SM/88/219

CONTAINS CONFIDENTIAL
INFORMATION

September 20, 1988

To: Members of the Executive Board

From: The Acting Secretary

Subject: Papua New Guinea - Staff Report for the 1988 Article IV Consultation

Attached for consideration by the Executive Directors is the staff report for the 1988 Article IV consultation with Papua New Guinea, which is tentatively scheduled for discussion on Friday, October 14, 1988.

Mr. Evers (ext. 7611) or Mr. Baban (ext. 7412) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

Att: (1)

Other Distribution:
Department Heads

CONTAINS CONFIDENTIAL INFORMATION

INTERNATIONAL MONETARY FUND

PAPUA NEW GUINEA

Staff Report for the 1988 Article IV Consultation

Prepared by the Asian Department

(In consultation with the Exchange and Trade Relations, Fiscal Affairs, Legal, and Treasurer's Departments)

Approved by Hubert Neiss and Eduard Brau

September 19, 1988

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Papua New Guinea

Selected Economic and Financial Indicators

GDP (GDP per capita): 1986: US$2,540 million (US$706)

Exchange rate: August 31, 1988: K 1 = US$1.1541

	1985	1986	1987	1988 Proj.	1989 Proj.
	(Annual percentage change)				
National income and prices					
GDP at constant prices	4.8	5.0	5.8	5.0	5.0
GDP deflator	2.1	2.9	6.3	5.0	5.0
Consumer prices (period average)	3.7	5.5	3.3	5.0	5.0
External sector					
Exports, f.o.b.	-0.4	14.8	13.0	27.0	6.1
Imports, f.o.b.	-7.6	6.4	14.0	21.6	20.7
Terms of trade (deterioration, -)	3.5	6.7	4.5	-2.3	-6.0
Nominal effective exchange rate (depreciation -) 1/	-7.9	0.2	1.3	1.7 2/	...
Real effective exchange rate (depreciation -) 1/	-10.1	0.3	-3.0	-1.1 2/	...
Government budget					
Revenue and foreign grants	-0.9	7.0	8.1	7.9	...
Revenue	1.8	12.3	14.9	10.6	...
Foreign grants	-6.9	-5.1	-10.2	-1.6	...
Total expenditure	3.4	9.3	2.4	5.4	...
Current expenditure	9.5	2.6	4.7	5.5	...
Capital expenditure	-38.9	89.7	-11.8	3.1	...
Money and credit					
Domestic credit	22.3	15.3	4.6	12.4	6.4
Of which: Private sector (nonseasonal loans)	(18.1)	(13.0)	(7.5)	(8.0)	(8.3)
Broad money (M3*) 3/	8.8	16.0	8.4	12.9	14.8
Velocity (GDP/M3*) 4/	3.6	3.3	3.4	3.3	3.2
Interest rate 5/	15.7	8.9	10.5	10.7 6/	...
	(In percent of GDP)				
Tax revenue	18.2	17.9	18.0	18.6	...
Central government expenditure	33.6	33.9	30.9	29.5	...
Central government budget deficit (-)	-2.4	-3.0	-1.2	-0.4	...
Domestic bank financing	1.7	0.7	-1.1	1.0	...
Foreign financing	0.1	2.3	2.2	-0.7	...
External current account deficit (-)	-8.6	-4.1	-7.0	-6.0	-11.1
Of which: Official transfers	(9.5)	(8.3)	(6.6)	(5.9)	(5.3)
External debt	92.6	76.4	68.3	58.8	58.0
External debt service ratio 7/	24.5	21.3	19.8	23.8	21.4
	(In millions of U.S. dollars)				
Exports	917	1,053	1,190	1,511	1,603
Imports	-873	-929	-1,059	-1,289	-1,554
External current account	-197	-104	-215	-207	-430
Overall balance of payments	13	--	-9	--	61
Gross official reserves	455	473	506	506	567
(In months of nonmineral sector imports)	(7.8)	(8.3)	(8.2)	(6.6)	(6.9)
External debt outstanding	2,116	1,941	2,085	2,038	2,248

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

1/ End of period.
2/ End-June 1987 to end-June 1988.
3/ Excludes deposits of Bougainville Copper Ltd. and of the commodity stabilization funds.
4/ Ratio.
5/ Average term deposit rate at end of period.
6/ April 1988.
7/ In percent of current account receipts including official transfers.

I. Introduction

The 1988 Article IV consultation discussions with Papua New Guinea were held in Port Moresby during August 1-12, 1988. The staff team met with Mr. Paul Pora, Minister of Finance and Planning; Sir Henry To Robert, Governor of the Bank of Papua New Guinea; and senior officials of government departments and the Bank of Papua New Guinea. The staff team consisted of Messrs. Willem G. L. Evers (head), Roy C. Baban, Reza Kibria, Young-Wook Chin (all ASD), and Mrs. Susan E. Sekera (ETR, secretary). Mr. Ian Sliper, Advisor to the Executive Director for Papua New Guinea, attended some of the meetings as an observer.

Papua New Guinea has accepted the obligations of Article VIII, Sections 2, 3, and 4; apart from a prohibition on the payment of life insurance premiums, it maintains an exchange system that is free of restrictions on payments and transfers for current international transactions. The prohibition on the payment of life insurance premiums has not been approved.

Papua New Guinea has been placed on the bicyclic procedure by the Executive Board. The staff report of the Interim consultations was issued on January 13, 1988 (SM/88/12).

II. Background and Recent Economic Developments

The principal economic activities in Papua New Guinea consist of the production of copper and gold from largely foreign-owned mines at Bougainville and Ok Tedi, and the cultivation of export crops, including coffee, cocoa, copra, and palm oil. Output of these products accounts for about one third of GDP and about 85 percent of export earnings. The agricultural sector is dominated by smallholders, who grow both subsistence and cash crops. The cultivation and processing of agricultural products are constrained by the rugged and mountainous terrain, inadequate technical and managerial skills, high wages, and limited size and isolated location of domestic markets. In addition, most of the land is communally owned and not well demarcated, making it difficult to obtain rights to its development or to use it as collateral. The mining sector, which has been expanding rapidly in recent years, is not labor intensive and relies only to a limited extent on domestically procured inputs. Reflecting these conditions, unemployment has been rising rapidly and, although nutritional levels are generally adequate, about 60 percent of the population lives in poverty.

Mainly as a result of the start of copper and gold production at Ok Tedi, real growth rose to an average of 5 percent in 1985-87 from less than 2 percent during the previous three years (Chart 1). 1/ With continued expansion of output at Ok Tedi, GDP is projected to grow by another 5 percent in 1988. In recent years, there has been an improvement in the terms of trade, largely on account of higher copper and gold prices and lower petroleum prices.

