

## **Papua New Guinea: Selected Issues Paper and Statistical Appendix**

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INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

**Selected Issues and Statistical Appendix**

Prepared by Ebrima Faal, Qaizar Hussain, and Aiko Mineshima (all APD)

Approved by the Asia and Pacific Department

February 20, 2007

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## I. POLITICAL BUDGET CYCLES IN PAPUA NEW GUINEA<sup>1</sup>

### A. Introduction

1. **The political budget cycle literature argues that incumbent governments may use expansionary economic policies prior to elections to influence voters and maximize chances of re-election.**<sup>2</sup> In the political economy literature, this outcome is known as the political business cycle, that is, a macroeconomic cycle induced by the political cycle. Empirical testing of competing models supporting the theory has relied mostly on data from the industrial democracies, where results have been mixed. To date, there have been few tests of political business cycle theory in developing countries, and none with significant reference to Papua New Guinea.<sup>3</sup>

2. **Several factors point to the existence of political budget cycles in Papua New Guinea.** Anecdotal evidence suggests pre-election periods have seen increases in social welfare transfers and capital spending, and a rapid liquidation of public sector arrears and increase in public debt. In addition, Papua New Guinea, as many other developing countries, has relatively weak institutions. As a result, there are relatively few constraints on government actions and accountability.

3. **This paper examines and tests the existence of political budget cycles in Papua New Guinea during the period 1988–2004.** Section B provides an overview of the political business cycle literature. Section C provides an overview of Papua New Guinea's political structure and processes. Section D describes the data set and the empirical methods used to test for the presence of election-influenced spending, and presents the results of a time series analysis. Section E details the paper's conclusion.

### B. Theoretical and Empirical Considerations

4. **Two main bodies of literature (opportunistic and partisan) explore economic fluctuations around elections.** The literature on opportunistic budget cycles argues that electoral pressures force the incumbent party to manipulate economic policy in order to increase the probability of re-election. Partisan theory argues that policies are predetermined by ideology. Specifically, left-wing parties are concerned more with unemployment than inflation, the inverse of right-wing parties. As a result, economic fluctuations arise from the policy changes that different parties pursue while in office.<sup>4</sup>

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<sup>1</sup> Prepared by Ebrima Faal. This chapter is based on a presentation delivered in Port Moresby in November 2006 in response to a request from the authorities.

<sup>2</sup> Drazen (2001) provides a good survey of political business cycles.

<sup>3</sup> Shi and Svensson (2000), Moyo (1999), and Khemani (2004).

<sup>4</sup> See Hibbs (1977), Frey and Schneider (1978), and Alesina (1987).

5. **The first opportunistic political business cycle models were based on the premise that voters are myopic.**<sup>5</sup> Nordhaus argued that politicians are able to repeatedly fool voters, even though voters may already have formed a view on the outcome of upcoming elections. This was seen as independent of the ideology of the party in power and was explained by faster rates of real growth and/or higher inflation rates in the period leading into each election. More recent models of the political business cycle (for example, Rogoff and Sibert, 1988, and Rogoff, 1990) have abandoned this assumption in favor of the “Lucas critique” (1976). The Lucas critique posits that economic actors form rational expectations by optimally using all available information to forecast the future.

6. **These newer models substitute an assumption of asymmetric information for voter myopia by assuming that voters do not have full information about incumbents’ competence.** Voters want to elect the most competent politicians and form rational expectations regarding the incumbent’s abilities based on observable current fiscal policy outcomes. Before the election, incumbents with a high probability of success will attempt to signal their competence (and thereby increase their chances of re-election) by engaging in expansionary fiscal policy. This leads to a pre-election increase in the government deficit even though competent politicians may be in office. Rogoff (1990) specifically argues that incumbents can signal their competence before an election by shifting government expenditure towards easily observed consumption spending and away from investment. The key distinction between the predictions of the rational and those of the naïve opportunistic theories, therefore, is that the former relate explicitly to manipulation of fiscal instruments rather than direct macroeconomic outcomes.

7. **Empirical support of the political business cycle theory is mixed.** Studies of developed countries (Alesina and Sachs, 1988); Alesina and Roubini, 1988) reveal much stronger evidence of partisan rather than opportunistic cycles. The weak evidence for opportunistic cycles in developed countries then motivated a wave of empirical research to examine whether such cycles occur in developing countries. There, the research produced more convincing evidence of opportunistic cycles. Ames (1987) found evidence of increased public spending in Latin America. In a time series study focusing on Cameroon, Ames (1987) identified evidence of electoral cycles in monetary growth. Khemani (2004) found evidence of electoral-timed cycles in commodity taxes, road construction, and capital spending, in a time series study of India. Other studies have identified electoral competition (Block, 2001), and levels of democracy and transparency (Gonzalez, 2002), as important determinants of political business cycles.

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<sup>5</sup> Developed by Nordhaus (1975) and Lindbeck (1976).

### C. Papua New Guinea's Political System

8. **Papua New Guinea is the second-largest country in Oceania in terms of population and third in terms of land area.**<sup>6</sup> The country is endowed with a rich natural resource base, which includes major gold and copper deposits, large oil and natural gas reserves, and extensive forests and maritime fisheries. Yet, despite this abundant source of wealth, Papua New Guinea still struggles to achieve sustained economic growth. Throughout its post-colonial history, it has been periodically beset by periods of severe economic crisis.

9. **Papua New Guinea has a unicameral Westminster-style national Parliament.** The Parliament is composed of 109 members elected from a two-tier system composed of 89 "open" electorates of approximately equal population size and 20 "regional" electorates based on the boundaries of the country's 19 provinces and its National Capital District. The parliamentary term is five years. National elections began in 1964; the most recent was held in June 2002. Two different electoral systems have been used. Between 1975 and 2002, a plurality, first-past-the-post system was followed, with winners frequently gaining less than 15 percent of the vote. Electoral reforms in 2001 introduced the Limited Preferential Vote system, a version of the alternative vote system used for single winner elections in which voters rank candidates in order of preference. The first general election to be conducted using the new system will be held in 2007.

10. **Politics in Papua New Guinea have been marked by three distinct features, the first being that Papua New Guinea has an impressive record of democratic longevity in the developing world.**<sup>7</sup> There have been over 40 years of uninterrupted democratic elections at the national level.<sup>8</sup> Relevant political and social constituencies accept democratic institutions and regard them as legitimate. There is universal suffrage. Elections have been conducted on time since independence. Transfer of power takes place peacefully on a regular basis. The military and the police have not engaged in active politics. However, while democracy is generally accepted, vote buying, ballot rigging, violence and intimidation, and other forms of irregularity are widespread.

11. **Second, despite the broad acceptance of the legitimacy of democratic institutions, problems of institutional instability have occurred due to the fact that no government since independence in 1975 has lasted its full term.**<sup>9</sup> The average life of a government is less than three years. Government has changed hands ten times

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<sup>6</sup> The exact scope of Oceania is defined variously, with interpretations including Australia, New Zealand, New Guinea, and various islands of the Malay Archipelago.

<sup>7</sup> Reilly (2000) provides an assessment of the political process in Papua New Guinea.

<sup>8</sup> Lijphart (1999) considers Papua New Guinea to be amongst the world's 36 "established" democracies. The first general elections in Papua New Guinea was in 1964 although the executive became accountable to the legislature only after 1972. Other analysts are less positive; see, for example, the World Bank's Fragile States: The Low Income Countries Under Stress Initiative.

<sup>9</sup> The current Somare government (2002–2007) will be the first to complete a full term in office.

since July 1977. Five changes have come through elections, three by votes of no confidence, and one each through a court ruling and a resignation (Table I.1). The constant shifting of parliamentary loyalties meant that no government was safe from a vote of no confidence (other than during the “grace periods” of 18 months when a new government is formed and 12 months before a general election).<sup>10</sup> Political personalities and patronage are more important than political parties (see Okole 2004). In most cases, political parties are means for their leaders to achieve personal ambitions, with no ideological underpinnings, or simply a medium to help form a government. This has resulted in a high level of voter volatility.

**Table I.1. Papua New Guinea: Coalition Governments, 1977–2002**

Date	Prime Minister	Deputy Prime Minister	Reason for change
July–77	Michael Somare (Pangu)	Julius Chan (PPP)	National elections
March–80	Julius Chan (PPP)	Iambakey Okuk (NP)	Vote of no confidence
August–82	Michael Somare (Pangu)	Paias Wingti (Pangu)	National elections
November–85	Paias Wingti (PDM)	Julius Chan (PPP)	Vote of no confidence
July–87	Paias Wingti (PDM)	Julius Chan (PPP)	National elections
July–88	Rabbie Namaliu (Pangu)	Ted Diro (PAP)	Vote of no confidence
July–92	Paias Wingti (PDM)	Julius Chan (PPP)	National elections
August–94	Julius Chan (PPP)	Chris Haiveta (Pangu)	Court ousted PM
July–97	Bill Skate (PNC)	Chris Haiveta (Pangu)	National elections
July–99	Mekere Morauta (PDM)	John Pundari (PAP)	Incumbent PM resigned
August–02	Michael Somare (NA)	Allan Marat (PPP) Sir Moi Avei (MA) Don Polye NA	National elections

Key: Pangu = Pantu Pati; PPP = People’s Progress Party; NP = National Party, PDM = People’s Democratic Movement; PAP = People’s Action Party; PNC = People’s National Congress; NA = National Alliance.

Sources: Henry Okole (2005), and author updates.

12. **Third, the frequent changes of governments and politics has created a class of politicians and members of parliament who are myopic in their outlook and who, because of the short political cycles, are prone to rent-seeking activities.** An important reinforcing factor is the reciprocal relationship between voters and their elected representatives. In general, voters want and demand tangible benefits such as roads, schools, hospitals, etc., while members of parliament want re-election. As Okole (2004) observed: “how these sides hold each other accountable to their respective ends of the bargain is what explains in part the haphazard performance of the legislative body.” A simple way to gauge the success of a member of parliament is, very often, by how much he or she brings home to their constituency in the form of tangible services such as schools, roads, and aid posts in rural areas; more recently, this has included personal benefits to individual constituents. As a result, a major preoccupation for members of parliament is to obtain portfolios in the government that allow them to disburse benefits to voters in their own constituencies. From a

<sup>10</sup> From 1975–1992, an incoming government was protected from votes of no confidence for only six months. The term grace period is probably a misnomer since a vote of no confidence passed during the last 12 months would not lead to the replacement of the prime minister, but would instead lead to a general election. Given the reluctance of MPs to go to elections, the provision means that votes of no confidence are never moved or passed during the last 12 months of a government’s term.

strategic perspective, therefore, it is advantageous to be in those ranks of the government where control of the public purse confers those benefits that those in the opposition or backbenches do not enjoy for their constituents. The concern with immediate material returns from elections is underlined by the introduction, continued existence and importance of members of Parliament discretionary funds.

13. **In 2001 the government of Sir Mekere Morauta introduced the Organic Law on the Integrity of Political Parties.** This legislation was designed to reduce instability in government. The Integrity Law came into effect after the 2002 national elections. One of its key provisions prohibited members of parliament from switching political parties except under circumstances specified by the Law. Some political developments since 2002 have tested the Integrity Law, though more time is required to determine how effective it will be in easing Papua New Guinea's political issues.

#### D. Empirical Analysis

##### Data

14. **Most empirical studies of developing countries have used annual data to conduct analysis of political budget cycles.** This means that not all fluctuations can be captured, especially if they are of short duration. Akhmedov and Zhuravskaya (2004) argue that monthly data should be used so as to allow a very careful measurement of even very short cycles. High frequency data enables the model better able to detect fluctuations of short duration and there is now a growing trend toward using monthly or quarterly data to analyze political business cycles. High political instability arising from votes of no confidence and from fragile coalitions in Papua New Guinea during the study period argue for the use of quarterly data (the highest frequency available).

15. **This study therefore uses a data set of quarterly seasonally adjusted fiscal policy indicators covering the sample period 1988:Q1–2004:Q4.** The main reason for choosing this period is that quarterly data are readily available only after 1987. The period includes three parliamentary elections and four changes of government arising from votes of no confidence or resignations of the prime minister.

16. **The fiscal data includes central government total revenue, total expenditure, recurrent expenditure, development expenditure, and net credit to the public sector.** For an incumbent government, all the above items are ways of signaling to voters by applying opportunistic policies before elections. Expenditure items of the budget consist mainly of total expenditures, non-interest expenditures, non-interest recurrent expenditures, and development expenditures.<sup>11</sup> Data on other components of the budget, including transfers,

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<sup>11</sup> Fiscal data are derived from the Bank of Papua New Guinea's *Quarterly Economic Bulletin* and Treasury Budget Reports.



were not readily available and are not considered in this paper. Since the government decides the allocation and distribution of expenditures, this, rather than manipulation of revenue, is the more likely channel for implementing opportunistic policies.

17. **In Papua New Guinea interest expenditure has been a significant component of total expenditure, averaging 13 percent per year during 1988–2004.** For this reason, primary expenditure and the primary deficit represent a more appropriate guide for determining fiscal policy. In the regressions, all the fiscal variables are taken as ratios to total expenditure given that the central focus of our analysis is to test the behavior of fiscal variables during election periods.

18. **Table I.2 presents a framework for assessing the magnitude of the econometric results.** During 1988:Q2–2004:Q4, the average ratio of revenue to GDP equaled 7.3 percent of GDP with a standard deviation of 1.08. Overall, expenditure displays significantly more variability, as measured by the standard deviation, than revenue. The primary and fiscal deficits averaged 0.57 and -1.5 percent of GDP per quarter, with the overall deficit displaying significantly more variability than the primary deficit. Stock of net claims on the government is also substantial, averaging 9 percent of GDP per quarter with a standard deviation of 3.13.

