

CHAPTER 7. MEDIUM TERM ECONOMIC & FISCAL OUTLOOK

7.1 OVERVIEW

Papua New Guinea's economy is expected to grow by 4.5 per cent in real terms in 2007, underpinned by a strong global economy and strengthening domestic conditions. This is well above population growth and a significant improvement from the first part of the decade.

The International Monetary Fund (IMF) expects global economic growth to remain well above trend in 2007, reflecting very strong economic growth in emerging and developing countries, particularly China and India and trend growth in advanced economies. The world outlook points to continued strong growth in demand, and continued high prices, for major mineral commodities, subject to the impact of response by suppliers.

Stronger growth in output is expected to see a continued increase in employment opportunities and income in PNG.

Inflation is expected to remain very low, with prices rising by only 1.5 per cent in 2007. This low inflation outcome is the result of the Government's adherence to the *Medium Term Fiscal Strategy* and the increasing emphasis placed on productivity in wage negotiations.

The continuation of a low inflation environment will also be reflected in interest rates remaining low, with the Kina Facility Rate projected to remain unchanged from its current level of 6 per cent in 2007.

On the external front, consistent with Government policy, the exchange rate will continue to be set by the market in 2007, with the Bank of Papua New Guinea's very high level of foreign reserves more than sufficient to perform the role of appropriately managing short term exchange rate volatility.

Table 60: Principal Economic Forecasts for 2007

	2005 Actual	2006 Projection	2007 Projection
Real GDP ^(a)	3.3	3.7	4.5
Real Non-Mining GDP ^(a)	3.1	4.1	4.2
Inflation (Year Average)	1.7	1.7	1.5
Treasury Bill rate	4.5	5.0	6.0
World Economic Growth	4.5	5.1	4.9
Oil Price (US\$ per barrel)	53.4	65.0	65.0
Copper Price (US\$ per pound)	1.67	2.99	2.49

Sources: National Statistical Office, Treasury Department and IMF

(a) Real GDP and Non-mining GDP for 2005 are Treasury estimates

In the medium-term, the economy is expected to continue to expand over the remainder of the decade, in line with the positive outcomes expected from Government policies and several new large mineral projects start towards the end of the decade. Continued solid economic and fiscal management and sustained reform on a number of fronts could see even stronger growth in the non-mining sector over the medium term. Medium-term prospects for the minerals sector continue to improve, as the supportive investment environment continues to encourage further investment.

7.2 WORLD ECONOMIC OUTLOOK

The world economy has grown well above trend in recent years, reflecting very strong economic growth in China and India, continued strong growth in the United States and an improved economic performance from Japan. This above-average performance is expected to continue in 2007, with world economic growth expected to grow by 4.9 per cent in real terms.

The continued strength in the global economy has resulted in sharp increases in world prices for mineral commodities, including crude oil. However, as yet there is little evidence of higher commodity prices having a significant impact on global economic activity. This muted response is attributed to the reduced energy intensity of the global economy and the real decline in minerals commodity prices in recent decades.

That said, the direct effect of the higher world oil price, in particular, is evident in higher consumer prices in 2006. Further, signs of inflationary pressures in some countries as sustained high rates of growth have absorbed spare capacity. In response to these pressures, global interest rates have increased over the course of 2006.

Table 61: IMF World Economic Outlook

	2005 Actual	2006 Projection	2007 Projection
World Economic Growth	4.9	5.1	4.9
<i>Advanced economies</i>	2.6	3.1	2.7
United States	3.2	3.4	2.9
Japan	2.6	2.7	2.1
European Union	1.8	2.8	2.5
<i>Emerging & Developing countries</i>	7.4	7.3	7.2
China	10.2	10.0	10.0
India	8.5	8.3	7.3
Inflation			
<i>Advanced economies</i>	2.3	2.6	2.3
<i>Emerging & Developing countries</i>	5.3	5.2	5.0
Interest Rates			
<i>US dollar</i>	3.8	5.4	5.5
<i>Japanese Yen</i>	0.1	0.5	1.1
<i>Euro</i>	2.2	3.1	3.7

Source: International Monetary Fund, *World Economic Outlook*, September 2006.