One of the more salient financial developments in recent years has been the progress in fiscal consolidation; government dissavings 2/ declined from 9.3 percent of GDP in 1985 to 4.4 percent in 1987, and a further decline to 3.1 percent is projected for 1988 (Table 1). Although the improvement in fiscal performance was mainly the result of expenditure restraint, there were also significant increases in revenue, which benefited from higher profitability of the mining sector, a rationalization of import duty rates, and higher collection of company tax arrears, fees, and charges. The overall deficit declined from 3 percent of GDP in 1986 to 1.2 percent in 1987; a further decline to 0.4 percent is projected for 1988. However, owing to large repayments on foreign commercial loans, the Government's domestic borrowing will increase in 1988 and, as in previous years, it will come mainly from the banking system; nonbank financing will remain relatively insignificant.

Following the adoption of a more restrictive policy stance, bank lending to the private sector leveled off in 1987 and, despite substantial payments by the commodity stabilization funds, the growth in broad money (M3*) was reduced to 8 percent from 16 percent in 1986 (Table 2). 3/ Tight credit policies toward the private sector continued in 1988, but with a rapid growth in government borrowing from the banking system, total domestic credit is projected to rise by 12-13 percent. Consistent with an expected overall balance on the external account, and further payments by commodity stabilization funds, broad money is projected to rise by 13 percent in 1988.

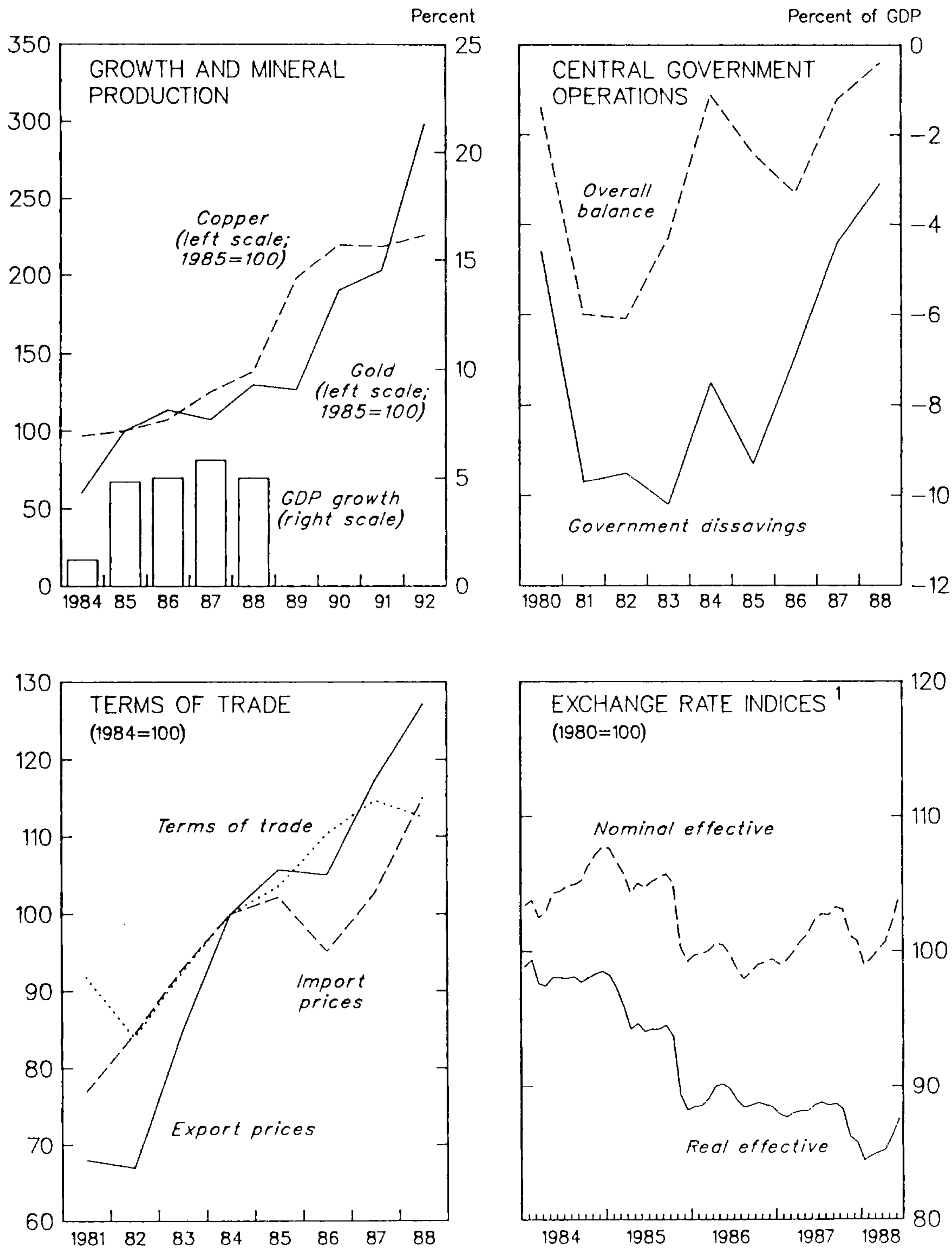
About half of the goods consumed in urban areas are import-related and the consumer price index is therefore heavily influenced by movements in import prices. In part reflecting higher import costs, inflation during the year ended March 1988 rose to 5.0 percent from 3.9 percent during the previous 12 months.

1/ Estimates of growth rates for 1986 and 1987 have been revised upward to 5 and 5.8 percent, respectively, from 3.3 and 2.9 percent reported in the staff report on the Interim Article IV consultation discussions (SM/88/12). The staff believes that GDP data underestimate the level of real output; ratios to GDP should therefore be used with caution, especially if comparisons are made with other countries.

2/ Current expenditures less domestic revenue.

3/ Broad money (M3*) is defined as total liquidity minus the deposits of commodity stabilization funds and of Bougainville Copper Limited (BCL). For a description of the commodity stabilization funds, see page 8 below and the forthcoming report on recent economic developments.

CHART 1
PAPUA NEW GUINEA
SELECTED ECONOMIC INDICATORS, 1980–92



Sources: Data provided by the Papua New Guinea authorities; and staff estimates and projections.
[1] Trade-weighted, IMF Information Notice System index.