Table I.2. Descriptive Statistics for the Fiscal Variables (1988:2-2004:4)

	Revenues	Expenditure			Deficit		Net Claims on government
		Recurrent	Development	Primary	Primary	Total	
Mean	7.34	5.50	1.21	8.97	0.57	-1.50	9.03
Median	7.27	5.31	0.88	8.54	0.51	-1.23	9.57
Maximum	10.01	8.55	4.20	17.29	3.48	1.70	15.71
Minimum	5.63	3.35	0.17	5.21	-3.50	-5.96	1.98
Std. Dev.	1.08	1.21	1.89	2.36	1.23	1.57	3.13
Skewness	0.63	0.31	1.54	0.89	-0.26	-0.67	-0.61
Kurtosis	2.79	2.34	5.23	4.06	3.86	3.37	3.02
Observations	65	65	65	65	65	65	65

Sources: Treasury Department, *Quarterly Economic Bulletins* (Bank of Papua New Guinea), and Fund staff estimates.

19. **Several methods are available to separate cyclical and trend movements in macroeconomic variables.** The Hodrick-Prescott filter is the most commonly used. It suffers, however, from many weaknesses, including as not being able to distinguish between short-term fluctuations, which may be interpreted in terms of the economy (the cycle) and those that cannot be explained by (errors in measurement), and the tendency of this process to deform the dynamic properties of the data by introducing spurious cycles. This paper uses the Baxter-King filter to decompose the macroeconomic time series into three different and uncorrelated frequency components using the ideal band pass filter.

20. **Figures 1–5 show the trend in the log levels of primary expenditure, primary recurrent expenditure, capital expenditure, net credit to the public sector, and total revenues.** In all cases, there are no clear patterns or synchronization between the level of the fiscal variable and elections. However, better synchronization of the cyclical components of

the fiscal variables with elections is evident in the cyclical component. The remainder of the paper seeks to confirm econometrically if this relationship is significant.

### Model

21. **To test the implication of the political budget cycle theory, the following model is estimated:**

$$y_t = \alpha + \sum_{j=1}^n \beta_j y_{t-j} + \delta_k \text{elect}_{kt} + \sum_{i=1}^n s_i + \varepsilon_i; \quad (1)$$

$K = 1, 2, 3, \dots, 8$ .

where  $y$  is the policy variable and is assumed to follow an autoregressive process. It is also assumed that this process is interrupted by elections, as captured by the dummy term  $\text{elect}_{kt}$ ;  $\varepsilon_t$  is the error term at time  $t$ ;  $n$  is the lag order, and is specified by the Schwarz Information Criterion;  $k$  is the quarter the dummy represents. The coefficient  $\delta_k$  of the dummy variable  $d_{kt}$  is tested under the null hypothesis ( $H_0: \delta_k = 0$ ).

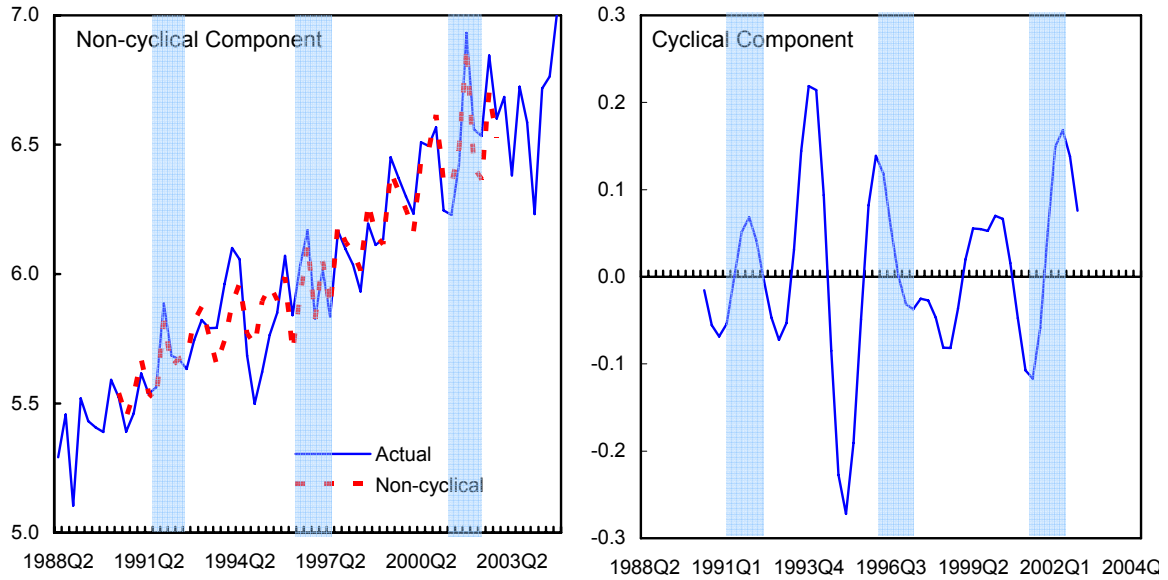
22. **The dependent variable in each specification is a particular fiscal instrument to be tested for evidence of political cycles.** This test is implemented for five fiscal policy variables—primary expenditure, recurrent primary expenditure, development expenditure, total revenues, and net claims on government. A dummy variable is introduced to reflect the effect of elections. The dummy variable takes the value of 1 in the period when expansionary policies are expected and -1 when the post-election contraction is anticipated.

23. **The estimated model also controls for variations in government expenditure that are due to reasons exogenous to the domestic political cycle.** Given the openness of Papua New Guinea's economy and that its political trends have little effect on global economic outcomes, the rate of growth of its external terms of trade is a useful control for the importance of nonpolitical factors that might influence Papua New Guinea's economy.<sup>12</sup>

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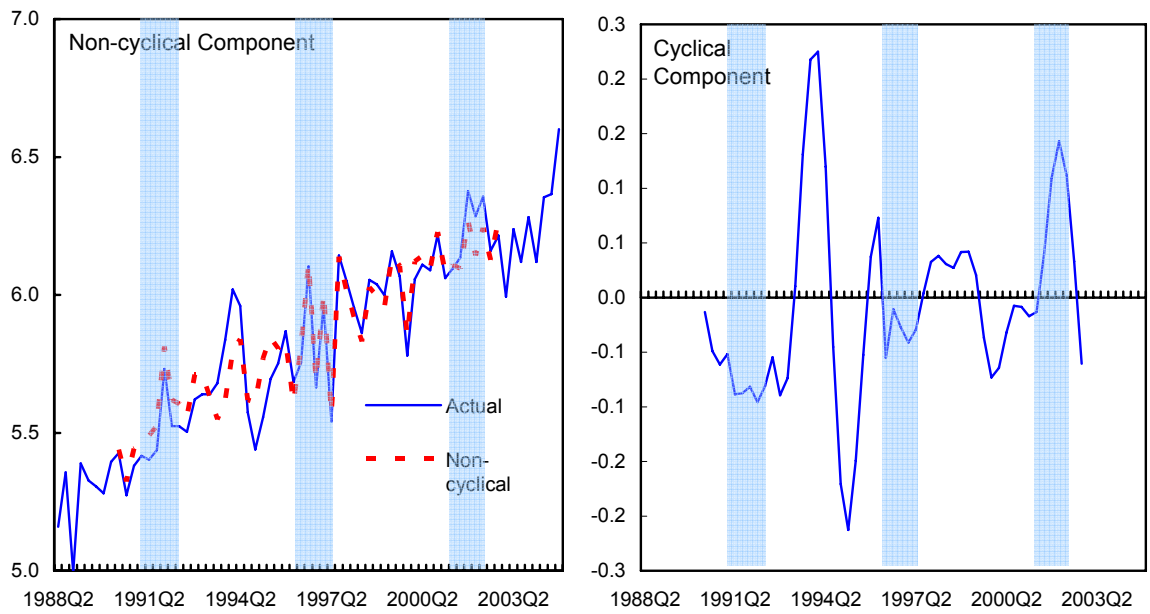
<sup>12</sup> Openness is defined as the sum of exports and imports over GDP. It averaged 98.4 percent of GDP during the 1988 to 2004 period.

Figure I.1. Papua New Guinea: Total Primary Expenditure, 1988–2004 1/  
(In logarithm)



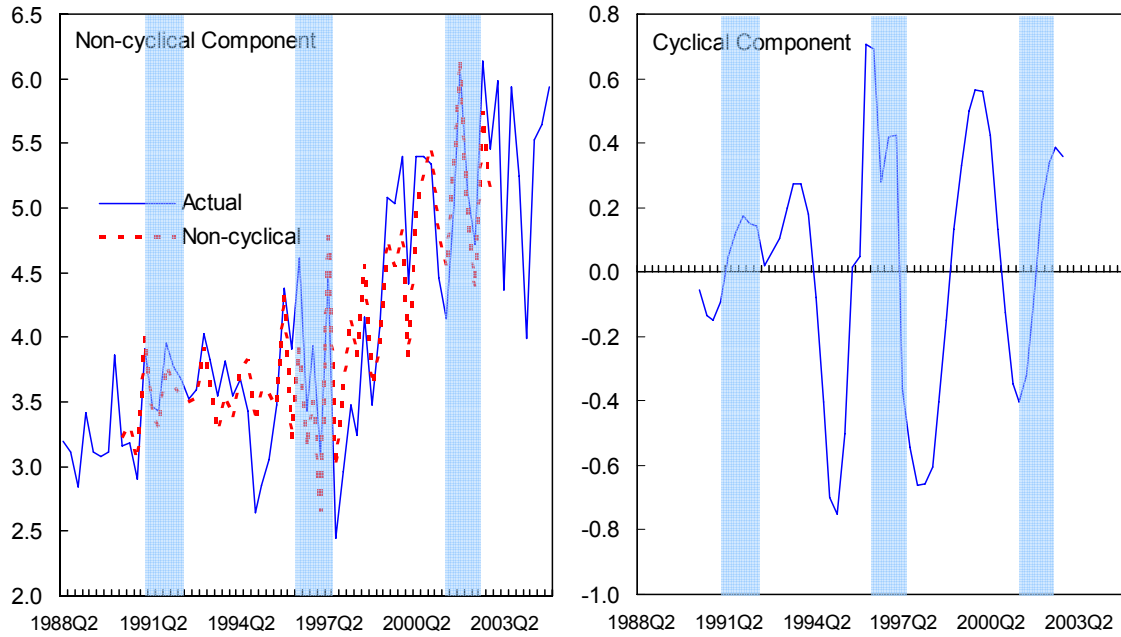
1/ Shaded areas are election periods.

Figure I.2. Papua New Guinea: Recurrent Expenditure, 1988 - 2004 1/  
(In logarithm)



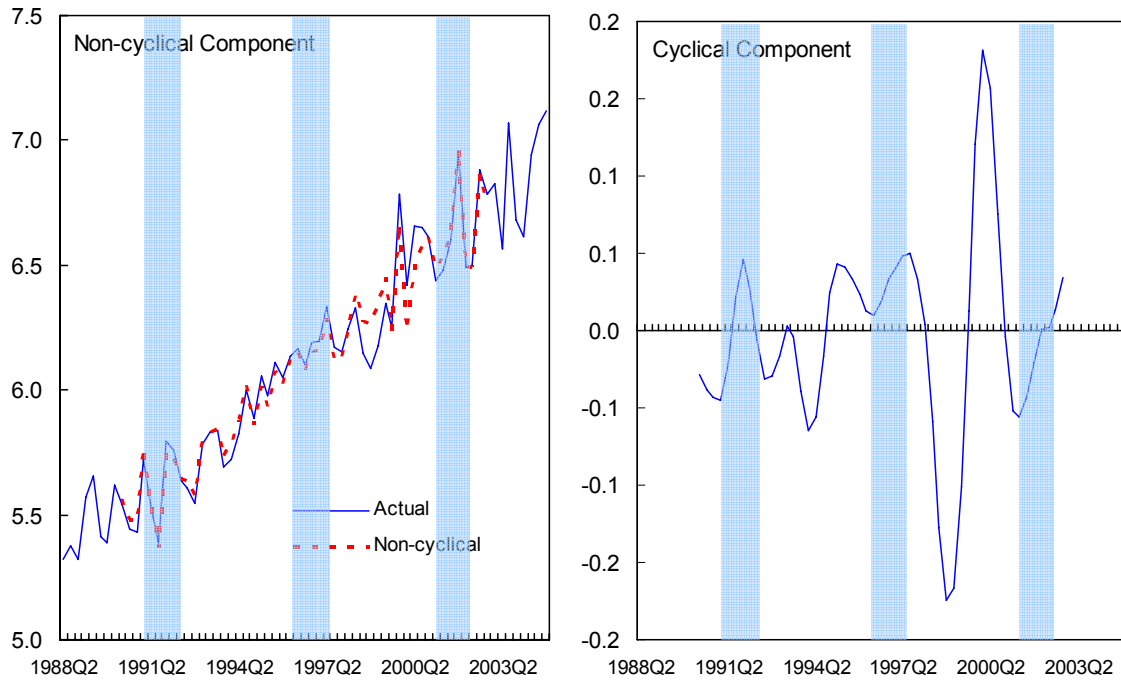
1/ Shaded areas are election periods.

