR Million)</b>	<b>Amount Drawn (SDR Million)</b>
Stand-by	4/25/90	6/24/91	26.36	0.00
Stand-by	7/31/91	9/30/92	26.36	0.00
Stand-by	7/14/95	12/15/97	71.48	35.34
Stand-by	3/29/00	9/28/01	85.54	85.54

**VI. Projected Obligations to Fund** (SDR million; based on existing use of resources and present holdings of SDRs):

	<b>2005</b>	<b>Forthcoming</b>			
		<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Principal	0.00	0.00	0.00	0.00	0.00
Charges/interest	<u>0.00</u>	<u>0.28</u>	<u>0.28</u>	<u>0.28</u>	<u>0.28</u>
Total	0.00	0.28	0.28	0.28	0.28

**VII. Safeguards Assessments:**

Under the Fund's safeguards assessment policy, the Bank of Papua New Guinea (BPNG) was subject to a transitional assessment based on its SBA with the Fund, which was approved in March 2000 and expired in September 2001. The transitional assessment was completed on May 4, 2001, and it identified certain weaknesses and made appropriate recommendations, as reported in the 2002 Article IV staff report. BPNG will be subject to a full safeguards assessment if another Fund arrangement is approved.

**VIII. Exchange Rate Arrangement:**

The exchange rate of the kina is determined freely in the interbank market in which authorized banks participate, although the central bank may intervene with spot purchases or sales of foreign exchange.

**IX. Article IV Consultation:**

Papua New Guinea is on the standard 12-month consultation cycle. The last Article IV consultation discussions were held during March 1–11, 2004. The staff report (SM/04/172) was considered by the Executive Board and the consultation concluded on June 2, 2004.

**X. Technical Assistance from Headquarters:**

**FAD:** A joint FAD/PFTAC mission in March 2000 assisted the authorities in preparing a Report on the Observance of Standards and Codes Fiscal Transparency Module, published in October 2000. A mission in December 2000 provided advice on the reconciliation of large and volatile differences in fiscal reporting based on information provided by the Department of Finance and Treasury and information reported by the Bank of Papua New Guinea. A mission in February 2002 assessed progress in improving fiscal transparency.

**LEG:** A mission in November 1996 provided advice on the legal framework for the National Value-Added Tax. A mission in November 2005 provided advice on the drafting of a tax administration law.

**MFD:** A mission in November 2001 reviewed foreign exchange management. A mission in June 2001 assessed the monetary policy implementation framework. During 2001–03 assistance was provided through missions in bank supervision, financial sector restructuring and improving the accounting framework and monetary operations of the central bank. A resident advisor was assigned to the BPNG research department for 15 months through August 2003. Technical assistance through short peripatetic visits was delivered on bank regulation and supervision (2001–November 2005), on medium-term monetary policy formulation (October 2004 and September 2005), and on internal audits (July and October 2005).

**STA:** Four missions in 1995–96 provided advice on the compilation of national accounts. A mission reviewed monetary and financial statistics in April 2005.

**XI. Resident Representative:**

A post was opened in Port Moresby in May 2000 and is currently filled by Mr. E. Faal.



## **PAPUA NEW GUINEA: RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE<sup>1</sup>**

Assistance to Papua New Guinea (PNG) in recent years has been limited due to the presence of extensive assistance under the Australian Enhanced Cooperation Plan (ECP). In all, there have been 13 missions since 2000. PNG has sent 38 officials to the Center's regional seminars, workshops and training courses in this period.

### **Public Financial Management**

PFTAC assisted in the preparation of a ROSC, which was published in October 2000, and participated in a FAD technical assistance mission (December 2000) on the reconciliation of fiscal and monetary reports on government activity.

### **Tax Administration and Policy**

The Internal Revenue Commission is receiving extensive assistance under the ECP program. PFTAC's taxation expert visited PNG in August 2004 to examine and make recommendations for reform of its organizational structure, operations and procedures and measures to strengthen the revenue collection capabilities and improve voluntary compliance, including through the establishment of a Large Taxpayers Unit. A follow up mission in April 2005 indicated that the authorities continue to study the reforms recommended but have no present plans to implement them.

### **Financial Sector Regulation and Supervision**

There is no current PFTAC involvement in this area but the advisor visited BPNG in September 2004 and July 2005 to identify areas where technical assistance could be provided. In October 2005, the BPNG hosted the annual meeting of the Association of Financial Supervisors of Pacific Countries. PFTAC is the secretariat.

### **Economic and Financial Statistics**

In 2000, PFTAC conducted a review of statistical operations, with a follow-up mission in February 2001. A peripatetic adviser assisted the central bank on the balance of payments in May 2003. PNG is a member of the General Data Dissemination System (GDDS) project organized under PFTAC, but has yet to submit metadata; further TA in this area will be subject to improvement with GDDS metadata.

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<sup>1</sup> The Pacific Financial Technical Assistance Centre (PFTAC) in Suva, Fiji is a regional technical assistance institution operated by the IMF with financial support of the Asian Development Bank, Australia, Japan and New Zealand. The Center's aim is to build skills and institutional capacity for effective economic and financial management that can be sustained at the national level. Member countries are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu.

## PAPUA NEW GUINEA: RELATIONS WITH THE WORLD BANK GROUP

*For questions relating to this annex, contact Mahesh Sharma at the (phone 202-458-7339) at the World Bank*

To date, the World Bank has provided 35 IBRD loans and 13 IDA credits to PNG, amounting to US\$786.6 million and US\$114.9 million in commitments, respectively. There are four active loans, totaling US\$82 million in commitments: Gas Development TA (US\$7 million), Mining TA (US\$10 million), Gazelle Restoration Project (US\$25 million) and the Road Maintenance and Rehabilitation Project (US\$40 million). In addition, the Bank is implementing a Global Environment Facility-supported Teachers' Solar Lighting Project (US\$0.992 million).

In June 2003, the World Bank suspended disbursements on the Forestry and Conservation Project (FCP) due to a number of areas of noncompliance with the loan agreement, with respect to which the Government had been unable to make adequate progress in the preceding months. In June 2005 the World Bank cancelled the loan. However, work is continuing on priority analytical/advisory services, in the fields of public expenditure management, health and education service delivery, and HIV/AIDS strategy.