Table 1. Papua New Guinea: Summary of Central Government Operations, 1985-88 1/

	1985	1986	1987	1988 Budget	1988 Jan.-June Actual	1988 Proj.
	(In millions of kina)					
Total revenue and grants	713	763	825	864	412	890
Tax revenue	416	443	501	546	277	568
Of which: Corporate tax	(85)	(71)	(97)	(88)	(70)	(131)
Personal income tax	(133)	(145)	(147)	(170)	(73)	(157)
Import duties	(104)	(123)	(144)	(180)	(71)	(155)
Nontax revenue	81	116	140	134	44	142
Foreign grants	216	205	184	184	91	181
Total expenditure	767	838	858	905	425	904
Current expenditure	709	728	762	754	382	804
Capital expenditure	58	110	97	151	43	100
Overall balance (deficit -)	-54	-75	-33	-41	-13	-14
External financing (net)	2	56	61	42	-30	-20
Concessionary loans	(12)	(44)	(105) 2/	(123)	(8)	(61)
Commercial loans	(-10)	(12)	(-44)	(-81)	(-38)	(-81)
Domestic financing (net)	52	18	-28	-1	43	34
Banking system	40	17	-30 2/	...	49	32
Nonbanks (including balancing item)	12	1	2	...	-6	2
Memorandum items:						
Revenue from mineral sector	20	30	45	39	57	86
Domestic revenue less current expenditure	-212	-170	-121	-73	-61	-94
	(In percent of GDP)					
Memorandum items:						
Total revenue and grants	31.2	30.9	29.7	28.4	...	29.1
Tax revenue	18.2	17.9	18.0	18.0	...	18.6
Nontax revenue	3.6	4.7	5.0	4.4	...	4.6
Foreign grants	9.5	8.3	6.6	6.0	...	5.9
Total expenditure	33.6	33.9	30.9	29.7	...	29.5
Current expenditure	31.0	29.5	27.5	24.8	...	26.3
Capital expenditure	2.5	4.4	3.5	5.0	...	3.3
Overall balance (deficit -)	-2.4	-3.0	-1.2	-1.3	...	-0.4
Domestic revenue less current expenditure	-9.3	-6.9	-4.4	-2.4	...	-3.1

Source: Based on data provided by the Papua New Guinea authorities.

1/ The fiscal year coincides with the calendar year. Components may not add to totals owing to rounding.

2/ Includes the receipt of a K 47 million STABEX loan, to be used for project expenditures in 1988 and subsequent years.

Table 2. Papua New Guinea: Monetary Survey, 1985-88

	1985	1986	1987	1988 June Prel.	1988 Dec. Proj.
			(In millions of kina)		
Foreign assets (net)	397	414	407	393	407
Monetary authority	435	443	444	430	...
Commercial banks	-38	-29	-37	-37	...
Domestic credit	617	712	744	833	837
Government (net)	21	31	10	59	42
Monetary authority	-40	-74	-81	-53	-69
Commercial banks	61	104	91	111	111
Private sector	596	681	734	775	795
Of which: Nonseasonal loans	555	627	674	696	728
Broad money (M3*) 1/	643	746	808	853	913
Money	243	255	277	287	313
Quasi-money	399	491	531	567	600
Deposits of stabilization funds	161	166	111	102	53
Bank of Papua New Guinea	81	89	65	42	7
Commercial banks	80	76	46	60	46
Deposits of Bougainville Copper Ltd.	11	18	24	43	50
Total liquidity (M3)	814	929	943	998	1,016
Other items (net)	200	197	208	228	228
			(Change in percent)		
Memorandum items:					
Broad money (M3*) 1/	8.8	16.0	8.4	10.5	12.9
Domestic credit	22.3	15.3	4.6	9.1	12.4
Private nonseasonal credit	18.1	13.0	7.5	7.9	8.0
GDP/M3* (absolute number)	3.6	3.3	3.4	...	3.3

Source: Data provided by the Papua New Guinea authorities.

1/ Equals total liquidity (M3) less deposits of stabilization funds and of Bougainville Copper Ltd.

After having narrowed from 15 percent of GDP in 1983 to 4 percent in 1986, the current account deficit of the balance of payments widened to 7 percent of GDP in 1987 (Table 3). This development stemmed largely from a deterioration in the services and transfers account; budgetary support from Australia declined, and a change in Australian tax laws led to a rise of income payments abroad. The overall balance of payments incurred a deficit of $9 million, compared with an average surplus of $14 million during the previous three years.

Although exports are projected to increase by about one fourth in 1988, imports of capital equipment and rising dividend payments by the mineral sector will keep the current account deficit at about 6 percent of GDP; the overall balance of payments is expected to be in approximate balance. 1/ At the end of June 1988, gross foreign reserves amounted to $525 million, or about seven months of estimated nonmineral sector imports in 1988.

The exchange rate is pegged to a basket of currencies, which is based on import weights. On a trade-weighted basis, the real effective exchange rate index has fallen by about 1 percent since mid-1987 largely because of a series of small devaluations against the basket totaling about 3.5 percent.

The last Executive Board discussion on Papua New Guinea took place on the occasion of the 1986 Article IV consultation. At that time Directors observed that, with the expected decline in foreign budgetary support, efforts to mobilize domestic resources should continue through the broadening of the tax base and further expenditure restraint. Convincing action was also needed to promote more realistic wages and greater flexibility in the labor market. Directors welcomed the authorities' continued commitment to flexibility in the management of the exchange rate.

The staff report on the Interim consultation discussions suggested that, with increasing volatility in the balance of payments, the achievement of monetary policy objectives would be facilitated by open market operations in government debt instruments and continued flexibility in the determination of interest rates.

III. Prospects and Policies

Although Papua New Guinea is well endowed with fertile land and adequate rainfall, economic growth since independence has come mainly from the mineral sector. It is therefore an important government

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1/ The staff report of the Interim Article IV consultation discussions projected a balance of payments deficit of $152 million in 1988. The improvement in the outlook stems mainly from larger-than-expected gold production and higher copper and gold prices.

Table 3. Papua New Guinea: Balance of Payments, 1985-88

(In millions of U.S. dollars)

	1985	1986	1987	1988 Proj.
Trade balance	44	125	131	222
Exports, f.o.b.	917	1,053	1,190	1,511
Gold	319	413	480	552
Copper	164	161	289	383
Other	434	479	421	576
Imports, f.o.b.	-873	-929	-1,059	-1,289
Mineral sector	-171	-246	-315	-369
Other	-702	-683	-744	-920
Services and transfers	-241	-228	-346	-429
Mineral sector	-143	-156	-195	-276
Budgetary grants	213	209	199	201
Other	-311	-281	-350	-354
Current account	-197	-104	-215	-207
Capital account	183	131	167	207
Official	53	30	51	26
Concessional	(41)	(44)	(98)	(69)
Commercial	(12)	(-13)	(-47)	(-43)
Private	127	110	107	181
Mineral sector	(46)	(78)	(60)	(144)
Other	(81)	(32)	(47)	(37)
Commercial banks	3	-9	10	--
Errors and omissions	27	-27	38	--
Overall balance	13	--	-9	--
Memorandum items:				
Current account/GDP (in percent)	-8.6	-4.1	-7.0	-6.0
Balance of the mineral sector	222	257	329	445
Debt service ratio 1/	24.5	21.3	19.8	23.8
Gross reserves in months of nonmineral sector imports	7.8	8.3	8.2	6.6

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

1/ Percentage of current account receipts including official transfers.

objective to achieve more broad-based growth by raising investment in rural areas, especially for infrastructure and projects that are likely to generate employment. The broad strategy underlying the recently adopted medium-term public investment program has been endorsed by the World Bank and the Consultative Group for Papua New Guinea, the latter having held its first meeting in May 1988. Other medium-term objectives include establishing parity between domestic revenue and current expenditures and fostering the development of projects that can be financed with concessional aid. The further development of the mineral sector that is now in prospect would have a profound effect in the balance of payments and the government budget. The discussions focused in particular on likely fiscal, monetary, and balance of payments developments over the medium term and their vulnerability to changes in prices, investment and output in the mineral sector.