Figure I.3. Papua New Guinea: Development Expenditure, 1988–2004 1/  
(In logarithm)



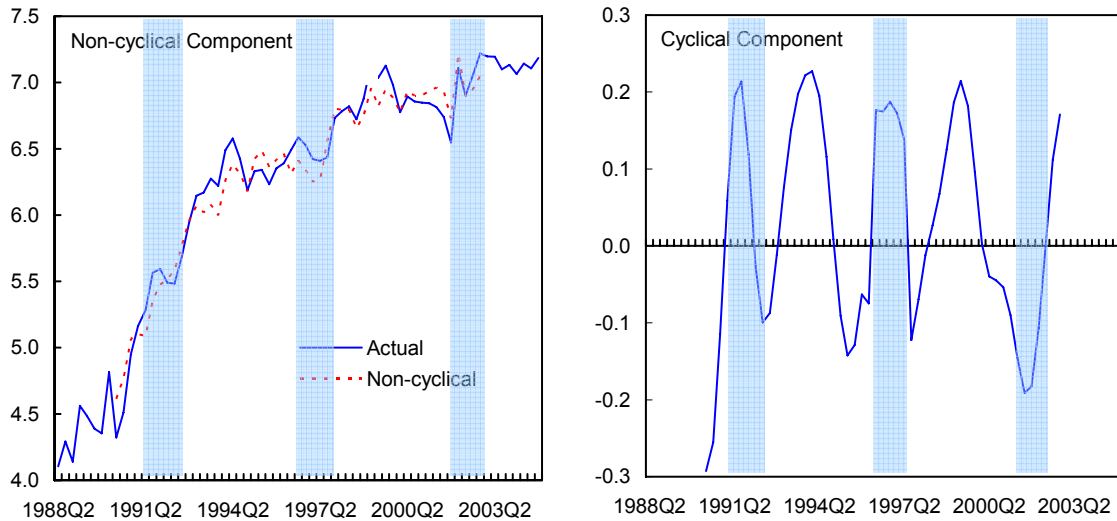
1/ Shaded areas are election periods.

Figure I.4. Papua New Guinea: Total Revenues, 1988–2004 1/  
(In logarithm)



1/ Shaded areas are election periods.

Figure I.5. Papua New Guinea: Net Credit to Government, 1988 - 2004 1/  
(In logarithm)



24. **Finally, the analysis accounts for the peculiarities of the parliamentary system of government in Papua New Guinea.** Like most parliamentary systems, the party winning power gains control over the government's policy instruments if it wins a simple majority of seats. If the winning party lacks a clear majority and must therefore govern in coalition with other parties, then control over policy instruments is more difficult. In Papua New Guinea, all governments since independence in 1975 have been coalition governments. As a result, the winning party has been forced to moderate its partisan concerns, or at least to accommodate those of its key coalition partners, in order to maintain the "confidence" of the House. In this environment, both policy and political decisions would likely be aberrant.<sup>13</sup> To account for this, the analysis considers a dummy variable labeled "confidence" to indicate those years when government has changed through a vote of no confidence or other constitutional means outside of a scheduled national election.

<sup>13</sup> Kontopolous and Perotti (1999) and Persson, Roland, and Tabellini (2004), for example, use a common-pooling argument to demonstrate higher than normal spending under coalition governments.

## Results

**Table I.3. Cycles in Budget Spending, Revenue, and Net Public Credit**

	Variable				
	Primary	Recurrent	Development	Revenues	Net Claims on Government
Period q -4	0.000	0.066	-0.206	-0.029	0.073
Period q -3	0.480 *	-0.052	0.581 *	0.071	-0.110
Period q -2	-0.230	-0.038	-0.318	-0.021	-0.103
Period q -1	0.171 *	-0.006	0.234 *	0.127	0.162 *
Elections: q=0	0.191	-0.082	-0.244	-0.007	-0.021
Period q +1	-0.464 *	0.050	-0.147	-0.033	0.254 **
Period q +2	0.155	-0.104	0.362	0.038	0.381 *
Period q +3	0.007	0.114	-0.628 *	-0.010	0.146
Period q +4	0.008	-0.026	0.255	0.036	-0.014
Confidence	-0.115	0.069	-0.466	0.019	-0.011
Terms of trade	0.650 *	0.169 *	0.418 *	0.015 *	0.004
Lagged dependent variable	0.424 *	0.244 *	0.416 *	0.317	0.774 *
<b>Adjusted R-squared</b>	0.748	0.499	0.611		0.766
<b>Diagnostic tests</b>			<b>P-Values</b>		
Jarque Bera Test	0.710	0.419	0.305	0.372	0.745
Breusch-Godfrey Test	0.279	0.773	0.156	0.816	0.175
White Heteroskedascity Test	0.086	0.078	0.087	0.069	0.113

Source: Fund staff estimates.

\* = Significance at the 5 percent level.

\*\* = Significance at the 10 percent level.

P-values give the probability that the null hypothesis is accepted.

25. **The estimations' results are presented in Table I.3.** Total primary expenditure experiences the first significant jump of 48 percent three quarters before elections compared with trend. After that, there are no statistically significant changes until the quarter preceding the elections, when expenditure rises by 17 percent. No significant developments take place in the election quarter, but the quarter following the elections is characterized by a statistically significant fall in total primary expenditures of around 46 percent. Development expenditure mimics the pattern seen in total primary expenditures with the exception that a sharp decline in development expenditure of about 68 percent takes place three quarters after the elections. The estimation finds no evidence of budget cycles in primary recurrent expenditures, or any indication that the confidence variable—proxy for coalition governments—affects the political budget cycle in Papua New Guinea.<sup>14</sup> The lagged dependent variable is statistically significant in all the estimations while the control variable (terms of trade) is statistically significant in all but the estimation of net public credit.

26. **Election-related spending was financed in part through domestic borrowing.** It is interesting to note that revenue was not statistically significantly related to elections in the pre- or post-election period. Electoral swings in fiscal deficits thus reflect a preference to

<sup>14</sup> Khemani (2004) and Gonzalez (2002) find significant pre-electoral increases in public investment in Mexico and India. In contrast, Block (2002), using an annual panel of developing countries, found that budget composition shifted away from public investment and toward current consumption in the period leading to elections.

manipulate expenditure rather than taxation.<sup>15</sup> Given these findings, how did governments finance election-related spending? Table I.3 shows that part of the financing came from domestic borrowing. Net claims on the central government, which records the transactions with the domestic banking system, indicated that government has in the past overdrawn balances in excess of its deposits with the banking system. The estimation shows that net claims on the central government as a percentage of GDP increase on average by 16 percent in the quarter immediately preceding an election. The post-election evidence also shows that the increases in net claims against the government are not reversed in the post-election period. Diagnostic tests indicate normality in the residuals and they allow rejection of the presence of heteroskedasticity and autocorrelation.<sup>16</sup>

## E. Conclusions

27. **This paper presents evidence of opportunistic political business cycles in Papua New Guinea.** In general, the above findings are consistent with the predictions of the rational opportunistic political models of Rogoff and Sibert (1988) and Rogoff (1990). The estimation results show a clear pattern of pre-election manipulation of fiscal instruments by incumbent governments—mainly increased development spending and overall primary expenditure—followed in most cases by a retrenchment in the post-election period. The evidence also shows that credit to government increase in post-election years, as politicians seek some means of financing their election-year extravagance. A broader implication of these findings points to the potential incompatibility between the pressures motivating the political business cycles and ongoing efforts on economic and political reform, including the objective of long-term fiscal sustainability.

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<sup>15</sup> Block (2002) has found similar results for African countries. The findings differ from the broader developing country results found in Shi and Svensson (2000).

<sup>16</sup> The results were estimated by EVIEWS (version 5.1). The diagnostic tests have computer-generated probabilities (reported in Table 3) indicating the probability of accepting the null hypothesis of no model misspecification. The test for normality is the Jacque-Bera  $\chi^2(2)$  test. Breusch-Godfrey serial correlation is a Lagrange Multiplier test of the hypothesis that the residuals of the regression are serially correlated. The test for heteroskedasticity is White's test (1980), which asymptotically follows a  $\chi^2$  distribution, with degrees of freedom equivalent to the number of slope coefficients in the test regression.

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## II. PAPUA NEW GUINEA: TAX SUMMARY

### A. Direct Taxation

#### Taxation of Individuals

1. **The tax year coincides with the calendar year. Residence is defined as physical presence in Papua New Guinea for more than six months out of a given tax year.** Resident individuals are taxed on global income from all sources, subject to double-taxation treaties. Nonresident individuals are liable for tax only on income derived from Papua New Guinea sources. The maximum number of dependents for whom a tax rebate may be claimed was reduced from four to three in the 2004 Budget.
2. **There are two separate types of assessment:** (i) a fortnightly salary or wages tax assessment; and (ii) an annual non-salary or wages income assessment. Expenses of earning income are fully deductible, and there are no capital gains or gift taxes. The tax rates on assessed income are shown in Table A.

Table A. Individual Resident Income Tax Rates From January 1, 2007

Income Bracket	Marginal Tax Rate (Percent)
Below K6,600	0
K6,601 to K18,000	25
K18,001 to K33,000	30
K33,001 to K70,000	35
K70,001 to K250,000	40
Above K250,000	42

#### Taxation of Companies

3. **Tax years generally correspond to calendar years, unless there is a sufficient reason to deviate from that rule** (e.g., if the parent company has a different tax year). A company is considered resident for tax purposes if it is incorporated in Papua New Guinea, has its management in Papua New Guinea, or is controlled by Papua New Guinea residents. A resident company is taxed on its global income from all sources. Nonresident companies pay tax only on Papua New Guinea sourced income.
4. **The general company tax rate is 30 percent, except for authorized superannuation funds**, for which the applicable rate is 25 percent. Taxable income generally corresponds to accounting income. Company income tax is payable as advanced payment tax (APT), so that companies pay tax on the current year's income. Advanced payment tax is payable in three equal installments on the last business day of April, July, and October each year. Business losses can be carried over for up to 20 years; they cannot be carried back.

5. **Special Temporary Rates for Agriculture and Tourism** apply. The 2004 Budget introduced a 20 percent tax rate that would apply for 10 years to agricultural projects with an investment of K5 million or more commencing between January 1, 2004 and December 31, 2006. The 2006 Budget extended the eligibility period for this temporary concessional tax rate from December 31, 2006 to December 31, 2011. The 2006 Budget also reduced the amount needed to be invested to qualify from K5 million to K1 million.

6. **The 2007 Budget introduced a temporary concessional tax rate of 20 percent** for 10 years from the date of operation for large scale tourist accommodation facilities involving investment of US\$10 million or more where construction commences within five years from January 1, 2007 and the resulting facility has at least 150 guest rooms.

7. **Other assistance measures for tourism and agriculture have been introduced since 2005, including** a double deduction for export market development costs for tourism operators and accelerated depreciation for capital expenditure. These concessions were expanded in 2006. A double deduction for staff training costs was introduced. The depreciation allowable for the first year was increased to 55 percent in 2006. The purchase by foreign tourists of travel and accommodation in Papua New Guinea while outside the country will be exempt from GST from January 1, 2007. A 150 per cent tax deductions for research and development and agricultural extension services, was introduced in the 2004 Budget. The level of infrastructure tax credits available to agriculture was increased from 0.5 percent to 0.75 percent in 2005. This was further increased to 1.5 percent in 2006.

8. **Dividend withholding tax** of 17 percent is applicable to all dividends paid by resident companies and received by resident companies from sources outside of Papua New Guinea. Dividend withholding tax on dividends paid to nonresidents, resident individuals and resident trust estate is a final tax. While the standard rate of dividend withholding tax on dividends paid to nonresidents is 17 percent, under some of Papua New Guinea's bilateral double tax treaties, a lower rate is prescribed. A DWT of 10 per cent applies to dividends from mining companies. Dividends from petroleum and gas operations are not subject to DWT.

9. **Interest withholding tax** of 15 percent was introduced in 1999. Interest withholding tax on interest paid to nonresidents is a final tax. Interest paid by mining and petroleum companies to nonresident financial institutions is exempt.

### **Taxation of Mining and Petroleum Companies**

10. **Mining and petroleum companies are subject to different rates of taxation than nonmining companies** as summarized in Table B. Corporate income tax for mining companies is payable as APT, as for non-mining companies. At the beginning of each year, the Internal Revenue Commission (IRC) assesses the estimate made by the tax payer and

issues an assessment to the mining company. The company then lodges this assessment (in kina) to the central bank account in New York in three equal installments in April, July, and October. Any differences between the APT assessment and income tax assessment are requested to be paid in U.S. dollars. The payment mechanism of corporate income tax for petroleum companies is same as for mining companies, except that APT assessments and lodgment are made in U.S. dollars. Business losses can be carried over indefinitely.

Table B. Taxation of Petroleum and Mining Companies

	Mining Companies	Gas Companies	Petroleum Companies
Income tax	30 percent (applicable for resident companies only)*	30 percent	Operations that began in 2001: 45 percent Operations that began in 2003–17: 30 percent Operations not included above: 50 percent
Dividend withholding tax	10 percent	None	None
Mining levy	Mining levy to be reduced by 5 percentage points every year	None	None
Royalties	2 percent on the f.o.b. sales	2 percent on gross revenues from gas sales	2 percent on gross revenues from petroleum sales

*\*Rate for nonresident mining companies is 40 percent, no distinction between resident and nonresident companies for petroleum and gas companies.*

### Other Provisions for the Mining and Petroleum Sectors

11. **Depreciation for new mining projects is allowed with a 25 percent decline in the balance pool for all assets, regardless of whether they are long-or short-life assets.** A double depreciation of 200 percent is allowed for mineral exploration expenses incurred after January 1, 2003 that results in a subsequent mining development. The first 100 percent deduction is allowed as a deduction against assessable income. The second deduction arises once a mine commences commercial operations. Ring fencing rules on mines allow up to 25 percent of pooled off-lease exploration expenditure as a deduction for tax purposes, provided that this does not reduce tax payable by more than 25 percent.

12. **A mining levy was introduced in July 1999 to capture the windfall gain of the mining industry from the introduction of the VAT,** which resulted from the zero-rating of their exports in conjunction with the removal of the 11 percent basic import duty for all

sectors of the economy. The tax is levied at 11 percent on the imports and deemed imports of the mining industry. In 2002 the government commenced phasing out the mining levy over a 4-year period, intending to reduce it by one-fourth of the original amount every year. However, phase out of the mining levy was temporarily suspended in 2003. In 2004 the government reinstated the phase out at the rate of 5 percentage points, and an additional 5 percentage points per annum every year thereafter, with the phase out to be complete by 2008.