Given the uncertain operating environment, the World Bank has prepared an Interim Strategy Note (ISN) in line with guidelines for assistance to Low-Income Countries Under Stress. Prepared in lieu of a Country Assistance Strategy, this will guide the Bank's involvement in PNG over the next 18 months and enable the Bank to evaluate its comparative advantage in the country. The objectives of are to: (a) promote development dialogue and stem the decline in social indicators; and (b) build the foundations for improved governance and sustained recovery. The scale and scope of assistance is likely to be modest, with an emphasis on analytical work, policy advice, capacity-building, and communications/outreach. The paper was presented to the Bank's Board of April 12, 2005.

Preparation of Smallholder Agriculture Development Project that had been put on hold due to the suspension of FCP has been restarted and work on Community Driven Development stocktaking is also ongoing. The Bank has also launched a Youth Competition Program (Development Marketplace) which has attracted a large number of partners. Furthermore, the Bank is involved in a number of community outreach programs supported by its Global Development Learning Network.

IFC, through its Pacific Enterprise Development Facility (PEDF), has in the past secured financing for 22 individual enterprises. In more recent times PEDF has initiated a program of technical assistance to support the development of small and medium enterprises in selected sectors. Through its Capacity Building Fund, IFC has contributed US\$100,000 towards the cost of an improved credit appraisal system at Bank South Pacific which has significantly increased the availability and reduced the cost of finance in rural PNG.

Subject to the approval of the Government of PNG, in 2006 IFC expects to establish a permanent presence in-country. Through this office, PEDF will undertake a significantly

enhanced program targeting SMEs in the agribusiness, tourism, and oil, gas and mining sectors. This program will work to improve access to finance, supply chains, product development and marketing, and the linking of large and smaller enterprises.

On the investment side, IFC has committed US\$14.5 million in three projects, including a US\$3.0 million investment in the Kula Fund, which made four investments totaling US\$4.9 million since its establishment in 1997. In FY05, IFC committed US\$1.2 million in equity plus a US\$2 million line of credit for PNG Microfinance Limited and is in the process of organizing a US\$2.2 million capacity building technical assistance program. In addition, IFC is reviewing potential investments in the gas sector. IFC and the Foreign Investment Advisory Service support activities aimed at generating sustainable employment opportunities by improving the environment for domestic and foreign investment.

The Multilateral Investment Guarantee Agency (MIGA) has facilitated a total of US\$892 million in foreign direct investment in Papua New Guinea. MIGA currently has one guarantee in the mining sector worth US\$51 million in gross exposure.

Papua New Guinea: IBRD/IDA Lending Operations  
(In millions of U.S. dollars)

Fiscal Year	1999	2000	2001	2002	2003	2004	2005 <sup>1</sup>
Commitments	0.0	42.1	134.5	40.1	91.0	103.7	61.3
Disbursements	10.6	39.8	11.2	4.5	6.2	7.8	10.7
Undisbursed balance	43.0	134.5	114.1	93.0	84.8	96.0	50.6

Note: Fiscal year is July–June.

<sup>1</sup> As of November 23, 2005.

### PAPUA NEW GUINEA: RELATIONS WITH THE ASIAN DEVELOPMENT BANK<sup>1</sup>

Through mid-December 2005, the Asian Development Bank (AsDB) had approved 57 loans totaling \$874 million for 46 projects. Of this total, 24 loans (\$463 million) had been extended from ordinary capital resources and 33 loans (\$412 million) from special funds resources. In addition, \$46 million had been provided for 126 technical assistance projects. There are currently 9 active loan-financed projects, and one which is being closed.

With the overarching objective of alleviating poverty, the AsDB strategy for Papua New Guinea focuses on strengthening governance, supporting private sector development, and improving social conditions. As weak public sector management and ineffective public services continue to be the main development problems, the short-term priorities are: consolidation (focusing on relationships with the Government and donors), policy dialogue in key sectors, administration and implementation of existing projects, and very selective identification of operations to deliver clear results. Based on lessons learned, e.g., in supporting private sector development, AsDB will explore alternative channels for the delivery of assistance to achieve development objectives. AsDB will continue to strengthen public sector management, particularly in the areas of fiscal and financial management and public service reform. For private sector development, AsDB has been helping to improve sector policy and institutional frameworks (agriculture), enhance factor productivity (skills development and microfinance services), and improve market access by selected transport infrastructure investments, especially in rural areas. AsDB will expand its support to private sector development by helping to bring about fundamental change where the public goods that provide the foundation for private sector activity are weak or non-existent, and by helping increase the role of the private sector. In the social sectors, AsDB will continue to assist in policy development (health) and to support infrastructure investments (water and sanitation), and service delivery. AsDB will expand its efforts to help address the growing HIV/AIDS pandemic.

The latest loan was approved on March 25, 2004 for \$19 million for community water transport. No lending is envisaged in 2005. In 2006, a grant of \$15 million from special funds resources (the first such grant for Papua New Guinea) is envisaged for HIV/AIDS. For 2006, tentative plans call for two road transport projects, financed with three loans: (i) a \$20 million supplementary loan from ordinary capital resources for the Highlands Region road maintenance and upgrading project and (ii) rehabilitation of the Highlands Highway (financed with \$18 million from special funds resources and \$22 million from ordinary capital resources) - work on the Highlands Highway project may well be deferred to 2007. Also in 2006, a \$13 million loan from special fund resources is possible for health sector development. Possible AsDB financing for the proposed gas pipeline to Australia may be finalized during 2006. The current program envisages annual grant-financed technical assistance totaling about \$2 million, not including special grants from special fund resources.

Table 1. Papua New Guinea: Loan Approvals and Disbursements, 1999–2005  
(In millions of U.S. dollars)

	1999	2000	2001	2002	2003	2004	2005 E
Loan approvals	109.0	45.5	75.9	5.7	0.0	19.0	0.0
Loan disbursements	35.1	13.0	43.6	14.0	13.8	19.2	15.0

<sup>1</sup> Prepared by AsDB staff.