1. Production and investment policies

Since the Interim consultation discussions, the outlook for further development of the mineral sector has become even more favorable. Construction of one new gold mine has begun and plans for the development of three additional gold mines and for the exploitation of an oil field are in an advanced state of preparation. 1/ The coming into production of these mines would increase gold output from an estimated 42 tons this year to 96 tons in 1992; 2/ oil production could start in 1992 at 20 million barrels rising to 60 million barrels by 1996. Further development of the existing mine at Ok Tedi is expected to lead to a 60 percent rise in total copper output by 1992. Capital expenditure in the mining sector is expected to rise from about $200 million in 1988 to about $1 billion annually in 1990 and 1991; thereafter, these expenditures are projected to decline to about $200 million by 1994.

The Government holds an equity share of about 20 percent in the two existing mines and has decided to participate in most, if not all, of the new mining projects. This participation will most likely be channeled through the Mineral Resources Development Corporation (MRDC), a state-owned company, which will finance its investment largely with long-term foreign loans. New mining legislation will be submitted to parliament early next year. The legislation will introduce simpler procedures for the granting of mining tenements, permit mechanized

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1/ The mine currently under construction is at Misima; the three other gold mines would be at Porgera, Lihir, and Hidden Valley; the oil field is at Iagifu.

2/ Since early 1988, significant quantities (about 2 tons) of alluvial gold have been found at Mount Kare where underground mining could produce up to 130 tons of gold within a few years. However, no firm plans exist as yet to commence underground mining operations at this site.

alluvial mining by landowners, and arrange for compensation to landowners whose land is damaged by mining operations.

Development efforts in the agricultural sector will revolve around the promotion of the four tree crops--coffee, cocoa, palm oil, and copra--where the potential for further output growth is considerable. The impact of coffee leaf rust, 1/ which first appeared in Papua New Guinea in 1986, has been considerably less than originally feared, as its spread was contained by fungicides and improved maintenance by growers. Largely because of increased yields, coffee output grew from 42,000 tons in 1986 to 65,000 tons in 1987 and is expected to remain around this level for the medium term. Owing to the introduction of a new hybrid variety and rehabilitation of plantations and smallholdings, cocoa production is expected to grow at about 7 percent per year for the next several years, and palm oil, which will benefit from new plantings, at about 10 percent. Copra production is not expected to increase, in part because of lack of suitable hybrid varieties.

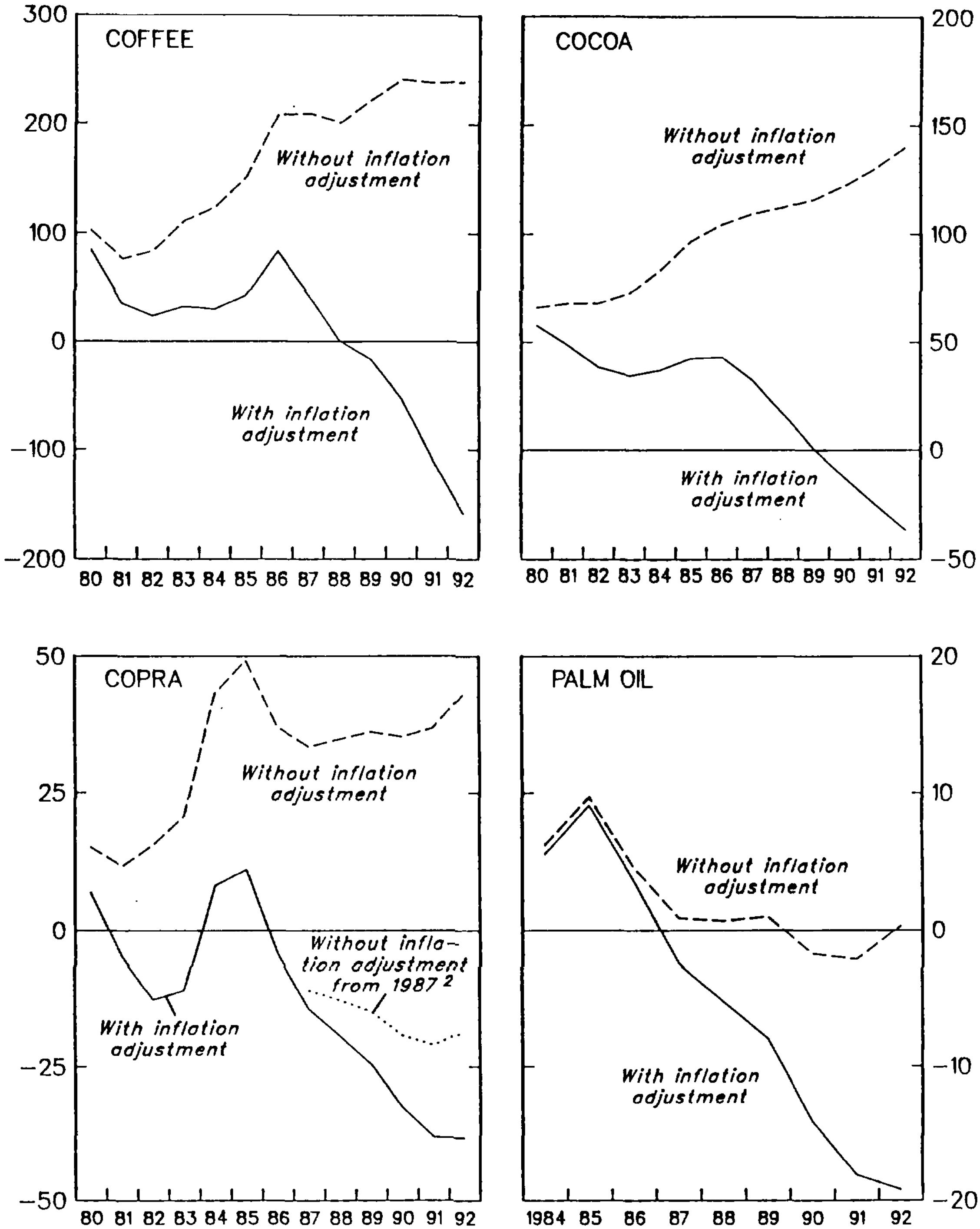
Because international prices of the major agricultural exports are subject to large fluctuations, the marketing boards for coffee, cocoa, copra, and palm oil have established commodity stabilization funds to dampen the effect of these fluctuations on producer prices. To this end, producer prices are set at the midpoint between the export price and an inflation-adjusted moving average of export prices. The stabilization funds accumulate reserves when export prices are high and lose reserves when export prices are low. However, as shown in Chart 2, the accumulated effect of the inflation adjustment may well be the principal reason why the coffee, cocoa, and palm oil funds may now run the risk of depleting their reserves. The administrators of the copra fund abandoned the inflation adjustment in 1987 and may therefore see a halt to its declining reserve position. The staff team suggested that an early termination of the cost of living adjustment in the formula that is used to determine producer prices for agricultural exports would reduce the risk of the stabilization funds ceasing operations or becoming a burden on the budget. With the introduction of yield-increasing techniques, for which there is ample scope, termination of the inflation adjustment in setting producer prices would not necessarily result in a decline of real incomes of producers.