13. **To promote new petroleum projects, the rate of corporate income tax was reduced from 50 percent to 45 percent for petroleum projects that began to derive income from operations in January 2001 or later.** The reduced rate however does not apply to projects that existed at the time of reduction. Furthermore, the government has introduced special fiscal incentives for Petroleum Prospecting Licenses issued before January 1, 2008, which convert to Petroleum Development Licenses before January 1, 2018. This practically entitles all mining projects that commence operation between 2003–17 to a reduced petroleum corporate tax rate of 30 percent for the entire life of the project, usually 10 to 15 years. The reduced corporate income tax rate is aimed at providing incentives for new petroleum exploration. Additional profit taxes, which were applied to mining and petroleum company income that exceeded an internal rate of return of at least 20 percent, have been abolished for mining and petroleum projects but not gas ones such as the prospective Gas to Australia project.

14. **A national resource tax is imposed by the national government** but paid to provincial governments and landowners as a royalty of 2 percent of the net value of output from mining, petroleum and gas projects.

### **Taxation of Superannuation Funds**

15. **All companies employing 20 or more persons are required to provide superannuation for their employees.** Employee contributions are deducted from gross basic salary at a minimum rate of 5 percent, while the employer contributes 7 percent of the employees' gross salary. Civil servants contribute to the Public Officers Superannuation Fund, where contribution rates of 6 percent for the employee and 8.4 percent for the employer apply.

16. **Superannuation funds are subject to income tax.** The corporate income tax rate for authorized superannuation funds was reduced from 30 percent to 25 percent in 2004. This is expected to increase domestic savings, and boost member returns and benefits over time. To further encourage savings, the government also introduced concessional taxation arrangements in 2004, allowing the retention of funds in the newly established Retirement Savings Accounts (RSAs) up to a maximum of K100,000. Under the new arrangement,

employees exiting a superannuation fund can voluntarily transfer their savings to RSAs. These savings can be drawn down on a periodic basis free of income tax, providing an income stream in retirement. Draw-down rules limit the rate at which monies can be withdrawn in order to protect savings from dissipation. The earnings of RSAs are also free from income tax, subject to the maximum draw-down rules.

17. **The 2004 Budget also introduced concessional tax rates for employer contributions and fund earnings at the benefit stage** in accordance with Table C. Previously, only employees who have been with a fund for more than 15 years benefited from the concessional tax rate of 2 percent.

Table C. Tax Rates Applying to Superannuation Earnings

Years of contribution	Marginal tax rate (percent)
Less than 5 years	Income tax rates as shown in Table A
At least 5 years but less than 10 years	15 percent
At least 10 years but less than 15 years	8 percent
15 years or more	2 percent

## B. Indirect Taxation

### Goods and Services Tax

18. **The goods and services tax (GST) has a uniform tax rate of 10 percent, with zero-rated exports, including for the mining and petroleum sectors.** Exempted goods and services are mainly medical services, financial services, education services and supplies, fine metals and public transportation fees. GST is levied on all imported goods, with the exception of imports for aid projects and diplomatic missions and for the mining and petroleum sectors. All businesses with an expected turnover in excess of K100,000 must register for GST. Registration for other businesses is voluntary.

19. **From 2004, inland GST collections (net of refunds) are distributed between national government and provinces on the basis of 40 percent to the national government and 60 percent to provincial governments.** Each provincial share of the net inland collection is calculated in accordance with the formula set out in the GST Revenue Distribution Act. Up until December 31, 2006 these distributions were based on an estimate of the revenue to be received in the year. For 2007 and future years the distribution will be based on the actual net revenue received two years previously, provided the distribution is no less than the actual distribution to a province in 2006.

## Excise Taxes

20. **Excise taxes are applied to alcoholic beverages (beer, wine, and spirits), cigarettes, other manufactured tobacco products, and fuels.** Since the 1999 tax and tariff reform, excise taxes also apply to a few products that were previously protected by high tariffs, such as motor vehicles and audio-visual electronic equipment. The excise rates for alcohol and tobacco products were indexed by 4 percent every six months from May 1, 2003. However, the 2004 Budget froze the indexation for 12 months until November 30, 2004. From December 1, 2004, the excise indexation for alcohol and tobacco products resumed at 2.5 percent. From December 1, 2005, the excise indexation for alcohol and tobacco products became the lesser of 2.5 percent or the increase in the Consumer Price Index every six months, with the rates applying from January 1, 2007 as shown in Table D.

21. **From the beginning of 2004, an excise duty exemption was granted to business and individual importing tractors for use in agricultural and forestry work as well as pedestrian controlled tractors.** The excise rate was reduced from 10 percent to 0 percent.

Table D. Excise Tax Rates

Commodity	Excise Rate
Alcohol (per liter)	
Beer	K41.29–58.73
Wine and spirits	K62.38–66.95
Tobacco products	
Cigars (per Kg)	K148.40
Regular cigarettes (per 1,000)	K148.40
Spear no filter (per 1,000)	K74.20
Spear filter (per 1,000)	K92.61
Smoking tobacco (leaf, per kg.)	K49.47
Coarse Shredded Tobacco (per Kg)	K29.18
Others	K49.47
Petroleum products	
Gasoline	K0.61 per liter
Aviation gasoline	Abolished from January 1, 2007
Diesel	K0.06 per liter (K0.03 for commercial fishing vessels)
Jet A1-	K0.02 per liter
Zoom (Gasoline and oil mix)	K0.30 per liter from January 1 to December 31, 2007 on a trial basis. Policy to be reviewed in November 2007.
Other	
Pearls, diamonds, and some metals	40 percent
Drying, dictating and answering machines, microwave ovens	30 percent
Motor vehicles	0–110 percent
Arms	60 percent
Poker machines	50 percent

## Import Duties

22. **The Harmonized Commodity Description and Coding System (HS Tariff) was adopted in January 1991.** The 1995 revision of the code was adopted in 1996. Papua New Guinea became a member of the World Customs Organization in 1998, and is implementing the WTO agreement on Customs Valuations. Papua New Guinea bound its entire tariff schedule during the Uruguay Round. A seven-year tariff reform program commenced in July 1999, rationalizing the tariff structure and setting a schedule for the phased reductions of tariffs. Under the tariff reform program, tariff rates were reduced to the current rates of 15, 25, and 40 percent in January 2006. Domestic sugar production is protected with a 70 percent tariff, which will be maintained until the end of 2010.

23. **Preferential import tariff arrangements exist with members of the Melanesian Spearhead Group, and a bilateral arrangement with Fiji.**

Table E. Tariff Rates (in percent)

Tariff Category	Current Tariff Rate	Tariff Rate Prior to July 1999
Duty free	0	0
Input rate	Abolished	5
Basic rate	Abolished	11
Intermediate rate	15	40
Protective rate	25	55
Prohibitive rate	40	75–125

The descriptions of the tariff categories are as follows:

- Duty free items: more than three-fourths of all lines fall into this category.
- Intermediate rate items: intermediate goods.
- Protective rate items: goods that are produced, or potentially can be produced, in Papua New Guinea and are seen as requiring a level of protection.
- Prohibitive rate items: these include fresh vegetables, fruits and nuts (whether or not preserved), beer, cigarettes and cigars, veneer and plywood, articles of jewelry and pearls, prefabricated buildings and sugar. Tariffs for some of these products (plywood, and veneer sheets) will be higher than the prohibitive rate during the phased reduction, but set at the general prohibitive rate in 2006. There is a specific tariff on beer, spirits, cigarettes, matches, shelled birds' eggs and certain tobacco products.



### Import Levy

24. **In 2004, a temporary levy of 2.0 percent was imposed on imports**, except imports by the mining and petroleum sectors, by churches and charitable groups, and pharmaceuticals and medical goods. The levy was operative until December 31, 2004 only.

### Export Duties

25. **Export duties are levied only on unprocessed logs, sandalwood and crocodile skins**; the duty varies depending on the product. Export duties are calculated on an f.o.b. basis and are payable before shipment. A pre-shipment inspection system on the export of round logs has been supplied by a private contractor since late 1994. Up until December 31, 2006 the log export duty was imposed on a progressive rate scale. The tax was changed in the 2007 Budget to a flat rate tax of 28.5 percent from January 1, 2007. Plantation logs are exempt from export duty. Crocodile skins are charged an export tax set at 5 percent, and sandalwood is charged at a rate of 15 percent.

### C. Other Taxes

26. **Gaming machine tax (Tax on Pokies)** was introduced in October 1996 as a general revenue measure, and last increased in April 2000. The Gaming Machine Act specifies the distribution of the turnover of gaming machines to all stakeholders as shown in Table F.

Table F. Distribution of Poker Machine Tax

Recipient	Share (Percent)
National government	74
Operators	4
Site owners	22

27. **Stamp duties** are imposed by the national government on the execution of certain documents. The rates vary by type of document.

28. **Debit tax** on withdrawals from financial institutions was introduced during 2003, applying at the rate of 1 toea if the withdrawn amount is between K50.00 and K100.00, 0.01 percent of the withdrawn amount if the withdrawn amount is between K101.00 and K125,000.00. Where the debit is K125,000.00 or a greater amount, the debit tax shall be K12.50 and where the debit in question is less than K50.00, the debit tax is nil. The Debit Tax replaced the existing K0.20 stamp duty applying to checks.

29. **Departure tax** of K30 is payable by all persons departing Papua New Guinea. Departing international passengers also pay a K30 terminal facility charge to the Civil Aviation Authority.

30. **Land tax** may be imposed by provincial governments although this tax is difficult to implement and collect.

Table 1. Papua New Guinea: Gross Domestic Product by Sector at Current Market Prices, 2001–05

	2001	2002	2003	2004	2005
		Actual	Prel.	Prel.	Est.
	(In millions of kina)				
Nominal GDP	10,396	11,656	12,567	12,652	15,339
Mineral	2,401	2,150	2,252	2,391	3,632
Non-mineral	7,995	9,506	10,316	10,261	11,707
<i>Of which</i> : Non-agricultural	4,418	5,078	5,496	5,710	6,024
Agriculture, forestry, and fishing	3,578	4,428	4,819	4,551	5,683
Mining, quarrying, and petroleum	2,401	2,150	2,252	2,391	3,632
Manufacturing	731	729	821	848	943
Electricity, gas, and water	167	194	229	264	284
Construction	702	996	1,129	1,177	1,246
Wholesale and retail trade	558	746	850	891	945
Transport, storage, and communication	258	268	294	305	317
Financing, insurance, real estate, and business services	407	407	423	415	449
Less: Imputed bank service charge	179	185	188	196	215
Community, social, and personal services	1,241	1,352	1,403	1,395	1,427
Import duties	535	575	539	615	632
Less: Subsidies	3	3	3	3	3
	(In percent of GDP)				
Memoranda items:					
Nominal GDP	100.0	100.0	100.0	100.0	100.0
Mineral	23.1	18.4	17.9	18.9	23.7
Non-mineral	76.9	81.6	82.1	81.1	76.3
<i>Of which</i> : Non-agricultural	42.5	43.6	43.7	45.1	39.3
Agriculture, forestry, and fishing	34.4	38.0	38.3	36.0	37.1
Mining, quarrying, and petroleum	23.1	18.4	17.9	18.9	23.7
Manufacturing	7.0	6.3	6.5	6.7	6.1
Electricity, gas, and water	1.6	1.7	1.8	2.1	1.9
Construction	6.8	8.5	9.0	9.3	8.1
Wholesale and retail trade	5.4	6.4	6.8	7.0	6.2
Transport, storage, and communication	2.5	2.3	2.3	2.4	2.1
Financing, insurance, real estate, and business services	3.9	3.5	3.4	3.3	2.9
Less: Imputed bank service charge	1.7	1.6	1.5	1.5	1.4
Community, social, and personal services	11.9	11.6	11.2	11.0	9.3
Import duties	5.1	4.9	4.3	4.9	4.1
Less: Subsidies	0.0	0.0	0.0	0.0	0.0

Sources: National Statistical Office through 2004; Treasury Department estimates for 2005; and Fund staff estimates.

Table 2. Papua New Guinea: Gross Domestic Product by Sector at 1998 Constant Prices, 2001–05

	2001	2002	2003	2004	2005
		Actual	Prel.	Prel.	Est.
(In millions of 1998 kina)					
Real GDP	7,741	7,728	7,896	8,111	8,380
Mineral	1,121	943	969	972	1,020
Non-mineral	6,620	6,786	6,927	7,139	7,361
<i>Of which</i> : Non-agricultural	3,711	3,997	3,999	4,077	4,246
Agriculture, forestry, and fishing	2,909	2,789	2,927	3,062	3,115
Mining, quarrying, and petroleum	1,121	943	969	972	1,020
Manufacturing	595	560	587	600	660
Electricity, gas, and water	107	107	121	126	130
Construction	601	805	849	876	918
Wholesale and retail trade	428	526	539	556	579
Transport, storage, and communication	210	206	210	215	222
Financing, insurance, real estate, and business services	343	324	313	303	318
Less: Imputed bank service charge	152	149	153	158	162
Community, social, and personal services	1,140	1,174	1,133	1,106	1,124
Import duties	441	448	403	455	461
Less: Subsidies	2	2	2	2	2
(Annual percentage change)					
Memoranda items:					
Real GDP	-0.1	-0.2	2.2	2.7	3.3
Mineral	-10.4	-15.9	2.8	0.3	5.0
Non-mineral	1.9	2.5	2.1	3.1	3.1
<i>Of which</i> : Non-agricultural	7.7	7.7	0.1	1.9	4.2
Agriculture, forestry, and fishing	-4.7	-4.1	5.0	4.6	1.7
Mining, quarrying, and petroleum	-10.4	-15.9	2.8	0.3	5.0
Manufacturing	0.1	-5.8	4.8	2.3	10.0
Electricity, gas, and water	-5.4	-0.4	13.4	4.3	2.7
Construction	27.2	34.0	5.4	3.2	4.8
Wholesale and retail trade	62.5	22.7	2.6	3.2	4.0
Transport, storage, and communication	-4.3	-2.0	2.1	2.6	3.0
Financing, insurance, real estate, and business services	5.3	-5.5	-3.4	-3.4	5.0
Less: Imputed bank service charge	14.4	-1.9	2.9	2.9	3.0
Community, social, and personal services	-2.2	2.9	-3.5	-2.4	1.7
Import duties	3.4	1.6	-10.1	12.9	1.3
Less: Subsidies	0.0	0.0	0.0	0.0	0.0

Sources: National Statistical Office through 2004; Treasury Department estimates for 2005; and Fund staff estimates.