## PAPUA NEW GUINEA: STATISTICAL ISSUES

**Data provision for surveillance purposes is generally adequate. However, inadequate coverage, and timeliness of statistical releases continue to hinder the conduct of macroeconomic policy.** The National Statistical Office (NSO) is underfunded and lacks sufficient staff with computer training. It faces difficulties obtaining and collating data from businesses and other government departments, although it does have the relevant legal power. As a result, the only economic release produced on a somewhat timely basis is the Consumer Price Index. The Bank of Papua New Guinea (BPNG) and the Department of Treasury produce the most current data. The NSO, with assistance from AusAID, completed collections for the 2000 Population Census and released preliminary results in July 2001. Using some of the expertise and equipment it acquired for this census, the NSO intended to conduct a Household Income and Expenditure Survey (HIES) in 2002, but work on the survey was postponed due to funding constraints. Papua New Guinea participates in the Pacific Regional General Data Dissemination System (GDDS) Project and was represented at the GDDS workshop held in Suva in November 2002. A GDDS coordinator has been nominated and metadata is being developed prior to formal participation in the GDDS.

**Monetary data are not available on a regular basis and reporting to the Fund's Statistics Department (STA) needs to be improved.** A monetary and financial statistics mission that visited the country during April 2005 (i) reviewed the Bank of Papua New Guinea's (BPNG) collection, compilation, and dissemination procedures; (ii) introduced the standard form for reporting central bank data and designed the central bank survey; and (iii) initiated the development of an integrated monetary database from which alternative presentations of monetary statistics can be derived for use by the BPNG, APD, and STA. The mission made recommendations for improving compilation and reporting. Most of the recommendations aim at fully aligning the sectorization of the domestic economy, classification of financial instruments, valuation procedures, and institutional coverage of the depository corporations with the *MFSM*.

**In mid-2000, the NSO released a set of national accounts estimates: *National Income, Expenditure and Product, 1993–98*.** These estimates were compiled using the *1968 System of National Accounts*. However, the NSO has been working to implement the *1993 System of National Accounts*. In March 2004, the NSO released a preliminary set of national income, expenditure, and production accounts estimates for 1994–2002, rebased to 1998 prices. As these figures are still subject to revisions, they have not been used to update staff's estimates. A Pacific Financial Technical Assistance Centre (PFTAC) mission in February 2001 identified several sources that could be used to generate measures of business activity:

- Corporate income tax data from the Internal Revenue Commission (IRC), corporate profits, revenues, and other financial data for some 4,000 companies.
- Value-added tax data from the IRC: sales and input data for a broad range of businesses.

- Membership data from the superannuation funds: employment numbers for both the private and public sectors.

The government needs to ensure that the NSO is granted access to these data and that additional resources are provided to compile these series on a timely basis.

**The only price index currently compiled is a quarterly CPI.** Its main deficiencies include outdated weights that are based on consumption studies conducted in the mid-1970s and weaknesses in data collection practices. The NSO intends to use the results of the planned HIES to rebase the CPI; however, this has been delayed. Moreover, there is a need for technical assistance to computerize the collation and production of the index.

**Annual government finance statistics (GFS) reported to STA suffer from insufficient coverage and timeliness.** While central government tax revenue statistics are generally accurate and timely, nontax revenue and public expenditure data are deficient. In particular, development budget expenditures and the utilization of grants and project loans are recorded with long lags, and few records on the use of accrual trust accounts are available. While interest payment records are accurate, there are timing issues regarding the recording of interest on discount securities. No data are available for deferred pension liabilities to civil servants, provincial and local government budgets, off-budget outlays and corresponding liabilities, or transfers between the government and public enterprises. These weaknesses contribute to discrepancies in domestic financing between estimates from monetary and debt data and those derived from fiscal records. The latest data reported and published in the *GFS Yearbook* and *IFS* are for 1999-2002 and cover only budgetary central government.

**Quarterly data on the balance of payments are reported to the Fund for publication with a substantial lag; no data have been reported since mid 2002.** These data are based on the exchange record system, which is not tightly monitored despite BPNG reporting requirements. The financial accounts data are of poor quality because of major deficiencies in data collection, especially in the areas of private external debt. In many cases, donors and lenders disburse funds directly to contractors for the purchase of goods and services, effectively bypassing the exchange record system. Therefore, a substantial proportion of current account and capital flows are not recorded. As a first step, efforts are underway to improve the coverage of the merchandise trade statistics by moving to customs-based data. The ASYCUDA customs system currently used by the IRC electronically records about 80 percent of trade transactions, but as yet neither BPNG nor the NSO has the resources to access this database the NSO have the resources to access this database.

	Date of Latest Observation	Date Received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of Publication <sup>6</sup>
Exchange rates	11/30/05	12/19/05	D	W	W
International reserve assets and reserve liabilities of the monetary authorities <sup>1</sup>	8/31/05	10/05	W	W	Q
Reserve/base money	10/05	12/23/05	M	M	Q
Broad money	1 0/05	12/23//05	M	M	Q
Central bank balance sheet	10/05	12/23/05	M	M	Q
Consolidated balance sheet of the banking system	10/05	12/23/05	M	Q	Q
Interest rates <sup>2</sup>	10/31/05	12/20/05	W	W	Q
Consumer price index	06/05	11/05	Q	Q	Q
Revenue, expenditure, balance and composition of financing <sup>3</sup> —general government <sup>4</sup>	09/05	11/05	M	Q	Q
Revenue, expenditure, balance and composition of financing <sup>3</sup> —central government	2004	10/05	M	Q	Q
Stocks of central government and central government-guaranteed debt <sup>5</sup>	2004	11/05	Q	A	A
External current account balance	03/05	11/05	Q	Q	Q
Exports and imports of goods and services	03/05	11/05	Q	Q	Q
GDP/GNI	2004	7/05	A	A	A
Gross external debt	2004	10/05	Q	A	A

<sup>1</sup>Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

<sup>2</sup>Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.

<sup>3</sup>Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup>The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup>Including currency and maturity composition.

<sup>6</sup>Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); and Not Available (NA).