Although the factors that impede output and employment in the nonmineral sector are many and complex--such as lack of technical skills, inadequate infrastructure, and limited size of domestic markets--the high level of wages is likely to become the more dominant constraint as progress is made in overcoming the other limitations. Against this background, it has been government policy to reduce real wages gradually through weakening the one-to-one relation between wages and prices. The guidelines for 1986-88 of the Minimum Wages Board,

1/ Rust is a plant disease especially affecting coffee.

CHART 2
PAPUA NEW GUINEA
COMMODITY STABILIZATION FUNDS: SIMULATION OF RESERVE BEHAVIOR WITH AND WITHOUT ADJUSTMENT FOR INFLATION IN THE CALCULATION OF PRODUCER PRICES, 1980–92[1]

(In millions of kina)



Sources: Data provided by the Papua New Guinea authorities; and staff estimates and projections.
[1]Producer prices equal export prices plus or minus 50 percent of the difference between the export price and a moving average of export prices, adjusted for inflation. The actual levels of reserves may differ from those shown in this chart because of other income and expenditure, such as stock financing and interest receipts. Also, the funds have occasionally deviated from the producer price setting formula.
[2] The Copra Fund abandoned inflation adjustment in 1987.

which is a tribunal consisting of representatives of employers, employees, the Government, and the community at large, provided for full cost of living adjustment of wages up to a maximum of 5 percent per year. However, with inflation having remained below 5 percent, no reduction in real wages has occurred. During the next hearing of the Minimum Wages Board, which is scheduled in the fall of 1988, the authorities intend to propose less-than-full cost of living adjustment also for inflation rates below 5 percent. In addition, they will propose that the effects of higher indirect taxes on the cost of living be excluded from any adjustment of wages. Although the authorities favor deregulation of minimum wages in rural areas and the introduction of productivity based wages in urban areas, no progress has been made in obtaining the necessary legislation.

Foreign investments must be approved by the National Investment and Development Authority (NIDA), an intergovernmental agency that has considerable discretion with regard to the incentives that are offered, the location of projects, and the period for which approval is granted. It also regulates any subsequent investment in the same project. In response to criticism regarding the implementation of NIDA's detailed regulations, new legislation has been prepared with assistance from the International Finance Corporation. The legislation, which is to be submitted to parliament in November 1988, will simplify approval procedures and rationalize NIDA's institutional framework.

2. Fiscal policies

Over the medium term, the authorities may be faced with a number of developments that will make it difficult to maintain a fiscal position compatible with stable monetary conditions and a healthy balance of payments. Budgetary support from Australia, which accounts for about 20 percent of total government receipts, is expected to decline gradually in real terms; amortization payments on foreign commercial debt will rise to about twice the level of recent years; and the public investment program envisages a 40 percent rise in project-related outlays during the next four years. In all, these developments would affect the balance between revenue and expenditure by an amount equivalent to about 3-4 percent of GDP during the next several years.

The amount, timing, and duration of fiscal revenue from the mineral sector will be subject to considerable uncertainty. Although mineral output is expected to rise rapidly, taxable profits will be constrained by high exploitation costs and accelerated depreciation provisions on initial investment. For instance, the mine at Ok Tedi, which commenced production in 1984, is expected to start paying company taxes only in 1993, and this date may well be postponed further if additional capital expenditure is necessary to dispose of chemical waste. Because of these factors, receipts of mineral sector company taxes are expected to remain more or less unchanged until the mid-1990s.

Government revenue will benefit substantially, however, from imports of capital goods by the mineral sector; receipts from import duties are expected to double by 1991, after which they will decline sharply as construction activities wind down. Although the budget could well move into temporary surpluses during the mineral construction boom, prospects are that in the early 1990s, the Government will face a situation where revenue from imports has reverted to more normal levels and company taxes would still be affected by accelerated depreciation provisions. In addition, the revenues from the mineral sector will remain subject to considerable uncertainty. Somewhat lower prices for copper and gold may affect profitability of existing mines and delay plans for the construction of new mines. Higher prices, on the other hand, would not necessarily increase taxable profits in the short run.

To strengthen the budget outlook, the authorities will continue their policy of limiting the growth of current expenditure and of raising additional revenue. As the number of civil servants is relatively high, reducing the size of the civil service during the next four years by about 1 percent a year will be an important element in this strategy. On the revenue side, efforts to identify tax arrears have continued so that the amount of such arrears has increased to K 78 million from K 50 million last year; collections from these arrears are estimated at about K 15 million a year for the next four years. The authorities are also considering a package of tax measures that would not only raise more revenue, but would also result in a shift from direct to indirect taxation. The package would increase domestic revenues by about 1 percent of GDP. The authorities are mindful of the experience of the early 1980s, when the Government borrowed heavily abroad in anticipation of revenues from the Ok Tedi project. They therefore do not intend to borrow in anticipation of a possible rise in revenue from the mineral sector during the second half of the 1990s, especially in view of the vulnerability of the economy to changes in copper and gold prices. Because conditions bearing on the fiscal position can change rapidly, the authorities have recently introduced a cash flow information system in the Ministry of Finance and Planning to monitor receipts and outlays on a monthly basis.

The Government remains committed to the privatization or liquidation of about 40 public enterprises. So far, three small enterprises have been sold to the private sector and plans for the sale of eight other enterprises are well advanced. The authorities plan to appoint advisors to help with negotiations and refine policy guidelines.

3. Monetary policies

Monetary policy aims at moderating the impact of externally induced fluctuations in the money supply and at maintaining a level of credit expansion that will provide for the liquidity needs of the economy and create a stable economic environment. The principal instruments of monetary policy are the minimum liquid assets ratio and the discount facility. Interest rates have been market determined since controls were lifted in December 1986.