Table 3. Papua New Guinea: Gross Domestic Product by Type of Expenditure at Current Market Prices, 2001–04 1/

	2001	2002	2003	2004
		Actual	Prel.	Prel.
	(In millions of kina)			
Gross domestic product	10,396	11,656	12,567	12,652
Market component	8,191	8,770	9,480	9,895
Nonmarket component	2,206	2,887	3,087	2,758
Consumption	6,650	8,847	8,130	8,447
Private	4,962	7,060	6,213	6,509
Government	1,688	1,788	1,917	1,938
Gross investment	2,386	2,470	2,504	2,531
Gross fixed capital formation	2,200	2,264	2,281	2,294
Change in inventories	186	206	222	236
Domestic demand	9,036	11,317	10,633	10,977
Foreign balance (net)	1,360	339	1,934	1,676
Exports of goods and services	6,792	7,100	8,724	9,130
Imports of goods and services	5,432	6,761	6,790	7,455
	(In percentage of GDP)			
Memoranda items:				
Gross domestic product	100.0	100.0	100.0	100.0
Market component	78.8	75.2	75.4	78.2
Nonmarket component	21.2	24.8	24.6	21.8
Consumption	64.0	75.9	64.7	66.8
Private	47.7	60.6	49.4	51.4
Government	16.2	15.3	15.3	15.3
Gross investment	23.0	21.2	19.9	20.0
Gross fixed capital formation	21.2	19.4	18.2	18.1
Change in inventories	1.8	1.8	1.8	1.9
Domestic demand	86.9	97.1	84.6	86.8
Foreign balance (net)	13.1	2.9	15.4	13.2
Exports of goods and services	65.3	60.9	69.4	72.2
Imports of goods & services	52.3	58.0	54.0	58.9

Sources: Data Provided by the National Statistical Office; and Fund staff estimates.

1/ Data for 2005 by expenditure are not available.

Table 4. Papua New Guinea: Gross Domestic Product by Type of Expenditure  
at 1998 Constant Prices, 2001–04 1/

	2001	2002	2003	2004
		Actual	Prel.	Prel.
(In millions of 1998 kina)				
Gross domestic product	7,741	7,728	7,896	8,111
Market component	6,256	6,233	6,386	6,541
Nonmarket component	1,485	1,495	1,509	1,569
Consumption	4,397	5,289	4,416	4,878
Private	2,846	3,737	2,868	3,343
Government	1,552	1,552	1,548	1,535
Gross investment	2,047	2,001	1,889	1,889
Gross fixed capital formation	1,887	1,834	1,721	1,712
Change in inventories	160	167	168	176
Domestic demand	6,444	7,290	6,304	6,767
Foreign balance (net)	1,296	439	1,592	1,343
Exports of goods and services	5,775	5,703	6,516	6,693
Imports of goods and services	4,479	5,264	4,925	5,350
(Annual percentage change)				
Memoranda items:				
Gross domestic product	-0.1	-0.2	2.2	2.7
Market component	0.4	-0.4	2.5	2.4
Nonmarket component	-2.3	0.7	1.0	4.0
Domestic demand	-3.5	14.4	-14.9	8.1
Consumption	-7.3	20.3	-16.5	10.5
Private	-13.6	31.3	-23.3	16.6
Government	7.1	0.0	-0.3	-0.8
Gross investment	7.0	-2.3	-5.6	0.0
Foreign balance (net)	18.6	-66.1	262.7	-15.6

Sources: Data Provided by the National Statistical Office; and Fund staff estimates.

1/ Data for 2005 by expenditure are not available.

Table 5. Papua New Guinea: Production of Major Commodities, 2001–05

	2001	2002	2003	2004	2005
<b>Production volumes</b>					
Crude oil (millions of barrels)	21.4	15.4	15.0	12.6	13.3
Copper (thousands of tonnes)	170.1	170.1	230.6	173.9	226.1
Gold (tonnes)	69.1	59.1	68.4	67.3	70.5
Silver (tonnes)	10.8	11.5	12.7	13.6	16.0
Cocoa (thousands of tonnes)	38.0	34.9	40.3	41.5	44.2
Coffee (thousands of tonnes)	65.4	63.1	68.8	63.0	72.1
Tea (thousands of tonnes)	7.5	5.2	6.6	8.1	6.9
Copra (thousands of tonnes)	22.3	15.8	8.4	19.2	22.3
Copra oil (thousands of tonnes)	15.8	28.2	47.7	45.1	54.4
Palm oil (thousands of tonnes)	309.1	323.9	326.9	339.0	345.8
Rubber (thousands of tonnes)	3.8	3.8	4.2	3.8	4.8
Logs (millions of cubic meters)	1.4	1.8	2.0	2.0	2.3
(In millions of kina)					
<b>Production values</b>					
Crude oil	1,889	1,431	1,632	1,652	2,283
Copper	859	1,019	1,415	1,544	2,498
Gold	2,115	2,295	2,811	2,780	2,834
Silver	32	29	32	32	37
Cocoa	121	226	258	218	199
Coffee	247	277	299	284	471
Tea	21	18	19	23	20
Copra	11	11	7	17	17
Copra oil	13	33	67	81	94
Palm oil	245	390	421	439	391
Rubber	7	9	12	14	18
Logs	256	366	370	356	405

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

Table 6. Papua New Guinea: Employment by Sector, 2002–September 2006

	2002	2003	2004	2005	2006 Sept.
(March 2002=100, annual average)					
Total	102.2	108.5	109.2	111.0	117.9
Retail	97.9	96.9	93.1	93.7	94.9
Wholesale	103.3	113.3	123.8	130.7	146.2
Manufacturing	104.1	110.9	117.7	127.5	131.2
Building and construction	99.0	124.1	107.9	98.4	121.7
Transportation	106.3	106.1	106.8	106.1	110.1
Agriculture, forestry, and fisheries	103.9	114.1	112.9	112.9	119.5
Financial and business services	99.1	100.8	104.7	105.7	115.1
Mining 1/	98.8	97.6	95.6	101.5	113.2
(Change from corresponding period of previous year in percent)					
Total	1.6	6.2	0.6	1.6	4.6
Retail	-2.7	-1.0	-3.9	0.6	4.1
Wholesale	0.6	9.7	9.3	5.6	8.1
Manufacturing	4.6	6.5	6.1	8.3	0.6
Building and construction	6.6	25.4	-13.1	-8.8	13.3
Transportation	6.9	-0.2	0.7	-0.7	4.8
Agriculture, forestry, and fisheries	1.7	9.8	-1.1	0.0	3.5
Financial and business services	-1.4	1.7	3.9	1.0	8.5
Mining 1/	2.0	-1.2	-2.0	6.2	9.9

Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*.

1/ Not included in overall index; excludes subcontractors.



Table 7. Papua New Guinea: Consumer Price Index by Expenditure Group, 2001–September 2006

	All Groups Total	Food	Drinks, Tobacco, and Betelnut	Clothing and Footwear	Rents, Fuel, and Power	Household Equipment and Operations	Transportation and Communication	Miscellaneous	Bank of Papua New Guinea's Underlying Inflation 1/
(Percentage change from corresponding quarter of previous year)									
2001									
March	8.9	5.9	15.5	11.2	2.5	3.7	10.2	4.4	4.4
June	7.8	7.9	11.7	12.5	6.8	-0.7	4.7	6.7	4.6
September	10.0	11.8	13.3	12.0	7.7	2.0	4.6	9.1	6.6
December	10.4	12.5	13.5	11.1	7.7	2.6	4.6	9.5	8.0
2002									
March	10.5	15.9	10.7	10.9	7.1	0.2	5.8	-2.0	9.4
June	9.4	17.3	4.5	9.6	1.4	4.7	5.5	-2.0	11.1
September	12.3	17.1	8.2	8.6	1.4	9.6	13.7	0.3	13.7
December	14.8	17.8	13.9	6.5	2.7	12.7	17.8	1.2	15.5
2003									
March	20.7	23.7	22.2	5.1	7.1	19.3	33.4	17.6	18.4
June	19.0	14.9	20.0	4.6	7.9	16.3	32.9	16.2	15.7
September	11.8	8.9	10.2	4.9	7.9	12.6	21.6	13.0	10.4
December	8.4	6.9	5.9	4.1	1.4	9.0	15.9	12.0	6.7
2004									
March	2.5	-1.4	1.1	3.9	1.3	0.2	-0.1	16.5	1.6
June	1.9	2.8	0.7	4.1	3.3	0.9	-1.9	16.4	2.3
September	1.6	1.7	-0.1	1.5	8.2	-0.8	0.0	16.5	2.0
December	2.4	-0.6	6.7	0.7	15.7	-1.7	-0.3	15.4	2.0
2005									
March	0.1	1.4	2.5	-1.4	8.8	-3.5	-8.3	4.4	3.3
June	0.8	1.4	2.4	-2.1	16.6	0.9	-3.9	2.3	2.6
September	1.4	3.4	5.4	-2.6	6.7	-2.3	-6.2	2.0	3.2
December	4.6	7.6	11.2	-2.0	5.2	-3.7	-6.2	2.2	3.3
2006									
March	1.8	3.5	-1.5	1.4	12.3	-3.6	3.3	-1.2	1.5
June	2.3	4.7	1.0	1.8	4.7	-6.8	0.9	0.8	1.4
September	5.3	9.2	4.6	-0.4	14.2	-3.1	1.1	-1.0	1.2
Memorandum item:									
Weights in total basket (percent) 2/	100.0	40.9	20.0	6.2	7.2	5.3	13.0	7.5	63.6

Sources: Consumer Price Index, National Statistical Office; and Bank of Papua New Guinea's Quarterly Economic Bulletin.

1/ Excluding food and goods and services subject to administered prices.

2/ Weights are based on the 1977 expenditure survey.

Table 8a. Papua New Guinea: Central Government Budget, 2002–06

(In millions of kina)

	2002	2003	2004	2005	2006 Rev. budget 1/
Revenue	3,237	3,657	4,317	5,243	6,091
Tax	2,370	2,678	3,220	3,744	4,725
Mineral taxes	365	498	736	1,150	1,963
Non-mineral taxes	2,005	2,180	2,484	2,594	2,762
Nontax	170	232	248	279	372
<i>Of which: mineral nontax revenue</i>	10	74	60	138	209
Grants	697	747	850	1,220	994
Budget grants	21	0	0	0	0
Project grants	676	747	850	1,220	994
Expenditure	3,713	3,811	4,104	4,688	5,991
Recurrent	2,547	2,677	2,831	3,053	3,350
Noninterest recurrent expenditures	2,110	1,987	2,461	2,718	2,918
National departments	1,357	1,189	1,576	1,833	1,950
Salaries and wages	574	618	681	691	860
Arrears payments	12	14	37	93	77
Education funding	135	19	40	41	43
Goods and services	568	528	752	904	901
Structural adjustment payments	68	10	67	105	69
Provinces	588	594	678	678	757
Salaries and wages	485	504	589	543	621
Goods and services	49	61	65	55	58
Conditional grants	54	29	24	80	78
Statutory authorities	165	203	207	207	211
Interest	437	690	370	335	432
Domestic	248	528	239	216	320
Foreign	189	161	131	119	112
Development budget and net lending	1,166	1,134	1,273	1,636	2,641
Development budget	1,171	1,144	1,283	1,639	2,545
Project grants	676	747	850	1,220	994
Concessional loans	120	134	74	137	163
Nonconcessional loans	138	56	25	2	0
Domestic Funds	237	207	334	280	1,388
Net lending	-5	-10	-10	-3	96
Overall balance (from above the line)	-476	-154	213	555	100
Errors, omissions, and discrepancy	-137	-77	-219	80	0
Overall balance (from below the line)	-612	-231	-5	635	100
Financing	612	231	5	-635	-100
Foreign financing (net)	-101	-266	-222	-213	-223
Domestic financing (net)	665	458	72	-415	124
Float	-153	-1	130	-7	0
Asset sales	201	40	25	0	0
Memorandum item:					
Nominal GDP (in millions of kina)	11,656	12,567	12,652	15,339	17,269

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

1/ Supplementary budget passed in August 2006, plus November appropriation bill.