## PAPUA NEW GUINEA: PUBLIC AND EXTERNAL DEBT SUSTAINABILITY

*This annex summarizes the debt sustainability analysis (DSA) for Papua New Guinea using the new framework for low-income countries.<sup>1</sup> The baseline macroeconomic scenario underlying this DSA is the medium-term outlook discussed in the staff report, including the sustained implementation of the ongoing medium-term fiscal strategy. This annex also assesses the impact of various exogenous shocks on the sustainability of public sector debt and external debt under the baseline scenario.*

### A. Main Assumptions

- Real GDP growth is anticipated to rise gradually from about 3 percent in 2005 to about 4.5 percent by 2010, as agricultural productivity improves, the gas pipeline project and the Ramu nickel mine come on line toward the end of the decade, and structural reform is implemented.
- Monetary policy remains geared toward achieving the objective of keeping inflation at subdued levels and maintaining a sound external position.
- Near balance of the fiscal accounts are expected from 2007 forward, along with gradual improvements in the nonmineral overall and primary balances between 2006 and 2010.
- Papua New Guinea would have access to external concessional finance.
- Prices of key commodities are in line with WEO projections.
- Structural reforms, including those under the Medium-term Development Strategy, would continue to gradually improve governance, law and order, transportation infrastructure, and public sector enterprises' finances. Overall, the investment climate would continue to slowly be enhanced.

### B. Total Public Sector Debt Sustainability

**The public sector debt ratio has steadily declined from 76 percent of GDP at end-2002 to an estimated 49 percent of GDP at end-2005.** The improvement reflects the government's prudent fiscal policy, favorable mineral sector developments, the appreciation of the kina, declining interest rates, and a sustained economic recovery since the current government took office in mid-2002. Multilateral debt accounts for about 58 percent of total external public debt.

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<sup>1</sup> See *Operational Framework for Debt Sustainability Assessments in Low-Income Countries—Further Considerations* (SM/05/109).



**Under the baseline projected scenario, the public sector debt ratio is expected to decline gradually to about 43 percent of GDP by end-2010 and 17 percent by 2025** (Annex VI, Table 1). The reduction would result mainly from continued adherence to the medium-term fiscal strategy and improved growth prospects in line with the assumptions above. The downward debt dynamics are delayed by the assumption that the government borrows about 4 percent of GDP in 2007 to complete the financing of its equity participation in the Highlands-Queensland gas pipeline.<sup>1</sup> In addition, the debt stock from 2005 forward includes contingent liabilities of the government for the first time (debt of statutory authorities). The NPV of public debt would decline from 54 percent of GDP in 2005 to 42 percent of GDP in 2010 and 16 percent of GDP in 2025. The public sector debt service to revenue ratio would remain broadly stable at about 15 percent during the medium term, and falling significantly over the longer term. Public sector debt projections would be affected should contingent liabilities arise in relation to government guarantees (e.g., on public enterprise investment projects) or if the government chose a smaller or higher level of equity investment in the gas pipeline project.

**The overall results suggest that, under the IMF-WB DSA framework for LICs, Papua New Guinea's total public sector debt is at moderate-to-high risk of debt distress.**<sup>2</sup> The main findings include: (i) only one indicator—NPV of debt to GDP ratio—is above its threshold under the baseline scenario—and it declines under the threshold over the long term, (ii) other indicators are well below their threshold over the entire projected period, and (iii) only under one bound test for lower real GDP growth are these thresholds significantly breached.

**The standard sensitivity analysis shows that the path of the debt ratios are particularly sensitive to changes in real GDP growth and the exchange rate** (Annex VI, Table 2 and Figure 1). To test the robustness of the baseline scenario, we subjected it to a number of stress tests. Compared to 2005, a decline in real GDP growth to one standard deviation below its historical average would raise the NPV of public debt to GDP ratio by about 16 percentage points of GDP in 2010. A one-time 30 percent real exchange rate depreciation in 2006 would raise the NPV of debt to GDP ratio by about 10 percentage points in 2010.

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<sup>1</sup> A decision has not yet been made on how this borrowing would be financed. As a working assumption, the staff assumes one third would be financed through external concessional loans and the remainder through external commercial borrowing.

<sup>2</sup> Papua New Guinea is rated as a poor performer with regard to its policies and institutions under the joint IMF-WB DSA framework for LICs. Thus, the thresholds applied to Papua New Guinea are: (i) 100 percent for NPV of debt-to-exports, (ii) 30 percent for NPV of debt-to-GDP, and (iii) 200 percent for NPV of debt-to-fiscal revenue; and for debt service: (i) 15 percent of exports and (ii) 25 percent of revenues.

### C. External Debt Sustainability

**Papua New Guinea's total external debt has also declined steadily in recent years, from 76 percent of GDP in 2002 to about 38 percent of debt in 2005** (Annex VI, Table 3).

External debt as a percent of exports has also declined from 19 percent in 2002 to 11 percent in 2005.

**External public debt dynamics are sustainable under the baseline scenario, as all three debt indicators** (the NPV of public external debt to GDP, the NPV of debt in percent of exports, and the debt service to exports ratio) do not breach the key thresholds. The NPV of public external debt rises in 2007 with the borrowing by about 4 percent of GDP to complete the assumed financing of its equity participation in the Highlands-Queensland gas pipeline. Thereafter it declines, reaching 23 percent of GDP in 2010 and 10 percent of GDP in 2025.

**External debt sustainability is most vulnerable to shocks to real GDP growth rates and lower export growth.** Stress tests indicate the NPV of public external debt to GDP threshold would initially rise significantly under a lower real GDP growth, lower export growth and exchange rate depreciation shocks, before falling below the thresholds by the end of the period. A decline in real GDP growth by one standard deviation below its historical average would raise the NPV of external public debt from 2005 by 30 percentage points of GDP in 2007 with the impact declining gradually over the medium term to 43 percent of GDP by 2010 and 19 percent by 2025. A decline in export value growth by one standard deviation below its historical average would raise the NPV of external debt-to-GDP ratio from 2005 by 35 percentage points to a high of 61 percent of GDP in 2007, before falling to 19 percent of GDP by 2025 over the longer term. Nonetheless, Papua New Guinea's external debt distress risk is moderated by the fact it has an excellent external repayment record.<sup>3</sup>