An important feature of the monetary system is that a few organizations, notably the commodity stabilization funds, the superannuation funds, and the provincial governments, hold a relatively large share of deposits. Many of these entities shift their deposits among banks in response to interest rate differentials and, in the absence of an effective interbank market, this has occasionally caused serious imbalances in the distribution of liquidity among banks. In early 1988, the authorities took steps to lessen large fluctuations in the distribution of bank liquidity. Official entities were instructed to refrain from unduly shifting their deposits and it was arranged with the commodity stabilization funds that for their payments to producers they would draw down their deposits with the central bank before using deposits with the commercial banks.

In recent years, the authorities have been reluctant to issue treasury bills and other government debt instruments, relying instead on advances from the Bank of Papua New Guinea to finance the budget deficit. This policy has not only limited the scope for providing credit to the private sector, given official concerns about moderating overall credit expansion, but has also resulted in limiting the amount of government securities in the secondary market, which in turn has diminished the effectiveness of open market operations. The staff suggested that, in view of the sizable balance of payments surpluses that are expected over the medium term, a more active use of government (or central bank) debt instruments would be essential in order to absorb any excess liquidity. The authorities mentioned that there was a growing awareness of the need for additional monetary policy instruments and that they would instruct the recently established Working Party on Public Borrowing and National Debt to study the inclusion of monetary considerations in the determination of the Government's debt policy.

In early 1988, the authorities introduced stricter quantitative guidelines for the redirection of bank lending to enterprises predominantly owned by nationals and to priority areas such as agriculture and housing. As selective credit controls have serious implications for the efficiency of financial resource allocation and bank profitability, the staff team encouraged the authorities to review the need for these guidelines and explore ways whereby credit to priority areas can be assured through the strengthening of specialized credit institutions, such as the Agriculture Bank.

4. Balance of payments policies

During the next four years the balance of payments will be strongly influenced by production and investment of the mineral sector. With further increases in copper production at Ok Tedi and the coming on stream of four additional gold mines, export earnings from copper and gold are projected to rise rapidly. However, imports associated with mining development will rise even faster so that until 1991 the current account deficit of the balance of payments will widen to about 24 percent of GDP (Table 4, Chart 3). After construction of most projects is completed, investment and imports of the mineral sector will fall in 1992 while its exports will accelerate, among other things, because of the start of oil production. The magnitude of these changes is such that the current account may show a surplus in 1992.

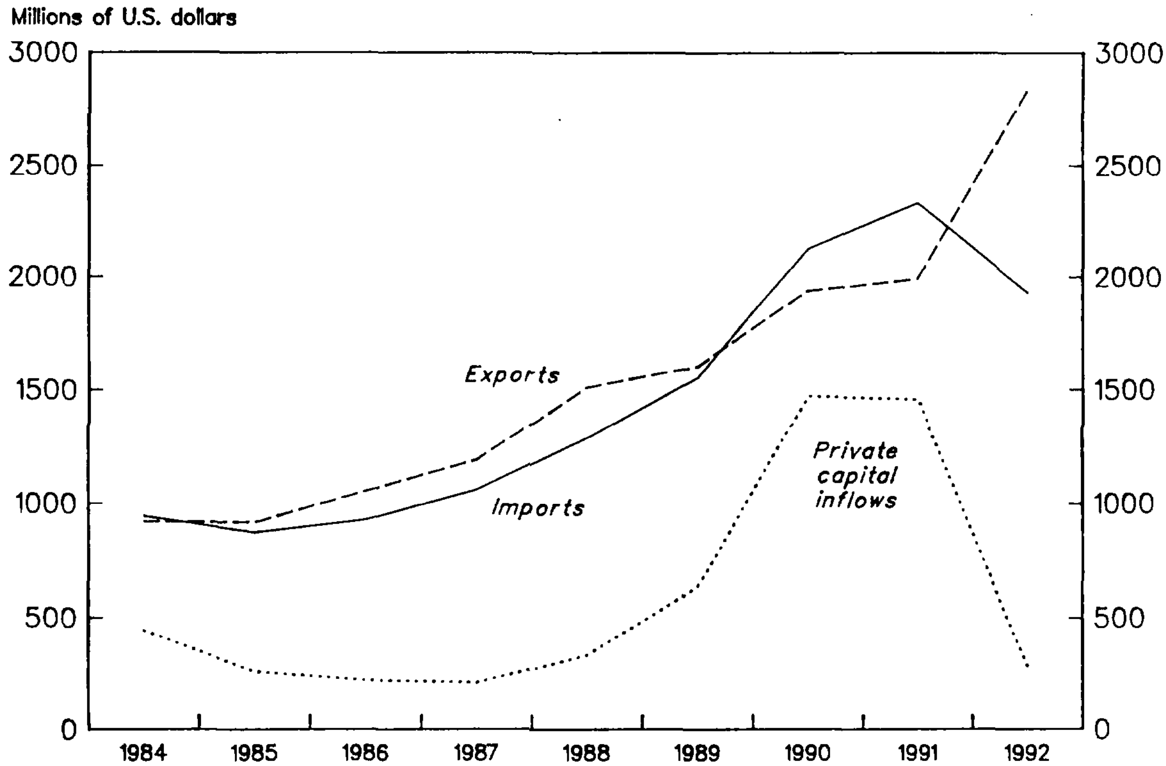
The investments in the mineral sector will be accompanied by large capital inflows so that the overall balance of payments is expected to show sizable surpluses, particularly in 1990. Gross foreign reserves are expected to rise to about 14 months of nonmineral sector imports by 1992. However, the actual balance of payments performance could deviate substantially from the one projected as a result of slightly different price and output developments. For instance, the balance of payments in 1989 would show a small deficit if copper prices on the world market would average $0.70 per pound instead of $0.83 per pound. Higher gold prices would significantly increase the surpluses in any year, but a delay in the start of oil production could well result in a substantial deficit in the overall balance of payments in 1992.