Table 8b. Papua New Guinea: Central Government Budget, 2002–06

(In percent of GDP)

	2002	2003	2004	2005	2006
					Rev. budget 1/
Revenue	27.8	29.1	34.1	34.2	35.3
Tax	20.3	21.3	25.4	24.4	27.4
Non-mineral taxes	3.1	4.0	5.8	7.5	11.4
Mineral taxes	17.2	17.3	19.6	16.9	16.0
Nontax	1.5	1.8	2.0	1.8	2.2
Of which: Mineral nontax revenue	0.1	0.6	0.5	0.9	1.2
Grants	6.0	5.9	6.7	8.0	5.8
Budget grants	0.2	0.0	0.0	0.0	0.0
Project grants	5.8	5.9	6.7	8.0	5.8
Expenditure	31.9	30.3	32.4	30.6	34.7
Recurrent	21.8	21.3	22.4	19.9	19.4
Noninterest recurrent expenditures	18.1	15.8	19.5	17.7	16.9
National departments	11.6	9.5	12.5	12.0	11.3
Salaries and wages	4.9	4.9	5.4	4.5	5.0
Arrears payments	0.1	0.1	0.3	0.6	0.4
Education funding	1.2	0.2	0.3	0.3	0.2
Goods and services	4.9	4.2	5.9	5.9	5.2
Structural adjustment payments	0.6	0.1	0.5	0.7	0.4
Provinces	5.0	4.7	5.4	4.4	4.4
Salaries and wages	4.2	4.0	4.7	3.5	3.6
Goods and services	0.4	0.5	0.5	0.4	0.3
Conditional grants	0.5	0.2	0.2	0.5	0.5
Statutory authorities	1.4	1.6	1.6	1.3	1.2
Interest	3.7	5.5	2.9	2.2	2.5
Domestic	2.1	4.2	1.9	1.4	1.9
Foreign	1.6	1.3	1.0	0.8	0.7
Development budget and net lending	10.0	9.0	10.1	10.7	15.3
Development budget	10.0	9.1	10.1	10.7	14.7
Project grants	5.8	5.9	6.7	8.0	5.8
Project concessional loans	1.0	1.1	0.6	0.9	0.9
Nonconcessional loans	1.2	0.4	0.2	0.0	0.0
Domestic funds	2.0	1.6	2.6	1.8	8.0
Net Lending	0.0	-0.1	-0.1	0.0	0.6
Overall balance (from above the line)	-4.1	-1.2	1.7	3.6	0.6
Errors, omissions, and discrepancy	-1.2	-0.6	-1.7	0.5	0.0
Overall balance (from below the line)	-5.3	-1.8	0.0	4.1	0.6
Financing	5.3	1.8	0.0	-4.1	-0.6
Foreign financing (net)	-0.9	-2.1	-1.8	-1.4	-1.3
Domestic financing	5.7	3.6	0.6	-2.7	0.7
Float	-1.3	0.0	1.0	0.0	0.0
Asset sales	1.7	0.3	0.2	0.0	0.0
Memorandum item:					
Nominal GDP (in millions of kina)	11,656	12,567	12,652	15,339	17,269

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

1/ Supplementary budget passed in August 2006, plus November appropriation bill.

Table 9. Papua New Guinea: Central Government Revenue and Grants, 2002–06

(In millions of kina)

	2002	2003	2004	2005	2006 Rev. budget 1/
Total revenue and grants	3,237	3,657	4,317	5,243	6,091
Tax revenue	2,370	2,678	3,220	3,744	4,725
Taxes on income and profit	1,491	1,786	2,223	2,771	3,644
Personal tax	694	758	827	841	879
Company tax	311	335	437	517	478
Dividend withholding tax	62	117	123	155	176
Mineral and petroleum taxes	259	396	634	1,077	1,901
Other direct	69	55	79	72	92
Interest withholding tax	22	41	33	18	18
Gaming tax	74	83	91	92	101
Indirect taxes	879	892	997	973	1,081
Excise tax	179	175	203	256	304
VAT plus mining levy	396	414	417	399	453
VAT (national share only)	290	312	316	326	390
Mining levy	106	102	101	73	63
Other indirect	1	1	1	2	3
Taxes on international trade	303	302	376	316	321
Import duties	80	74	151	101	90
Export duties (logs)	107	112	102	136	150
Import excises	117	110	123	79	81
Import levy	0	7	0	0	0
Nontax revenue	170	232	248	279	372
Property income	74	160	165	188	290
Dividends	64	86	105	50	81
Mining and petroleum	10	74	60	138	209
Interest and fees	1	4	3	1	4
Other	72	68	80	91	78
Asset sales costs	22	0	0	0	0
Foreign grants	697	747	850	1,220	994
Budgetary support	21	0	0	0	0
Australia	21	0	0	0	0
Other	0	0	0	0	0
Project grants	676	747	850	1,220	994

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

1/ Supplementary budget passed in August 2006, plus November appropriation bill.

Table 10. Papua New Guinea: Central Government Fiscal Financing, 2002–06

(In millions of kina)

	2002	2003	2004	2005	2006 Rev. budget 1/
Total Financing	612	231	5	-635	-100
Foreign financing (net)	-101	-266	-222	-213	-223
New borrowing	258	190	181	139	163
Project loans	258	190	99	139	163
Concessional financing	0	0	82	0	0
Amortization	358	456	403	353	386
Domestic financing (net)	665	458	72	-415	124
Bank of Papua New Guinea					
Net credit to central government	663	-306	-270	-512	...
Securities	451	-310	-180	30	...
Treasury bills	471	-291	-180	0	...
Inscribed stock	-19	-19	0	30	...
Temporary advance	84	-4	-91	0	...
Deposits	127	7	1	-542	...
Commercial Banks					
Net credit to central government	66	193	310	332	...
Securities	-16	212	346	419	...
Treasury bills	49	232	-90	-40	...
Inscribed stock	-65	-20	436	459	...
Loans	-4	-1	-1	0	...
Deposits	87	-18	-34	-87	...
Nonbanks					
Net credit to central government	-64	571	31	-235	...
Securities	-98	575	39	-219	...
Treasury bills	-99	645	-249	-400	...
Inscribed stock	1	-70	288	181	...
Loans	34	-5	-7	-16	...
Float	-153	-1	130	-7	0
Asset sales	201	40	25	0	0

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

1/ Supplementary budget passed in August 2006, plus November appropriation bill.

Table 11. Papua New Guinea: Central Government Domestic Debt, 2002–September 2006

(In millions of kina; end of period)

	2002	2003	2004	2005	2006	
					Jun.	Sept.
Central government domestic debt by creditor						
Bank of Papua New Guinea						
Net credit to central government	550	243	-26	-538	-724	-1,253
Securities	566	256	76	106	154	162
Treasury bills 1/	471	180	0	0	0	0
Inscribed stock 2/	95	76	76	106	154	162
Temporary advance	97	94	3	2	13	8
Less: Deposits	114	106	105	646	891	1,422
Other Depository Corporations						
Net credit to central government	816	1,010	1,320	1,652	2,027	2,032
Securities	1,036	1,248	1,593	2,013	2,470	2,389
Treasury bills 1/	1,016	1,248	1,157	1,118	1,318	1,056
Inscribed stock 2/	20	0	436	895	1,152	1,334
Loans	3	2	1	1	1	0
Less: Deposits	223	240	275	361	444	358
Nonbanks						
Net credit to central government	909	1,479	1,511	1,275	930	807
Securities	851	1,426	1,465	1,246	900	777
Treasury bills 2/	683	1,328	1,079	679	268	119
Inscribed stock 2/	168	98	386	567	633	658
Loans	58	53	46	30	30	30
Total central government net domestic debt	2,275	2,732	2,804	2,390	2,232	1,586
Total gross domestic debt	2,611	3,079	3,184	3,397	3,568	3,366
Securities	2,453	2,930	3,134	3,364	3,524	3,329
Total treasury bills	2,169	2,755	2,236	1,797	1,586	1,175
Total inscribed stock 2/	284	175	898	1,568	1,938	2,154
Loans	158	149	49	33	43	38
Less: Central government deposits	336	346	380	1,008	1,335	1,781

Sources: Data provided by the Bank of Papua New Guinea; and Department of Treasury.

1/ Discount value.

2/ Face value.

Table 12. Papua New Guinea: Monetary Survey, 2002–September 2006

(In millions of kina; end of period)

	2002	2003	2004	2005	2006	
					Jun.	Sept.
Net foreign assets	1,421	1,621	2,165	2,929	3,297	4,120
Bank of Papua New Guinea	909	1,322	1,869	2,367	3,039	3,902
Foreign assets	1,377	1,743	2,072	2,368	3,043	3,904
Less: Foreign liabilities	468	421	203	1	4	2
Other Depository Corporations	513	299	296	562	258	218
Net domestic assets	2,148	1,789	1,750	2,141	2,454	2,096
Domestic credit	3,277	3,046	3,066	3,329	4,000	3,567
Net credit to central government 1/	1,366	1,253	1,293	1,114	1,302	779
Bank of Papua New Guinea 1/	550	243	-26	-538	-724	-1,253
Claims on central government 1/	663	350	79	108	167	169
Less: Central government deposits	114	106	105	646	891	1,422
Other Depository Corporations 1/	816	1,010	1,320	1,652	2,027	2,032
Claims on central government 1/	1,039	1,250	1,594	2,014	2,471	2,390
Securities	1,036	1,248	1,593	2,013	2,470	2,389
Loans	3	2	1	1	1	0
Less: Central government deposits	223	240	275	361	444	358
Claims on other sectors	1,911	1,793	1,773	2,215	2,697	2,789
Claims on the private sector	1,780	1,707	1,724	2,133	2,624	2,694
Claims on official entities	130	79	48	81	73	93
Claims on nonmonetary financial institutions	1	6	1	1	1	1
Other items, net 1/	-1,129	-1,256	-1,316	-1,188	-1,546	-1,471
Broad money	3,569	3,410	3,915	5,069	5,751	6,216
Narrow money	1,599	1,707	2,232	3,017	3,227	3,444
Currency outside banks	363	388	400	445	462	469
Demand deposits	1,236	1,319	1,832	2,572	2,766	2,974
Quasi money	1,971	1,704	1,683	2,052	2,524	2,773
Memoranda items:						
Narrow money growth rate 2/	21.9	6.7	30.8	35.2	38.4	15.5
Broad money growth rate 2/	7.3	-4.4	14.8	29.5	43.6	26.5
Private sector credit growth rate 2/	1.4	-4.1	0.9	23.7	27.5	21.8
Nominal GDP (in millions of kina)	11,656	12,567	12,652	15,339	...	...
Nominal non-mineral GDP/broad money	2.7	3.0	2.6	2.3	...	...

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

1/ From January 2002 BPNG stopped netting the outstanding stock of its own short-term securities from its gross holdings of government treasury bills, and now records its total holdings of treasury bills as assets and the outstanding stock of central bank securities as liabilities. This led to a shift in the composition of credit to the central government from the commercial banks to the BPNG in March 2002.

2/ Percent change from corresponding period of previous year.

Table 13. Papua New Guinea: Balance Sheet of the Central Bank, 2002–September 2006

(In millions of kina; end of period)

	2002	2003	2004	2005	2006	
					Jun.	Sept.
Net foreign assets	909	1,322	1,869	2,367	3,039	3,902
Foreign assets	1,377	1,743	2,072	2,368	3,043	3,904
Less: Foreign liabilities	468	421	203	1	4	2
<i>Of which: Non-IMF liabilities</i>	4	13	1	1	4	2
Net domestic assets 1/	-239	-653	-998	-1,432	-2,131	-2,934
Domestic credit 1/	676	308	7	-502	-687	-1,214
Net credit to government 1/	550	243	-26	-538	-724	-1,253
Securities 1/	566	256	76	106	154	162
Treasury bills 1/	471	180	0	0	0	0
Inscribed stock	95	76	76	106	154	162
Advances	97	94	3	2	13	8
Less: Central government deposits	114	106	105	646	891	1,422
Credit to other sectors	126	64	34	36	38	39
Claims on the private sector	50	7	9	11	12	11
Claims on deposit money banks	75	50	24	24	24	26
Claims on nonmonetary financial institutions	1	6	1	1	1	1
Other items net 1/	-915	-961	-1,006	-929	-1,444	-1,719
Reserve money	669	669	871	935	908	968
Currency in circulation	472	512	531	606	578	598
Deposits of other depository corporations	192	153	332	322	326	366
ESA deposits	37	66	231	184	167	198
CRR deposits	154	87	101	138	159	168
Other deposits	5	4	8	8	4	5
Memoranda items:						
Reserve money growth 2/	13.5	-0.1	30.2	7.4	31.7	4.1
Use of fund credit (millions of U.S. dollars)	116.3	121.5	64.3	0.0	0.0	0.0
Gross international reserves (millions of U.S. dollars)	339.5	522.9	663.1	764.9	991.9	1,296.1
Exchange rate (U.S. dollar/kina)	0.25	0.30	0.32	0.32	0.33	0.33
Exchange rate (U.S. dollar/SDR)	1.36	1.49	1.55	1.43	1.48	1.48

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

1/ From January 2002 BPNG stopped netting the outstanding stock of its own short-term securities from its gross holdings of government treasury bills, and now records its total holdings of treasury bills as assets and the outstanding stock of central bank securities as liabilities. This led to a shift in the composition of credit to the central government from the commercial banks to the BPNG in March 2002.

2/ Percent change from corresponding period of previous year.