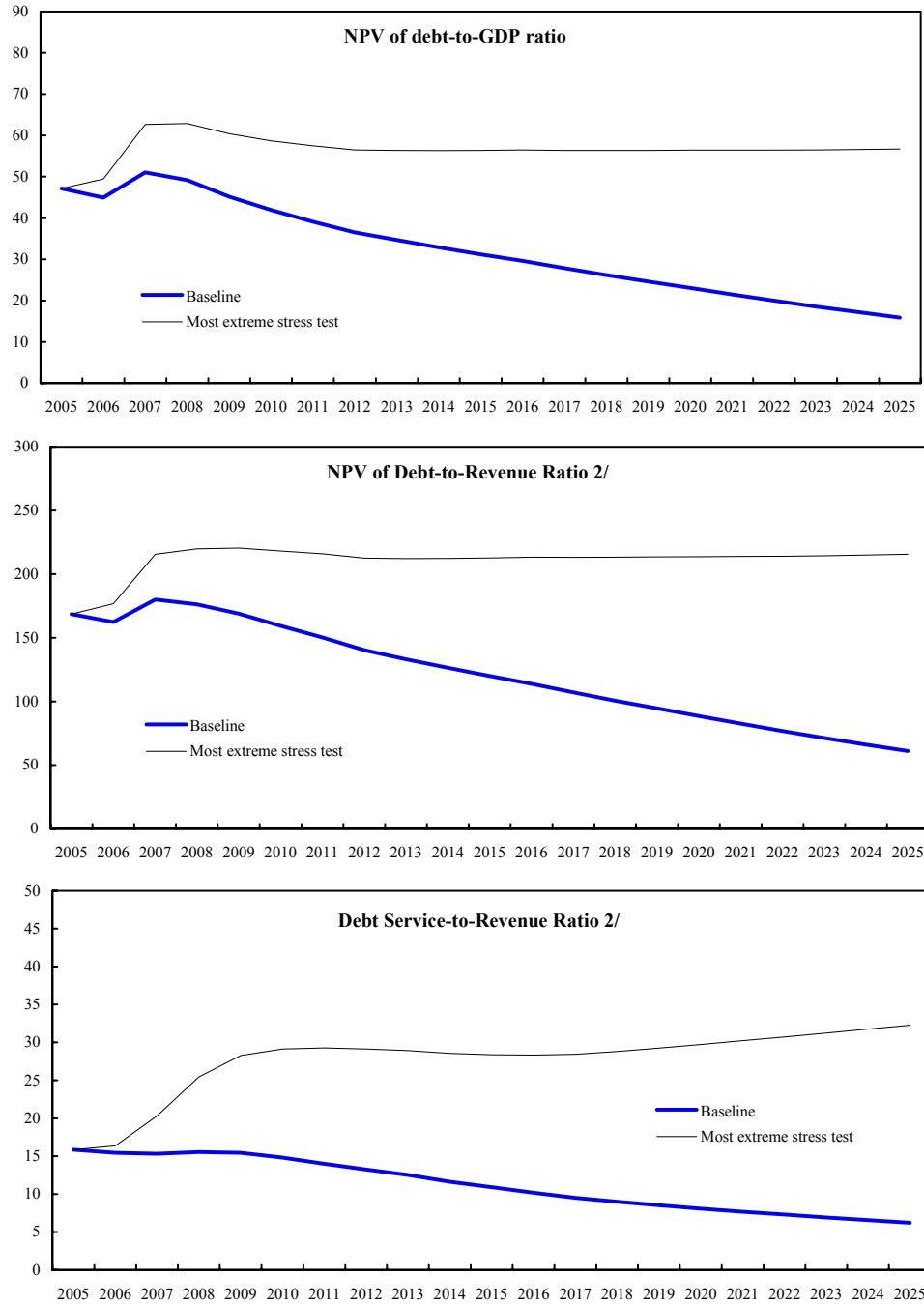
### D. Conclusions

**With continued adherence to prudent macroeconomic and fiscal policies, Papua New Guinea's debt indicators are projected to improve over the medium-to-long term, but slippage of these policies could have adverse consequences on public external debt sustainability.** Papua New Guinea's recent progress in reducing the stock of public debt and its capacity to repay future obligations suggest that the stock of debt and debt service as presently projected appear manageable and sustainable. However, this assessment rests on the need to avoid policy slippages and highlights the vulnerability of the debt dynamics to potential shocks. To further help guard against these vulnerabilities, Papua New Guinea needs to ensure that any external borrowing is obtained on concessional terms.

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<sup>3</sup> Papua New Guinea has never defaulted on external debt to its creditors.

Figure 1. Papua New Guinea: Indicators of Public Debt Under Alternative Scenarios, 2005-2025 1/