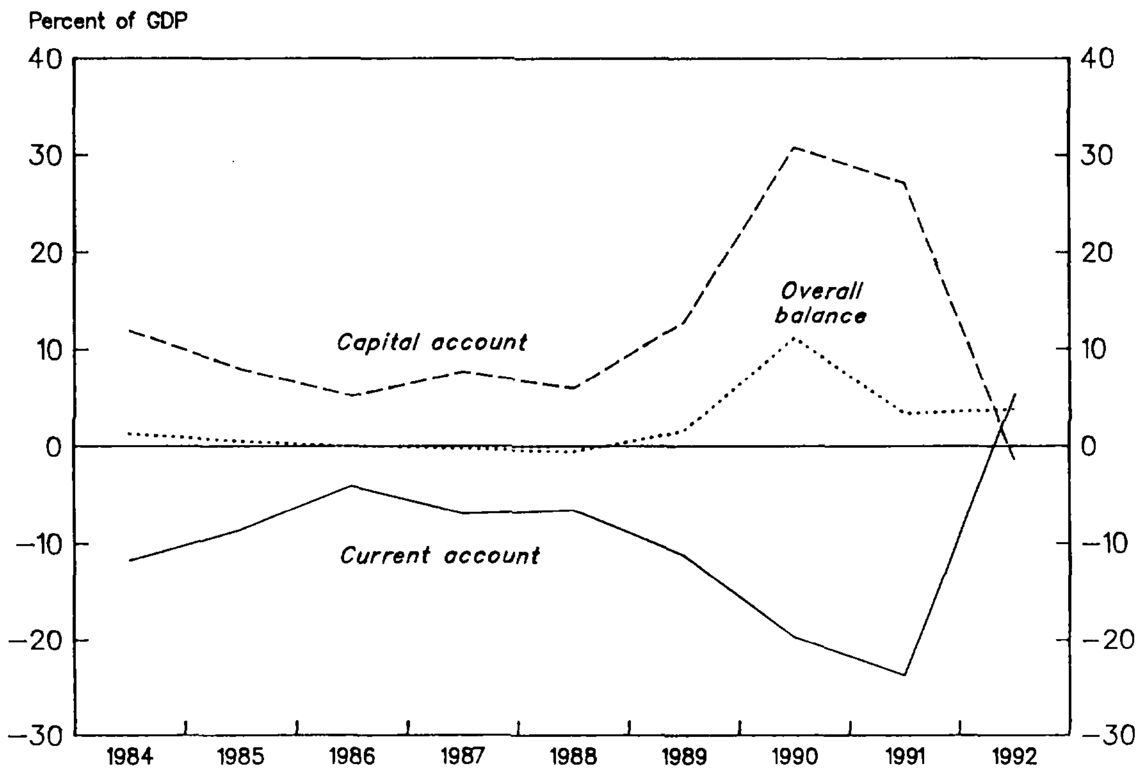
Debt service payments are projected to rise from $308 million or 20 percent of current receipts in 1987 to $782 million or 23 percent of current receipts in 1992. The increase in the debt service ratio is exclusively the result of debt service obligations of the mineral sector. Excluding payments by the mineral sector, the debt service ratio would decline from 12 percent in 1986 to 7 percent in 1992. Debt service payments by the Government will peak during 1989-91, partly as a result of large repayments on commercial loans received in the early 1980s. The Government is seeking to refinance some of these commercial loans in order to reduce the bunching of repayments in the years immediately ahead.

The authorities recognize that the international competitiveness of the nonmineral sector could be improved by a devaluation of the kina. However, they also believe that such action would raise inflation in the short term while, because of many other constraints on development, a sufficiently large supply response could only be expected over the longer term. Therefore, they intend to improve the longer-term competitiveness of the nonmineral sector primarily through greater flexibility in wages and measures to increase productivity. They do not entirely rule out the use of exchange rate policy; the series of small devaluations that was implemented during the last 12 months were aimed at improving the competitiveness of the nonmineral sector.

Quantitative restrictions are applied to a small number of imports, mainly foodstuffs, in order to protect infant industries. These restrictions are reviewed periodically in order to make sure that they serve the purpose for which they were intended. The authorities intend

CHART 3
PAPUA NEW GUINEA
BALANCE OF PAYMENTS, 1984-92





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

Table 4. Papua New Guinea: Balance of Payments Projections, 1988-92

(In millions of U.S. dollars)

	1988	1989	1990	1991	1992
Trade balance	222	49	-190	-342	909
Exports, f.o.b.	1,511	1,603	1,938	1,992	2,838
Gold	552	546	823	876	1,287
Copper	383	469	488	453	468
Other	576	588	627	663	1,096 1/
Imports, f.o.b.	-1,289	-1,554	-2,128	-2,334	-1,929
Mineral sector	-369	-572	-1,020	-1,144	-748
Other	-920	-982	-1,108	-1,190	-1,181
Services and transfers	-429	-479	-657	-763	-688
Mineral sector	-276	-303	-491	-622	-574
Budgetary grants	201	206	208	184	161
Other	-354	-382	-374	-325	-275
Current account	-207	-430	-846	-1,104	221
Capital account	207	492	1,325	1,260	-75
Official	25	-22	-42	2	74
Concessional	(69)	(62)	(59)	(75)	(93)
Commercial	(-43)	(-84)	(-101)	(-73)	(-19)
Private	181	513	1,367	1,257	-149
Mineral sector	(144)	(473)	(1,321)	(1,205)	(-207)
Other	(37)	(40)	(46)	(52)	(58)
Overall balance	--	61	479	156	146
Memorandum items:					
Current account/GDP (in percent)	-6.0	-11.1	-19.4	-23.5	4.2
Balance of the mineral sector	445	629	1,136	793	584
Total debt service	450	427	445	583	782
Public	203	219	229	196	140
Private	247	208	216	387	642
Debt service ratio 2/	23.8	21.4	18.8	23.6	23.3
Gross reserves as percent of nonmineral sector imports	6.6	6.9	11.3	12.1	13.7
Price assumptions (world market)					
Gold (US$/oz.)	441	441	441	441	441
Copper (U.S. cents/lb.)	97	83	78	73	73

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

1/ Of which $394 million is expected to be derived from oil exports.

2/ Percentage of current account receipts including official transfers.

to remove shortly the prohibition on the payment of life insurance premiums abroad, which is the only exchange restriction currently maintained by Papua New Guinea.

IV. Staff Appraisal

Papua New Guinea appears to be at the threshold of a boom in mineral production and investment. Increased copper production from existing mines has already contributed to higher growth and there are firm plans for four additional gold mines and the development of an oil field. Although these developments will have a favorable effect on growth and the balance of payments, the dual nature of the economy will intensify as the nonmineral sector remains beset by resource constraints, inadequate infrastructure, and shortages of technical and managerial expertise. The recent shift in emphasis in government expenditure toward production-oriented investment in rural areas to achieve greater diversification is therefore appropriate.

In addition to raising public development expenditures, the Government intends to achieve fiscal self reliance by raising public savings and reducing dependence on Australian budgetary support. These objectives will have to be achieved while, with accelerated depreciation provisions likely to affect taxable profits well into the 1990s, additional revenue from the mineral sector may initially be confined to a temporary rise in receipts from import duties. It is therefore essential that the Government continue its policies of raising more domestic resources and of refraining from commercial borrowing abroad.

The reluctance of the authorities to issue treasury bills and other debt instruments has led to a significant increase in government borrowing from the banking system and has thereby reduced the scope for lending to the private sector. The staff believes that the authorities should take early steps to develop a market in government securities not only to tap nonbank sources of financing but also to facilitate open market operations. With increasing balance of payments surpluses now in prospect, the availability of adequate government paper to absorb increases in liquidity will become a crucial element in the conduct of monetary policy. The recent introduction of a cash flow information system in the Ministry of Finance and Planning should aid not only the monitoring of government receipts and outlays, but also the coordination of debt management policy and monetary policy.