Table 14. Papua New Guinea: Consolidated Balance Sheet of Other Depository Corporations, 2002–September 2006

(In millions of kina; end of period)

	2002	2003	2004	2005	2006	
					Jun.	Sept.
Net foreign assets	513	299	296	562	258	218
Foreign assets	617	356	364	658	345	298
Foreign liabilities	104	56	69	96	87	79
Reserves	192	153	332	322	326	366
CRR accounts	154	87	101	138	159	168
ESA accounts	37	66	231	184	167	198
Currency	110	124	131	160	116	128
Domestic credit	2,958	3,136	3,788	4,655	5,927	6,419
Net credit to central government	816	1,010	1,320	1,652	2,027	2,032
Claims on central government	1,039	1,250	1,594	2,014	2,471	2,390
Securities	1,036	1,248	1,593	2,013	2,470	2,389
Treasury bills	1,016	1,248	1,157	1,118	1,318	1,056
Inscribed stock	20	0	436	895	1,152	1,334
Inscribed stock of maturity < 3 years	20	0	278	572	591	1,172
Inscribed stock of maturity > 3 years	0	0	157	323	561	162
Loans	3	2	1	1	1	0
Less: Central government deposits	223	240	275	361	444	358
Claims on other sectors	2,142	2,126	2,469	3,003	3,900	4,388
Claims on BPNG	281	347	706	800	1,217	1,611
Claims on the private sector	1,730	1,700	1,715	2,122	2,611	2,683
Claims on official entities	130	79	48	81	73	93
Claims on NFPE's	128	73	44	79	70	91
Claims on provincial governments	2	6	4	2	2	2
Claims on nonmonetary financial institutions	0	0	0	0	0	0
Other items, net	-525	-645	-1,019	-1,062	-1,321	-1,368
Deposits	3,200	3,017	3,505	4,614	5,283	5,740
Demand	1,187	1,293	1,781	2,513	2,715	2,898
Term	2,012	1,724	1,724	2,101	2,567	2,842
Central bank credit	47	50	24	23	24	24
Memoranda items:						
Deposits subject to reserve requirements	3,377	3,244	3,720	4,917	5,700	6,073
Implied cash reserve ratio (percent)	5	3	3	3	3	3
Kina facility borrowings (-deposits)	-30	0	0	0	0	0
Liquid assets	1,183	1,438	1,798	2,034	2,192	2,554
Excess ESA balances	7	66	231	184	167	198
Total ODC assets	4,403	4,420	4,960	6,351	7,325	7,745
Claims on central government/total assets (percent)	24	28	32	32	34	31

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

Table 15. Papua New Guinea: Commercial Bank Loans by Sector, 2002–September 2006

	2002	2003	2004	2005	2006 Sept.	2002	2003	2004	2005	2006 Sept.
	(In millions of kina; end of period)					(In percent of total credit; end-period)				
Total	1,593	1,495	1,421	1,797	2,309	100.0	100.0	100.0	100.0	100.0
Business	1,413	1,331	1,223	1,548	2,014	88.7	89.0	86.1	86.2	87.2
Agriculture, forestry, and fishing	90	51	64	74	103	5.6	3.4	4.5	4.1	4.4
Coffee	2	3	1	2	5	0.1	0.2	0.1	0.1	0.2
Cocoa	56	1	24	10	7	3.5	0.1	1.7	0.5	0.3
Coconut products	0	0	1	0	0	0.0	0.0	0.0	0.0	0.0
Palm oil	0	0	0	2	0	0.0	0.0	0.0	0.1	0.0
Fisheries	6	7	19	22	23	0.4	0.4	1.4	1.2	1.0
Forestry	15	21	8	18	22	0.9	1.4	0.5	1.0	1.0
Other 1/	10	20	12	21	46	0.7	1.3	0.8	1.1	2.0
Manufacturing	136	99	95	114	100	8.6	6.6	6.7	6.4	4.3
Engineering and metal processing	4	6	3	25	29	0.3	0.4	0.2	1.4	1.3
Food, drink, and tobacco processing	74	71	45	45	44	4.7	4.8	3.2	2.5	1.9
Textile, leather, and wood products	8	9	10	5	8	0.5	0.6	0.7	0.3	0.3
Chemicals, paints, and gases	5	1	0	4	4	0.3	0.1	0.0	0.2	0.2
Other 2/	44	12	36	36	16	2.8	0.8	2.5	2.0	0.7
Transport and communication	114	124	72	123	169	7.2	8.3	5.1	6.8	7.3
Finance	20	13	25	28	23	1.2	0.9	1.7	1.6	1.0
Commerce	325	373	384	438	450	20.4	25.0	27.0	24.4	19.5
Retail trade	236	265	214	280	248	14.8	17.7	15.1	15.6	10.8
Buyers, processors, and exporters	29	75	94	113	149	1.8	5.0	6.6	6.3	6.4
Wholesale trade	60	33	76	45	52	3.8	2.2	5.3	2.5	2.3
Building and construction	42	66	66	106	145	2.7	4.4	4.7	5.9	6.3
Mining and quarrying	69	20	6	14	143	4.3	1.3	0.4	0.8	6.2
Metals and other mining	47	6	6	14	140	2.9	0.4	0.4	0.8	6.0
Petroleum and natural gas	22	14	0	0	4	1.4	0.9	0.0	0.0	0.2
Other business 3/	617	587	511	652	881	38.7	39.2	36.0	36.3	38.2
Government	5	8	5	3	3	0.3	0.6	0.3	0.2	0.1
Central government 4/	3	2	1	1	0	0.2	0.1	0.1	0.1	0.0
Provincial government	2	3	2	1	2	0.1	0.2	0.1	0.1	0.1
Local government	0	3	2	1	1	0.0	0.2	0.1	0.1	0.0
Persons	175	156	193	246	293	11.0	10.4	13.6	13.7	12.7
Advances for housing	126	103	121	145	164	7.9	6.9	8.5	8.1	7.1
Other personal loans	49	52	73	101	129	3.1	3.5	5.1	5.6	5.6

Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*.

1/ Includes rubber, tea, and cattle.

2/ Includes printing and packaging.

3/ Includes hotels and restaurants, real estate, renting and business services, electricity, and gas and water supply.

4/ Excludes short-term government debt instruments and other deposits.

Table 16. Papua New Guinea: Reserve Requirements, March 1997–September 2006

(In percent)

Period	Cash reserve requirement	Minimum liquid assets ratio	Total requirement
March 1997–July 1998	0	20	20
August 1998–November 1998	0	20	20
December 1998–January 12, 1999	0	0	0
January 15, 1999–February 1999	10	0	10
March 1999–May 1999	5	15	15
June 1999–August 1999 1/	5	20	25
September 1999–December 2002	5	25	30
October 2003–September 2006	3	25	28

Source: Bank of Papua New Guinea.

1/ From June 1999, CRR deposits at the central bank were excluded from the definition of liquid assets.

Table 17. Papua New Guinea: Interest Rates, 2002–September 2006

	Kina Facility Rate	Kina Deposit Rate 1/	Treasury Bills				Weighted Average Deposit Rate			Indicative Overdraft Rate	Passbook Accounts	Term Deposits (less than K50,000)		
			Weighted Average Auction Yield		Weighted Average Deposit Rate	Weighted Average Lending Rate	3-6 Months	6-12 Months	12-24 Months					
			28-day	63-day								91-day	182-day	
2002 (December)	14.00	13.25	15.48	15.10	14.00	13.50	5.6	13.7	8.75	1.50-3.25	4.00-6.00	4.00-7.75	4.75-6.00	
2003 (December)	14.00	--	16.13	16.36	16.30	16.91	3.0	13.5	10.50	1.00-3.25	4.00-8.25	4.25-8.75	4.00-9.00	
2004														
January	13.00	--	15.76	15.73	16.00	16.74	2.7	13.9	10.50	0.50-3.25	4.00-7.50	4.25-8.75	4.75-9.00	
February	13.00	--	15.52	15.77	16.48	16.48	2.4	13.5	10.50	0.50-3.25	4.25-7.50	4.25-8.75	4.75-9.00	
March	12.00	--	12.38	13.59	13.90	14.16	2.2	13.6	10.50	0.50-3.25	4.00-7.50	4.25-8.00	4.75-9.00	
April	11.00	--	9.91	10.38	10.18	10.40	1.8	13.5	10.75	0.50-3.25	4.00-5.00	4.25-8.75	4.75-9.00	
May	10.00	--	7.67	7.86	8.34	8.85	1.8	13.2	10.75	0.50-2.20	2.75-7.00	2.75-8.75	4.00-9.00	
June	10.00	--	6.90	6.76	7.02	8.26	1.5	13.3	10.75	0.50-2.20	2.75-7.00	2.75-8.75	4.00-9.00	
July	10.00	--	6.55	6.35	6.37	7.73	1.5	13.7	10.75	0.50-2.20	2.75-6.25	2.75-8.75	4.00-9.00	
August	10.00	--	5.48	5.00	5.00	5.00	1.6	13.4	10.75	0.50-2.20	2.75-7.00	2.80-8.00	4.00-9.00	
September	9.00	--	4.44	4.06	4.74	5.43	1.5	13.3	10.75	0.50-2.20	2.00-7.00	2.75-8.00	4.00-9.00	
October	7.00	--	4.64	4.47	4.85	5.49	1.4	13.1	10.75	1.75-2.00	2.00-8.00	2.25-4.85	4.00-9.00	
November	7.00	--	3.16	2.95	2.98	3.13	1.3	12.4	10.75	1.75-2.00	1.50-8.00	1.50-4.85	2.50-9.00	
December	7.00	--	3.14	3.44	3.70	4.57	1.1	12.1	8.00	1.75-2.00	0.65-8.00	0.65-4.85	1.00-9.00	
2005														
January	7.00	--	3.20	3.14	4.11	4.56	0.9	12.0	8.00	1.75-2.00	0.65-4.85	0.65-4.85	1.00-8.00	
February	7.00	--	3.14	3.32	4.13	4.73	0.9	12.2	8.00	1.50-2.25	0.65-4.85	0.65-4.85	1.00-9.00	
March	7.00	--	3.54	--	4.09	4.37	0.9	11.9	8.00	1.50-2.25	0.65-4.85	0.65-4.85	1.00-9.00	
April	7.00	--	4.11	--	4.24	4.66	0.9	11.6	8.00	1.25-2.00	0.65-4.00	0.65-4.85	0.65-9.00	
May	7.00	--	3.75	--	4.28	4.50	0.9	11.6	8.00	1.25-2.00	0.65-4.00	0.65-4.00	0.65-9.00	
June	7.00	--	4.06	--	3.95	4.47	1.0	11.8	8.00	1.00-2.00	0.65-4.00	0.65-4.00	0.65-9.00	
July	7.00	--	3.97	--	4.24	4.53	0.9	11.4	8.00	1.00-2.00	0.65-4.00	0.65-4.00	1.00-1.25	
August	7.00	--	2.84	--	2.77	3.05	0.9	11.4	8.00	1.00-2.00	0.65-4.00	0.65-5.25	1.00-2.50	
September	6.00	--	--	--	1.37	1.14	0.8	11.1	8.00	1.00-2.00	0.35-4.00	0.50-2.82	0.75-2.50	
October	6.00	--	--	--	0.95	2.00	0.7	10.9	8.00	1.00-2.00	0.25-4.00	0.35-2.50	0.50-2.85	
November	6.00	--	--	--	1.48	2.78	0.7	11.0	7.20	1.00-2.00	0.35-5.25	0.50-2.50	0.50-1.25	
December	6.00	--	--	--	3.84	4.91	0.8	10.7	7.20	1.50-2.00	0.35-2.85	0.50-1.55	0.75-1.25	
2006														
January	6.00	--	--	--	2.64	4.29	0.8	10.5	7.20	1.50-2.00	0.25-2.85	0.35-1.25	0.50-1.25	
February	6.00	--	--	--	2.00	3.85	0.8	11.0	7.20	1.50-2.00	0.25-2.85	0.35-1.25	0.50-1.25	
March	6.00	--	--	--	1.99	3.13	0.8	11.3	7.20	1.50-2.00	0.25-1.25	0.35-1.35	0.50-1.25	
April	6.00	--	--	--	2.97	2.86	0.8	11.0	7.20	1.50-2.00	0.25-1.25	0.35-1.25	0.75-1.25	
May	6.00	--	--	--	--	--	0.9	10.4	7.20	1.50-2.00	0.35-1.25	0.25-2.00	0.75-1.25	
June	6.00	--	--	--	--	--	1.0	10.5	7.20	1.50-2.00	0.20-0.65	0.25-2.00	0.75-1.25	
July	6.00	--	--	--	--	--	1.0	10.5	7.20	1.50-2.00	0.20-0.75	0.25-2.00	0.75-1.25	
August	6.00	--	--	--	--	--	1.1	10.5	6.70	1.50-2.00	0.35-0.75	0.25-2.00	0.75-1.25	
September	6.00	--	--	--	--	--	1.1	10.4	6.70	1.50-2.00	0.25-0.65	0.35-2.00	0.75-1.25	

Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*.

1/ Prior to February 2001, the kina deposit rate was determined by a weekly auction for deposits conducted by the central bank. Since then the Bank of Papua New Guinea has announced a Kina Facility rate, and the deposit rate was set 125 basis points below this rate until July 2000, when the margin was reduced to 75 basis points. The facility was abolished in April 2003.