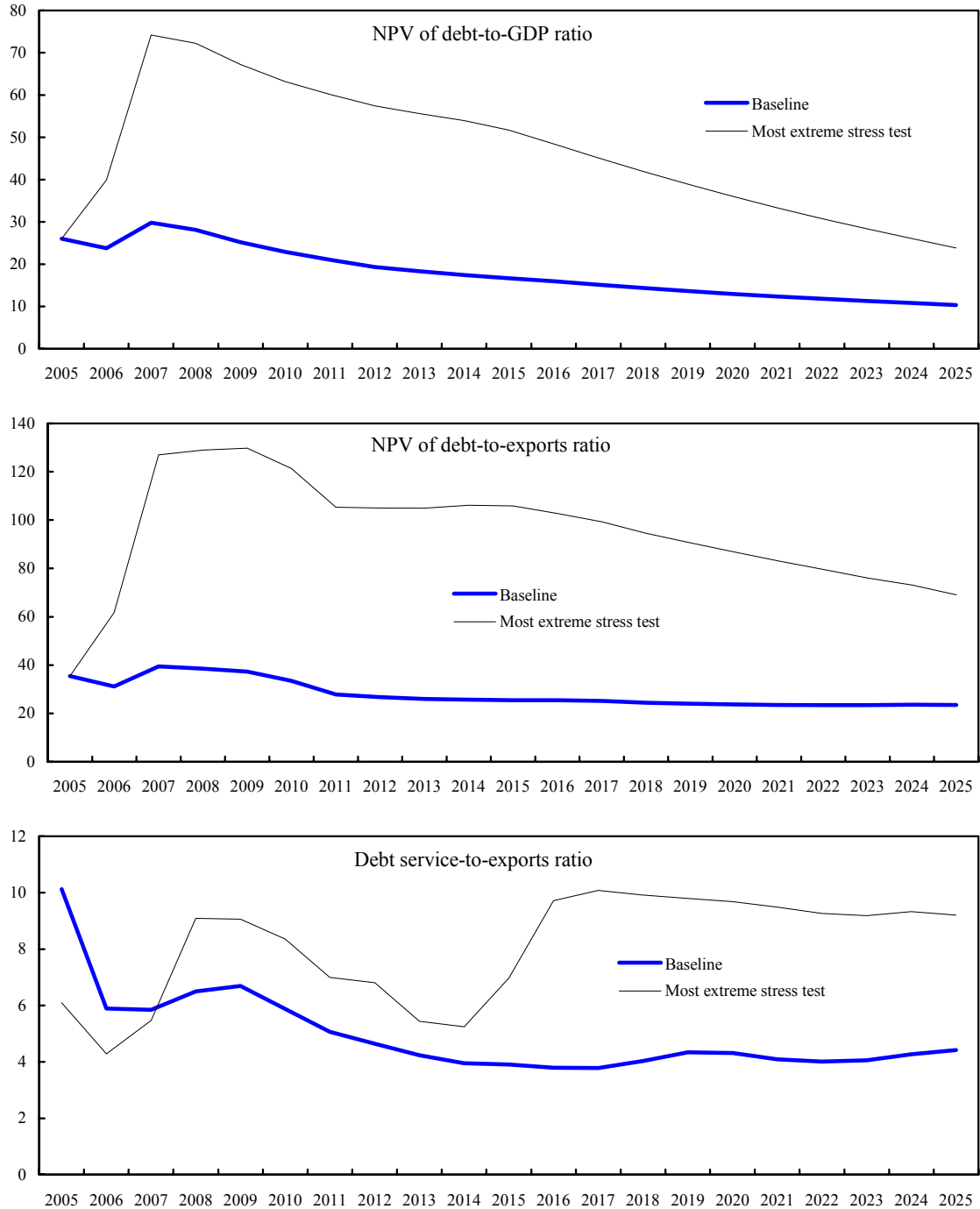


Source: Staff projections and simulations.

1/ Most extreme stress test is test that yields highest ratio in 2015.

2/ Revenue including grants.

Figure 2. Papua New Guinea: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2005-2025  
(In percent)



Source: Staff projections and simulations.

Annex VI, Table 1. Papua New Guinea: Public Sector Debt Sustainability Framework, Baseline Scenario, 2002-2025  
(In percent of GDP, unless otherwise indicated)

						Estimate Projections											
	2002	2003	2004	Historical Average 5/	Standard Deviation 5/	2005	2006	2007	2008	2009	2010	2005-10 Average	2015	2025	2011-25 Average		
<b>Public sector debt 1/</b>	76.2	65.0	55.0			48.7	46.3	50.4	49.1	45.7	42.9		31.7	17.4			
o/w foreign-currency denominated	50.2	38.7	32.3			27.4	25.3	29.4	28.3	25.9	24.1		17.3	11.9			
Change in public sector debt	0.4	-11.3	-10.0			-6.3	-2.4	4.1	-1.3	-3.5	-2.7		-2.0	-1.1			
Identified debt-creating flows	-1.4	-13.8	-8.0			-4.9	-0.3	1.0	0.8	-1.7	-1.8		-1.1	-0.6			
Primary deficit	1.4	-3.8	-3.8	-1.7	2.0	-4.8	-2.9	-2.7	-2.5	-2.4	-2.6	-3.0	-1.7	-1.0	-1.5		
Revenue and grants	27.8	28.4	31.3			28.0	27.7	28.4	27.9	26.8	26.3		26.0	26.0			
of which : grants	6.0	5.8	6.2			3.2	4.2	4.9	4.8	4.5	4.2		3.3	2.0			
Primary (noninterest) expenditure	29.1	24.6	27.5			23.2	24.8	25.6	25.4	24.3	23.7		24.3	25.1			
Automatic debt dynamics	-1.1	-9.7	-4.0			-3.2	-0.1	1.3	1.1	-1.2	-0.9		-0.2	-0.1			
Contribution from interest rate/growth differential	0.6	0.7	-1.1			-1.6	-0.2	0.5	0.2	-0.9	-0.8		-0.2	-0.1			
of which : contribution from average real interest rate	0.5	2.8	0.8			0.0	1.5	2.1	1.9	1.0	1.1		0.9	0.5			
of which : contribution from real GDP growth	0.1	-2.2	-1.8			-1.6	-1.7	-1.6	-1.7	-1.9	-2.0		-1.1	-0.6			
Contribution from real exchange rate depreciation	-1.7	-10.4	-2.9			-1.5	0.1	0.8	0.9	-0.3	-0.1		...	...			
Other identified debt-creating flows	-1.7	-0.3	-0.2			3.1	2.7	2.5	2.3	2.0	1.7		0.9	0.4			
Privatization receipts (negative)	-1.7	-0.3	-0.2			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			3.1	2.7	2.5	2.3	2.0	1.7		0.9	0.4			
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Other (domestic arrears, court orders, others)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Residual, including asset changes	1.8	2.6	-2.0			-1.4	-2.1	3.0	-2.1	-1.8	-1.0		-0.9	-0.4			
<b>NPV of public sector debt</b>	75.0	62.5	54.3			47.1	44.9	51.1	49.2	45.2	41.9		31.2	15.9			
o/w foreign-currency denominated	49.0	36.3	31.6			25.9	23.9	30.0	28.3	25.5	23.1		16.8	10.4			
o/w external	49.0	36.3	31.6			25.9	23.9	30.0	28.3	25.5	23.1		16.8	10.4			
NPV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...			
Gross financing need 2/	27.2	22.5	17.2			13.6	14.5	14.3	14.0	12.8	11.5		8.4	4.3			
NPV of public sector debt-to-revenue ratio (in percent) 3/	270.1	219.9	173.3			168.5	162.3	180.0	176.1	168.8	159.4		120.0	61.0			
o/w external	176.3	127.6	100.8			92.7	86.3	105.9	101.5	95.1	87.9		64.5	40.0			
Debt service-to-revenue ratio (in percent) 3/ 4/	27.5	34.6	18.1			15.8	15.4	15.3	15.5	15.4	14.8		10.9	6.2			
Primary deficit that stabilizes the debt-to-GDP ratio	1.0	7.4	6.1			1.5	-0.5	-6.8	-1.3	1.1	0.1		0.2	0.1			
<b>Key macroeconomic and fiscal assumptions</b>																	
Real GDP growth (in percent)	-0.2	2.9	2.9	0.6	3.9	3.0	3.5	3.5	3.5	4.1	4.5	3.7	3.5	3.5	3.5		
Average nominal interest rate on forex debt (in percent)	3.8	2.9	2.8	4.1	0.9	2.7	2.5	2.7	2.3	2.2	2.4	2.5	2.0	1.0	1.8		
Average real interest rate on domestic currency debt (in percent)	-2.2	9.5	2.7	2.0	4.5	-0.4	6.5	9.4	9.1	4.8	5.6	5.8	6.1	10.6	6.9		
Real exchange rate depreciation (in percent, + indicates depreciation)	-3.2	-21.0	-7.7	3.9	13.1	-4.9	...	...	...	...	...	...	...	...	...		
Inflation rate (GDP deflator, in percent)	12.3	7.2	4.2	9.0	4.3	6.6	2.8	0.4	0.7	5.0	4.0	3.3	3.5	3.5	3.5		
Growth of real primary spending (deflated by GDP deflator, in percent)	-1.1	-13.1	14.9	3.0	13.5	-13.2	10.8	7.1	2.5	-0.2	1.7	1.4	4.0	3.7	3.9		
Grant element of new external borrowing (in percent)	...	...	0.0	0.0		0.3	0.4	0.2	0.4	0.4	0.4	0.4	0.3	0.3	...		