*Annual percentage change, apart from LIBOR rates

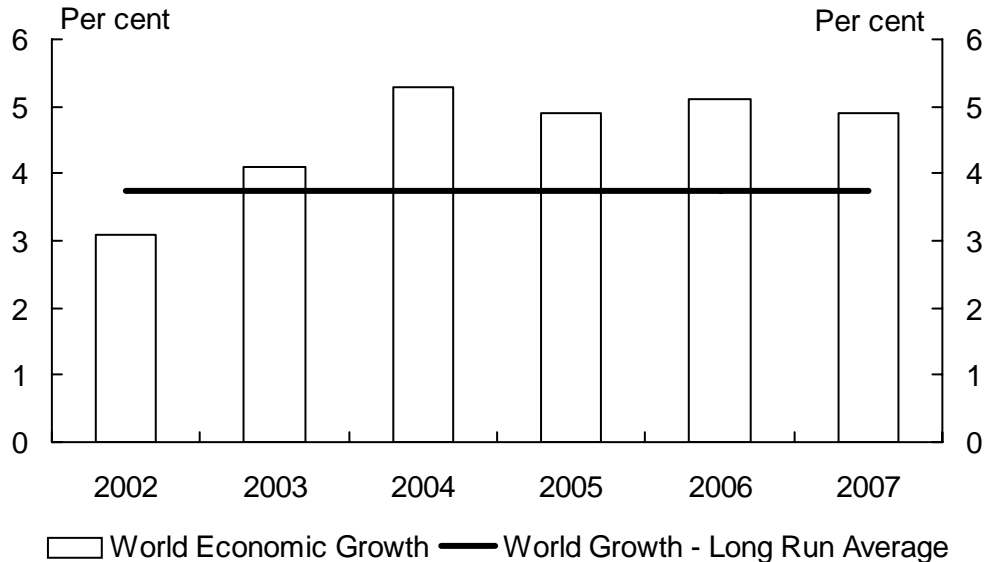
7.2.1 Global Economic Growth

The world economy is expected to continue to grow by 4.9 per cent in 2007, slightly below the 5.1 per cent growth projected for 2006, but well above its historical trend.

Growth in the advanced economies is anticipated to slow from the 3.1 per cent growth projected in 2006 to 2.7 per cent, or around its historical trend, in 2007, reflecting the combined effect of higher interest rates and higher world oil prices.

Growth in emerging and developing economies is expected to be 7.2 per cent in 2007, only slightly below the 7.3 per cent projected for 2006 and well above its historical trend. This performance is driven by continued rapid economic expansion in China and India, expected to grow by 10.0 per cent and 7.3 per cent respectively in 2007.

Figure 18: World economic growth



Source: IMF *World Economic Outlook*, September 2006.

While the global economic outlook remains positive, the International Monetary Fund cautions that “the balance of risks to the global outlook is slanted to the downside”, particularly in relation to inflationary pressures from high world oil prices and the potential for a disorderly unwinding of global financial imbalances.

7.2.2 Inflation

Inflation in advanced economies has increased steadily in recent years, from a low of 1.5 per cent in 2002 to an expected 2.6 per cent in 2006.

To some extent, this increase reflects the direct effect of higher oil prices over this period. Accordingly, as the oil price stabilizes, inflation should fall.

In addition, the pace of growth over the period has resulted in some advanced economies reaching capacity constraints, increasing inflationary pressures with monetary authorities responding by increasing interest rates.

Global inflation has picked up slightly in response to higher oil prices in 2005 and into 2006. Headline inflation in some advanced countries has been high for some time, pushed up by rising oil prices but there are now signs of increases in core inflation and inflation expectations.

7.2.3 Commodity Prices

Continued very strong world growth in 2006 has seen most commodity prices increase further in 2006.

In particular, the international prices of most base metals (including copper, one of PNG's major mineral exports) have nearly doubled in 2006, as suppliers have been unable to respond to the sharp increase in demand, particularly from the rapidly expanding Chinese economy.

The International Monetary Fund's recent *World Economic Outlook* outlined the IMF's projections for the world price of metals (including copper), based on integrated models of the demand, supply, and price of metals and industrial production.

The IMF caution that, based on this model, that they do not expect the current cyclically high metal prices to be sustained in the medium term. In particular, the copper price is expected to decline to US\$2.49 per pound in 2007 and to around US\$1.09 per pound in 2011. The *World Economic Outlook* notes that:

"The key policy message for countries that export commodities — particularly metals — is that they should not assume that high prices will be sustained. Current revenue windfalls should be saved or invested to support future growth in non-commodity sectors, rather than [be] used to increase spending in areas that will be difficult to reverse later."

The international prices of PNG's other major mineral exports, oil and gold, have also increased significantly in 2006. While prices of both commodities can be expected to remain volatile over the period ahead, on average the world oil and gold price are expected to be the same in 2007 as recorded in 2006.