Table 18. Papua New Guinea: Balance of Payments, 2002–05

(In millions of U. S. dollars)

	2002	2003	2004	2005
Current account balance	-31	159	88	190
Mineral	473	728	793	1,039
Nonmineral	-503	-569	-705	-849
Trade balance	344	718	760	816
Exports (f.o.b.)	1,646	2,153	2,554	3,278
Mineral	1,228	1,635	1,863	2,467
Non-mineral	417	518	690	811
Imports (c.i.f.)	-1,302	-1,435	-1,794	-2,462
Mineral	-397	-325	-482	-693
Non-mineral	-905	-1,109	-1,312	-1,769
Services	-345	-388	-485	-674
Income	-226	-407	-368	-386
Current Transfers	197	235	182	434
Official	175	199	142	393
Private	22	36	40	41
Capital and financial account balance	-104	-23	35	0
Direct investment	19	97	26	68
Other investment	-123	-120	10	-68
Medium- and long-term loan disbursements	-154	-151	-213	-175
Official (net)	-26	-100	-101	-69
Private capital flows (net)	-128	-51	-113	-107
Commercial banks	-33	-60	-1	-87
Other	63	90	224	194
Net errors and omissions	34	52	82	-29
Overall balance	-101	187	206	161
Financing	101	-187	-206	-161
Reserve assets	101	-184	-140	-102
Use of IMF credit	0	-6	-62	-59
Purchases	0	0	0	0
Repurchases	0	-6	-62	-59
Other foreign liabilities	0	3	-4	0
Memorandum items:				
Current account (in percent of GDP)	-1.0	4.5	2.2	3.8
Mineral	15.8	20.6	20.2	21.0
Nonmineral	-16.8	-16.1	-17.9	-17.2
Gross official reserves (end-year)				
In millions of U.S. dollars	339	523	663	765
In months of non-mineral imports	4.5	5.7	6.1	5.2
In months of imports of goods and nonfactor services	2.0	2.7	2.8	2.4
Public external debt-service-exports ratio (in percent)	7.9	7.5	8.7	6.0
Public external debt-GDP ratio (in percent) 1/	54.2	42.9	36.8	25.3

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 19. Papua New Guinea: Exports of Major Commodities, 2002–05

	2002	2003	2004	2005
<b>Copper</b>				
Value (in millions of U. S. dollars)	262.1	393.0	478.7	805.5
Volume (thousands of tons)	170.1	230.6	173.9	226.1
Unit value (U.S. dollars per ton)	1,541.0	1,704.2	2,753.0	3,562.7
(US cents per pound)	69.9	77.3	124.9	161.6
<b>Gold</b>				
Value (in millions of U. S. dollars)	590.4	780.0	861.8	913.7
Volume (tons)	59.1	68.4	67.3	70.5
Unit value (U.S. dollars per ounce)	310.7	354.7	398.3	403.1
<b>Petroleum</b>				
Value (in millions of U. S. dollars)	368.9	452.5	512.6	735.5
Volume (thousands of barrels)	15,370.5	14,983.4	12,564.7	13,299.8
Unit value (U.S. dollars per barrel)	24.0	30.2	40.8	55.3
<b>Silver</b>				
Value (in millions of U. S. dollars)	7.7	9.3	10.1	12.4
Volume (tons)	46.1	64.2	46.7	52.1
Unit value (U.S. dollars per ounce)	5.2	4.5	6.7	7.4
<b>Logs</b>				
Value (in millions of U. S. dollars)	94.1	102.6	110.3	130.5
Volume (thousands of cubic meters)	1,834.0	2,016.0	2,012.0	2,270.0
Unit value (U.S. dollars per cubic meter)	51.3	50.9	54.8	57.5
<b>Coffee</b>				
Value (in millions of U. S. dollars)	71.2	82.8	88.0	151.8
Volume (thousands of tons)	63.1	68.8	63.0	72.1
Unit value (U.S. dollars per ton)	1,128.4	1,203.5	1,396.9	2,106.1
(U.S. cents per pound)	51.2	54.6	63.4	95.5
<b>Cocoa</b>				
Value (in millions of U. S. dollars)	58.2	71.5	67.6	64.1
Volume (thousands of tons)	34.9	40.3	41.5	44.2
Unit value (U.S. dollars per ton)	1,667.6	1,774.2	1,629.0	1,449.3
<b>Palm oil</b>				
Value (in millions of U. S. dollars)	100.3	116.9	136.0	126.1
Volume (thousands of tons)	323.9	326.9	339.0	345.6
Unit value (U.S. dollars per ton)	309.7	357.6	401.3	364.9
<b>Copra</b>				
Value (in millions of U. S. dollars)	2.8	1.8	5.3	5.6
Volume (thousands of tons)	15.8	8.4	19.2	22.3
Unit value (U.S. dollars per ton)	177.2	214.3	277.8	250.1
<b>Copra Oil</b>				
Value (in millions of U. S. dollars)	8.6	18.7	25.1	30.2
Volume (thousands of tons)	28.2	47.7	45.1	54.4
Unit value (U.S. dollars per ton)	305.0	392.0	556.9	555.3
<b>Tea</b>				
Value (in millions of U. S. dollars)	4.7	5.4	7.1	6.5
Volume (thousands of tons)	5.2	6.6	8.1	6.9
Unit value (U.S. dollars per ton)	903.8	818.2	876.7	943.8
(U.S. cents per pound)	90.4	81.8	87.7	94.4
<b>Rubber</b>				
Value (in millions of U. S. dollars)	2.3	3.4	4.3	5.8
Volume (thousands of tons)	3.8	4.2	3.8	4.8
Unit value (U.S. dollars per ton)	605.3	809.5	1,126.2	1,209.0
(U.S. cents per pound)	27.5	36.7	51.1	58.8
<b>Other</b>				
Value (in millions of U. S. dollars)	97.9	115.0	246.6	290.2
<b>Total exports (in millions of U.S. dollars)</b>	<b>1,645.7</b>	<b>2,153.0</b>	<b>2,553.7</b>	<b>3,277.9</b>
Minerals and petroleum	1,228.3	1,634.8	1,863.3	2,467.1
Non-mineral	417.4	518.2	690.4	810.8

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

Table 20. Papua New Guinea: Direction of Trade, 2002–05 1/

(In percent of total)

	2002	2003	2004	2005
Exports (f.o.b.) by destination				
Australia	42.8	45.7	45.6	43.2
Japan	15.9	12.8	10.8	11.3
Korea	5.1	5.4	6.1	7.4
Germany	3.5	6.6	7.1	7.3
Philippines	1.8	3.5	4.0	5.3
People's Republic of China 2/	4.4	6.7	4.9	3.7
United Kingdom	2.8	2.5	3.5	1.9
USA	4.6	2.7	2.2	1.4
Singapore	3.7	2.1	2.2	1.1
Netherlands	1.8	1.1	1.5	0.9
Italy	1.9	1.6	1.1	0.7
Malaysia	0.0	0.4	0.9	0.7
Indonesia	1.3	1.7	1.2	0.4
Other	10.4	7.2	9.0	14.8
Imports (c.i.f.) by origin				
Australia	59.1	54.8	55.3	44.8
USA	8.7	9.6	8.1	13.8
Singapore	5.7	6.6	6.0	6.4
New Zealand	4.0	5.2	3.3	5.0
Japan	5.1	4.8	4.4	3.9
People's Republic of China 2/	1.8	4.6	3.2	2.0
Malaysia	2.1	2.3	1.7	1.7
Indonesia	2.1	2.0	1.5	1.5
Solomon Islands	0.0	0.1	0.0	1.3
Hong Kong, SAR	0.8	0.9	0.8	1.2
Vietnam	0.0	0.0	1.0	0.8
Germany	0.9	0.3	0.1	0.7
Belgium	0.0	0.2	2.1	0.6
Other	9.7	8.6	12.5	16.4

Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*.

1/ Ranked based on the 2005 data.

2/ Excluding Hong Kong SAR.

Table 21. Papua New Guinea: Services, Income, and Current Transfers, 2001–05  
(In millions of U.S. dollars)

	2001	2002	2003	2004	2005
Services (net)	-247.8	-345.4	-388.1	-484.9	-674.1
Freight, insurance	28.1	7.3	22.4	29.8	33.5
Travel payments	-29.9	-32.1	-51.3	-51.7	-75.9
Mineral	-1.3	-1.4	-1.6	-2.8	-4.7
Non-mineral	-28.6	-30.7	-49.7	-48.9	-71.2
Other	-182.1	-271.8	-279.0	-398.1	-480.3
Receipts	257.8	154.7	208.0	175.3	199.7
Mineral	84.9	32.5	41.4	45.6	70.0
Non-mineral	172.9	122.2	166.6	129.7	129.7
Payments	-439.9	-426.5	-487.0	-573.4	-680.0
Mineral	-285.9	-228.5	-276.3	-344.0	-420.0
Non-mineral	-154.0	-198.0	-210.7	-229.4	-260.0
Other misc. services payments	-63.9	-48.8	-80.2	-64.9	-151.4
Income (net)	-249.5	-225.9	-406.7	-368.2	-386.1
Interest	-80.1	-79.2	-52.9	-41.9	-39.5
Receipts	18.5	19.9	9.6	16.0	17.4
Mineral	11.6	9.6	1.7	10.2	8.6
Non-mineral	1.1	5.3	0.7	0.8	0.8
Official	5.8	5.0	7.2	5.0	8.0
Payments	-98.6	-99.1	-62.5	-57.9	-56.9
Mineral	-30.5	-33.5	-12.8	-10.2	-10.1
Non-mineral	-8.7	-15.0	-0.9	-4.0	-7.5
Official	-59.4	-50.6	-48.8	-43.7	-39.3
Concessional	-52.3	-45.7	-44.5	-40.0	-37.6
Nonconcessional	-3.8	-1.3	-1.4	-0.8	-0.7
IMF charges	-3.3	-3.6	-2.9	-2.9	-1.0
Dividends	-151.6	-131.3	-353.8	-326.3	-346.6
Receipts	1.5	7.3	6.2	2.1	2.1
Mineral	0.0	4.2	5.2	0.5	0.0
Non-mineral	1.5	3.1	1.0	1.6	2.1
Payments	-153.1	-138.6	-360.0	-328.4	-348.7
Mineral	-116.1	-92.6	-259.1	-222.7	-227.8
Non-mineral	-37.0	-46.0	-100.9	-105.7	-120.9
Other income payments	-17.8	-15.4	0.0	0.0	0.0
Current Transfers (net)	142.2	196.6	235.1	181.7	434.1
Official	183.9	174.6	199.1	141.8	393.1
Receipts	183.9	174.6	199.1	141.8	393.1
Australia budgetary support	20.9	0.0	5.8	0.0	0.0
Project & Commodity aid	155.3	169.2	193.3	141.8	393.1
Other grants	7.7	5.4	0.0	0.0	0.0
Payments	0.0	0.0	0.0	0.0	0.0
Private	-41.7	22.0	36.0	39.9	41.0
Receipts	25.6	80.8	116.4	117.1	122.0
Payments	-67.3	-58.8	-80.4	-77.2	-81.0

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



Table 22. Papua New Guinea: External Debt Outstanding, 2001–05

	2001	2002	2003	2004	2005
(In millions of U.S. dollars)					
Total external debt	2,289	2,304	2,311	2,158	2,002
Public external debt 1/	1,530	1,570	1,617	1,492	1,254
Central government	1,390	1,430	1,473	1,411	1,245
Multilateral creditors, o/w:	844	841	865	861	818
World Bank Group	380	363	348	334	326
Asian Development Bank	409	419	443	452	428
Bilateral creditors, o/w:	516	541	553	496	385
Australia	99	99	87	40	7
Japan	371	391	412	406	335
Commercial creditors	29	48	55	54	43
Central bank	109	115	124	64	0
Of which : IMF liabilities	108	115	120	64	0
Commercial statutory authorities	31	25	20	17	8
Private external debt	758	733	694	667	748
Of which : mineral sector	470	454	415	372	498
(In percent of GDP)					
Memoranda items:					
Total external debt	83	79	61	53	40
Total public external debt 1/	55	54	43	37	25
Central government external debt	50	49	39	35	25
Multilateral creditors	31	29	23	21	17
Bilateral creditors	19	19	15	12	8
Commercial creditors	1	2	1	1	1
Central bank	4	4	3	2	0
Commercial statutory authorities	1	1	1	0	0
Private external debt	27	25	18	16	15

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

1/ Including central government, central bank, and commercial statutory authorities.

Table 23. Papua New Guinea: Public External Debt Service, 2001–05  
(In millions of U.S. dollars)

	2001	2002	2003	2004	2005
Total public sector	146.8	142.5	182.7	241.1	212.1
Principal	94.7	92.2	133.9	197.4	172.8
Interest	52.2	50.3	48.8	43.7	39.3
Central government	142.3	139.2	174.3	176.0	151.9
Principal	93.4	92.2	128.4	135.2	113.6
Interest	48.9	47.0	45.9	40.8	38.3
Multilateral creditors	79.6	73.8	74.2	73.1	71.1
Principal	50.2	48.6	50.7	51.9	48.8
Interest	29.4	25.2	23.5	21.2	22.3
World Bank Group	41.9	37.3	35.4	34.2	36.5
Principal	29.0	26.8	25.8	26.1	26.4
Interest	12.9	10.5	9.6	8.1	10.1
Asian Development Bank	31.0	31.1	31.8	34.0	31.5
Principal	17.7	18.2	19.2	22.3	20.7
Interest	13.3	12.9	12.6	11.7	10.8
Other	6.7	5.4	7.0	4.9	3.1
Principal	3.5	3.6	5.7	3.5	1.7
Interest	3.2	1.8	1.3	1.4	1.4
Bilateral creditors	49.0	55.4	86.0	94.0	74.7
Principal	31.4	34.9	65.0	75.2	59.4
Interest	17.6	20.5	21.0	18.8	15.3
Australia	5.6	19.9	48.2	52.6	35.0
Principal	0.1	12.4	40.3	47.1	32.1
Interest	5.5	7.5	7.9	5.5	2.9
China	0.7	0.6	0.6	0.6	0.6
Principal	0.4	0.4	0.4	0.4	0.4
Interest	0.3	0.2	0.2	0.2	0.2
Japan	39.2	29.9	31.5	31.3	32.8
Principal	28.4	18.7	20.1	19.6	21.7
Interest	10.8	11.2	11.4	11.7	11.1
Other	3.5	5.0	5.7	9.5	6.3
Principal	2.5	3.4	4.2	8.1	5.2
Interest	1.0	1.6	1.5	1.4	1.1
Commercial creditors	13.7	10.0	14.1	8.9	6.1
Principal	11.8	8.7	12.7	8.1	5.4
Interest	1.9	1.3	1.4	0.8	0.7
Banks	11.6	7.5	6.8	4.8	0.0
Principal	9.9	7.1	6.4	4.8	0.0
Interest	1.7	0.4	0.4	0.0	0.0
Other	2.1	2.5	7.3	4.1	6.1
Principal	1.9	1.6	6.3	3.3	5.4
Interest	0.2	0.9	1.0	0.8	0.7
Central bank	4.5	3.3	8.4	65.1	60.2
Principal	1.3	0.0	5.5	62.2	59.2
Interest	3.3	3.3	2.9	2.9	1.0
Memorandum item:					
Public debt-service ratio	7.9	7.9	7.5	8.7	6.0

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