Sources: Country authorities; and Fund staff estimates and projections.

1/ General government gross debt. The increase in debt in 2007 reflects the staff's understanding regarding current plans for financing a full equity acquisition in the gas pipeline project.

2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

3/ Revenues including grants.

4/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Annex VI, Table 2. Papua New Guinea: Sensitivity Analysis for Key Indicators of Public Debt 2005-2025

	Estimate		Projections					
	2005	2006	2007	2008	2009	2010	2015	2025
<b>NPV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	47	45	51	49	45	42	31	16
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	47	47	56	56	54	53	49	37
A2. Primary balance is unchanged from 2004	48	45	50	47	42	38	22	-8
A3. Permanently lower GDP growth 1/	47	45	52	51	48	46	42	48
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2006-2007	47	49	63	63	60	59	56	57
B2. Primary balance is at historical average minus one standard deviations in 2006-2007	47	48	56	54	49	46	35	19
B3. Combination of B1-B2 using one half standard deviation shocks	47	49	60	57	53	49	36	18
B4. One-time 30 percent real depreciation in 2006	47	56	63	61	56	52	40	21
B5. 10 percent of GDP increase in other debt-creating flows in 2006	47	53	58	56	52	48	37	20
<b>NPV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	168	162	180	176	169	159	120	61
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	168	170	195	198	198	197	181	136
A2. Primary balance is unchanged from 2004	171	162	177	169	158	146	83	-32
A3. Permanently lower GDP growth 1/	168	164	184	183	179	173	158	183
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2006-2007	168	177	215	220	220	218	213	216
B2. Primary balance is at historical average minus one standard deviations in 2006-2007	168	172	197	192	184	175	134	72
B3. Combination of B1-B2 using one half standard deviation shocks	168	176	208	202	193	183	137	69
B4. One-time 30 percent real depreciation in 2006	168	203	222	218	209	198	153	82
B5. 10 percent of GDP increase in other debt-creating flows in 2006	168	192	206	201	194	184	142	78
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	16	15	15	16	15	15	11	6
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	16	16	18	20	21	21	19	15
A2. Primary balance is unchanged from 2004	16	17	15	13	12	10	2	-11
A3. Permanently lower GDP growth 1/	16	16	16	17	18	18	19	30
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2006-2007	16	16	20	25	28	29	28	32
B2. Primary balance is at historical average minus one standard deviations in 2006-2007	16	15	21	24	21	18	12	8
B3. Combination of B1-B2 using one half standard deviation shocks	16	16	21	23	20	18	12	7
B4. One-time 30 percent real depreciation in 2006	16	16	17	17	17	17	12	7
B5. 10 percent of GDP increase in other debt-creating flows in 2006	16	15	34	26	21	19	13	9

Sources: Country authorities; and Fund staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).

2/ Revenues are defined inclusive of grants.