Cost of living adjustments have prevented further progress toward reducing real wages to levels that are compatible with international competitiveness, which is of crucial importance for employment creation and diversification of the economy. A decision by the Minimum Wages Board to provide for less than full indexation of wages, even if inflation remains below 5 percent, would therefore be highly desirable. Progress toward a reduction in real wages and improvements in productivity would allow less reliance on the exchange rate mechanism, with its attendant implications for inflation and its limited impact in the particular context of the Papua New Guinea economy.

Although the commodity stabilization funds have been successful in reducing fluctuations in agricultural producer prices, prospects are that their reserves may be depleted during the next few years. Removal of the cost of living adjustment in the determination of agricultural producer prices would go a long way towards improving the liquidity of the stabilization funds over the life of the commodity cycle.

As private foreign investment will not only alleviate resource constraints but will also provide much needed technical and managerial skills, the staff welcomes current plans to liberalize and streamline approval procedures applicable to these investments.

The staff also welcomes the intention of the authorities to remove shortly the restriction on payments abroad of life insurance premiums.

The Executive Board has placed Papua New Guinea on the bicyclic consultation procedure. The next full Article IV consultation with Papua New Guinea will be completed within 24 months.

Papua New Guinea: Social and Demographic Indicators 1/

Area:	461,693 square kilometers
Population (1986):	3.6 million
Rate of growth:	2.6 percent per annum
Density:	8 persons per square kilometer
Population characteristics:	
Age structure	
0-14 years	43 percent
15-64 years	53 percent
65 and above	4 percent
Life expectancy	52 years
Infant mortality	68 per thousand
Crude birth rate	37 per thousand
Crude death rate	13 per thousand
Total fertility rate	5 children per woman
Health:	
Population per physician	11,700
Access to safe water:	
Total population	16 percent
Urban population	55 percent
Rural population	10 percent
Nutrition:	
Per capita calorie intake	2,145 per day
Per capita protein intake	40 grams per day
Poverty: 2/	
Urban	10 percent
Rural	75 percent

Source: The World Bank.

1/ Most recent estimates.
2/ Estimated population below absolute poverty income level (1979).

Papua New Guinea - Fund Relations
(As of August 31, 1988)

(Amounts in millions of SDRs, unless otherwise specified)

I. Membership Status

(a)	Date of membership:	October 9, 1975
(b)	Status:	Article VIII

(A) Financial Relations

II. General Department (General Resources Account)

		Amount	Percent of quota
(a)	Quota:	SDR 65.9 million	
(b)	Total Fund holdings of currency:	59.0	89.5
(c)	Fund credit:	--	--
	Of which: CFF	--	--
(d)	Reserve tranche position:	6.9	10.5
(e)	Lending to the Fund:	None	

III. Current Stand-By or Extended Arrangement and Special Facilities

(a)	Current stand-by or extended arrangement:	None
(b)	Previous stand-by and extended arrangements during the last ten years:	None
(c)	Special facilities in the past two years:	None

IV. SDR Department

		Amount	Percent of allocation
(a)	Net cumulative allocation:	9.3	100.0
(b)	Holdings:	3.1	33.5
(c)	Current Designation Plan:	Not included	

V. Administered Accounts

		SDR mn.
(a)	Trust Fund Loans:	
	(i) Disbursed:	19.6
	(ii) Outstanding:	4.6
(b)	SFF Subsidy Account	None

VI. Overdue Obligations to the Fund None

(B) Nonfinancial Relations

VII. Exchange rate arrangement

Since December 1976, the kina has been pegged to a basket of currencies of Papua New Guinea's major trading partners. Since April 1980, the U.S. dollar has been used as the intervention currency. The representative rate of the kina against the U.S. dollar is the midpoint between buying and selling rates for spot transactions in U.S. dollars as determined daily by the Bank of Papua New Guinea. On August 31, 1988, the rate was K 1 = US$1.1541.

VIII. Last Article IV Consultation

The last Article IV consultation took place during June 10-19, 1986 and was concluded on October 10, 1986 (SM/86/231 and SM/86/244). Interim Article IV consultation discussions took place during October 23-November 3, 1987, (SM/88/12; January 13, 1988).

IX. Technical Assistance

Two experts, provided by the Central Banking Department, have been assigned to the Bank of Papua New Guinea to assist in the management of the Bank.

X. Resident Representative/Advisor: None

Relations with the World Bank 1/

The Bank Group has been a major official lender to Papua New Guinea. To date, its assistance has consisted of 18 loans and 13 development credits, totaling $439 million of which $265 million has been disbursed. The assistance strategy is aimed at helping the development of sectors and activities that will contribute the most to sustained and broad-based economic growth. The largest proportion of total Bank Group lending to Papua New Guinea has been for agricultural and rural development. Other priority areas are infrastructure and human resource development. In order to improve the coordination of aid to Papua New Guinea, the Bank, at the request of the Government, organized and chaired the first meeting of a Consultative Group in May 1988, at which donors indicated that they would provide about $200 million in project-related assistance during 1988/89. Documentation prepared by the Bank for the meeting included an economic report and an agricultural sector report, both issued in April 1988. The next meeting of the Consultative Group is scheduled for May 1989.

1/ Prepared by the World Bank staff.

Papua New Guinea: Statistical Issues

1. Outstanding statistical issues

a. Real sector

The national accounts statistics are subject to a wide margin of error. Estimates of the subsistence sector are based on a 25-year old survey that needs to be updated. A new household expenditure survey should be undertaken with a view to improving the weighting structure of the consumer price index and broadening the coverage to rural areas.

b. Monetary accounts

The authorities are in the process of compiling data on nonbank financial institutions in order to integrate monetary statistics in the form of a comprehensive financial survey.

2. Coverage, currentness, and reporting of data in IFS

The table below shows the currentness and coverage of data published in the country page for Papua New Guinea in the September 1988 issue of International Financial Statistics. The data are based on reports sent to the Fund's Bureau of Statistics by the Bank of Papua New Guinea, which during the past year have been provided on a timely basis.

Status of IFS Data

		Latest data in September 1988 IFS
Real Sector	- National Accounts	1986 1/
	- Prices	Q1 1988
	- Production	n.a.
	- Employment	n.a.
	- Earnings	n.a.
Government Finance	- Deficit/Surplus	1987
	- Financing	1987
	- Debt	1987
Monetary Accounts	- Monetary Authorities	May 1988
	- Deposit Money Banks (partial)	April 1988/May 1988
	- Other Banking Institutions	n.a.
Interest Rates	- Discount Rate	May 1988
	- Bank Lending/Deposit Rates	May 1988/Q2 1987
	- Bond Yields	n.a.
External Sector	- Merchandise Trade:	
	Values: Exports	May 1988
	Imports	Q1 1987
	Prices: Exports	Q2 1987
	Imports	n.a.
	- Balance of Payments	Q4 1987
	- International Reserves	July 1988
	- Exchange Rates	July 1988

1/ Constant price national accounts up to 1985 only.