Annex VI, Table 3. Papua New Guinea: External Debt Sustainability Framework, Baseline Scenario, 2002-2025 1/  
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Estimate					Projections					
	2002	2003	2004			2005	2006	2007	2008	2009	2010	2005-10 Average	2015	2020	2025	2011-25 Average
<b>External debt (nominal) 1/</b>	<b>76.0</b>	<b>63.3</b>	<b>49.3</b>			<b>37.8</b>	<b>32.1</b>	<b>35.5</b>	<b>36.8</b>	<b>35.9</b>	<b>33.4</b>	<b>35.2</b>	<b>26.9</b>	<b>23.7</b>	<b>21.9</b>	<b>25.5</b>
o/w public and publicly guaranteed (PPG)	<b>51.5</b>	<b>44.1</b>	<b>34.5</b>			<b>27.6</b>	<b>25.2</b>	<b>29.1</b>	<b>28.1</b>	<b>25.7</b>	<b>23.9</b>	<b>26.6</b>	<b>17.1</b>	<b>13.3</b>	<b>11.9</b>	<b>15.5</b>
Change in external debt	2.7	-12.7	-14.0			-11.5	-5.7	3.4	1.3	-0.9	-2.4		-1.5	-0.9	-0.3	-0.8
Identified net debt-creating flows	2.4	-20.1	-12.5			-8.5	-7.6	-1.2	-2.2	-3.2	-6.9		-7.7	-2.4	3.5	-4.6
<b>Non-interest current account deficit</b>	<b>-2.3</b>	<b>-6.1</b>	<b>-3.4</b>	<b>-6.8</b>	<b>6.3</b>	<b>-5.3</b>	<b>-5.7</b>	<b>0.9</b>	<b>1.6</b>	<b>0.4</b>	<b>-4.8</b>	<b>-2.2</b>	<b>-6.7</b>	<b>-1.5</b>	<b>4.1</b>	<b>-3.6</b>
Deficit in balance of goods and services	14.5	7.5	8.9			7.8	6.3	14.5	15.3	13.6	8.3		5.8	10.2	14.8	8.4
Exports	60.3	65.9	64.5			73.6	76.4	75.6	72.8	67.7	68.4		65.3	54.6	44.1	59.1
Imports	74.7	73.4	73.4			81.4	82.7	90.1	88.1	81.3	76.8		71.1	64.8	58.9	67.5
Net current transfers (negative = inflow)	-6.5	-6.5	-4.2	-4.8	1.3	-4.1	-4.7	-5.4	-5.2	-4.8	-4.5		-3.4	-2.6	-2.0	-3.0
Other current account flows (negative = net inflow)	-10.2	-7.1	-8.1			-9.1	-7.3	-8.3	-8.5	-8.4	-8.6		-9.1	-9.1	-8.7	-9.0
<b>Net FDI (negative = inflow)</b>	<b>-0.6</b>	<b>-2.7</b>	<b>-0.6</b>	<b>-3.7</b>	<b>3.4</b>	<b>-1.4</b>	<b>-1.7</b>	<b>-2.6</b>	<b>-4.2</b>	<b>-3.7</b>	<b>-2.1</b>	<b>-2.6</b>	<b>-1.1</b>	<b>-0.9</b>	<b>-0.7</b>	<b>-1.1</b>
<b>Endogenous debt dynamics 2/</b>	<b>5.3</b>	<b>-11.3</b>	<b>-8.4</b>			<b>-1.8</b>	<b>-0.2</b>	<b>0.5</b>	<b>0.4</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>
Contribution from nominal interest rate	3.3	1.7	1.4			1.2	1.1	1.2	1.1	0.9	0.9		0.6	0.5	0.5	0.6
Contribution from real GDP growth	10.0	-7.9	-7.2			-2.9	-1.3	-0.7	-0.6	-0.8	-0.9		-0.5	-0.5	-0.4	-0.5
Contribution from price and exchange rate changes	-8.0	-5.1	-2.6			...	...	...	...	...	...		...	...	...	...
<b>Residual (3-4) 3/</b>	<b>0.3</b>	<b>7.4</b>	<b>-1.5</b>			<b>-3.0</b>	<b>1.9</b>	<b>4.6</b>	<b>3.5</b>	<b>2.3</b>	<b>4.5</b>	<b>2.3</b>	<b>6.2</b>	<b>1.5</b>	<b>-3.8</b>	<b>3.9</b>
o/w exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
<b>NPV of external debt 4/</b>	<b>69.9</b>	<b>56.8</b>	<b>47.4</b>			<b>36.3</b>	<b>30.7</b>	<b>36.2</b>	<b>36.8</b>	<b>35.4</b>	<b>32.4</b>	<b>34.6</b>	<b>26.4</b>	<b>23.4</b>	<b>20.4</b>	<b>24.7</b>
In percent of exports	115.9	86.3	73.6			49.3	40.3	47.8	50.5	52.2	47.4		40.4	42.8	46.2	42.2
<b>NPV of PPG external debt</b>	<b>45.4</b>	<b>37.6</b>	<b>32.5</b>			<b>26.1</b>	<b>23.8</b>	<b>29.8</b>	<b>28.1</b>	<b>25.2</b>	<b>22.9</b>	<b>26.0</b>	<b>16.7</b>	<b>13.0</b>	<b>10.4</b>	<b>14.8</b>
In percent of exports	75.3	57.1	50.5			35.4	31.1	39.5	38.6	37.2	33.5		25.5	23.7	23.5	24.8
Debt service-to-exports ratio (in percent)	19.3	22.6	15.1			10.8	6.6	6.7	7.2	7.4	6.5		4.3	4.7	5.2	4.7
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>16.1</b>	<b>21.5</b>	<b>14.3</b>			<b>10.1</b>	<b>5.9</b>	<b>5.8</b>	<b>6.5</b>	<b>6.7</b>	<b>5.9</b>	<b>6.8</b>	<b>3.9</b>	<b>4.3</b>	<b>4.4</b>	<b>4.2</b>
Total gross financing need (billions of U.S. dollars)	0.3	0.2	0.2			0.1	-0.1	0.2	0.1	0.1	-0.2		-0.4	0.0	0.8	-0.1
Non-interest current account deficit that stabilizes debt ratio	-5.0	6.5	10.6			6.2	0.0	-2.5	0.3	1.3	-2.3		-5.2	-0.6	4.4	-2.8
<b>Key macroeconomic assumptions</b>																
Real GDP growth (in percent)	-0.2	2.9	2.9	0.6	3.9	3.0	3.5	3.5	3.5	4.1	4.5	3.7	3.5	3.5	3.5	3.1
GDP deflator in US dollar terms (change in percent)	12.3	7.2	4.2	9.0	4.3	6.6	2.8	0.4	0.7	5.0	4.0	3.3	3.5	3.5	3.5	3.5
Effective interest rate (percent) 5/	4.4	2.7	2.5	3.7	0.8	2.7	3.1	3.7	3.0	2.8	2.7	3.0	2.2	2.2	2.2	2.3
Growth of exports of G&S (US dollar terms, in percent)	-16.5	31.8	15.8	0.5	15.9	30.0	10.5	1.6	-1.1	0.0	7.9	8.1	1.5	1.6	1.4	2.5
Growth of imports of G&S (US dollar terms, in percent)	-0.4	18.5	18.3	3.3	15.9	26.2	8.2	11.9	0.3	-0.8	0.8	7.8	3.6	3.6	3.5	3.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	34.7	39.5	20.5	39.2	38.1	39.4	35.2	32.4	32.0	31.5	32.4
<i>Memorandum item:</i>																
Nominal GDP (billions of US dollars)	3.0	3.6	4.3			4.9	5.2	5.3	5.5	5.9	6.3		8.2	10.7	14.0	

Source: Staff simulations.

1/ Includes both public and private sector external debt. The increase in debt in 2007 reflects the staff's understanding regarding current plans for financing a full equity acquisition in the gas pipeline project.

2/ Derived as  $[r - g - \rho(1+g)] / (1+g+\rho+gp)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $\rho$  = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Assumes that NPV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.