Table 62: Principal Commodity Price Forecasts for 2007

	2005 Actual	2006 Estimate	2007 Projection
Gold (US\$ per oz)	445	600	600
Copper (US \$ per lb)	1.67	2.99	2.49
Oil Price (US\$)	53.4	65.0	65.0

Sources: IMF and Treasury Department

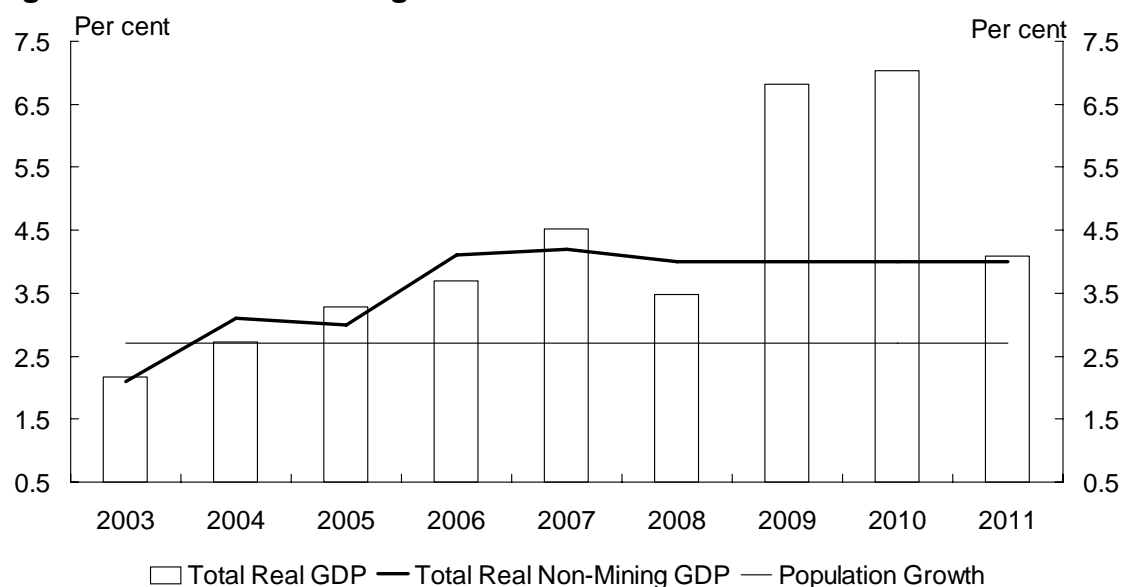
It should be noted that there are significant risks around the commodity price projections. While analysis of economic fundamentals of demand and supply is possible, it can be quite difficult to predict with precision the precise timing and magnitude of turning points in commodity prices in response to these fundamentals. In particular, this means that commodity prices could fall further and more quickly than expected, with taxation revenue from mining and petroleum being sharply lower than expected as a result.

7.3 GROSS DOMESTIC PRODUCT

7.3.1 Overview

The outlook for 2007 is for continued improvement in economic conditions, with economic growth expected to reach 4.5 per cent, with non-mining GDP expected to grow by 4.2 per cent in real terms in the year.

This will make 2007 the fourth successive year of economic growth above the estimated rate of population growth. This means that GDP per capita is improving, albeit slowly, which is a significantly better result than achieved in the first part of the decade.

Figure 19: Real economic growth 2005 to 2011

Source: Department of Treasury

The improved economic outlook for 2007 reflects increased investor and consumer confidence following a period of macroeconomic stability – reflecting the Government's prudent management of fiscal and monetary policy – and high commodity prices.

In the medium-term, the economy is expected to continue to expand over the remainder of the decade, in line with the positive outcomes expected from Government policies and several new large mineral projects start towards the end of the decade. Continued solid economic and fiscal management and sustained reform on a number of fronts could see even stronger growth in the non-mining sector over the medium term. Medium-term prospects for the minerals sector continue to improve, as the supportive investment environment continues to encourage further investment.

It should be noted that the Budget forecast for economic growth is not a target, but rather what is assessed as being realistically achievable in 2007. The Government is aiming for further improvement in the economy. To achieve this on a sustainable basis requires significant improved competitiveness and productivity in the economy, by addressing structural problems affecting all sectors of the economy, including the rundown state of much public infrastructure.

It should also be noted that the accuracy of economic projections continues to be constrained by a shortage of quality economic data. In particular, official GDP statistics for 2003 and 2004 are still preliminary and preliminary estimates for 2005 and the first half of 2006 are not yet available.

7.3.2 Agriculture, Forestry and Fisheries

The agriculture, forestry and fisheries sector is projected to grow by 3.6 per cent in real terms in 2007.

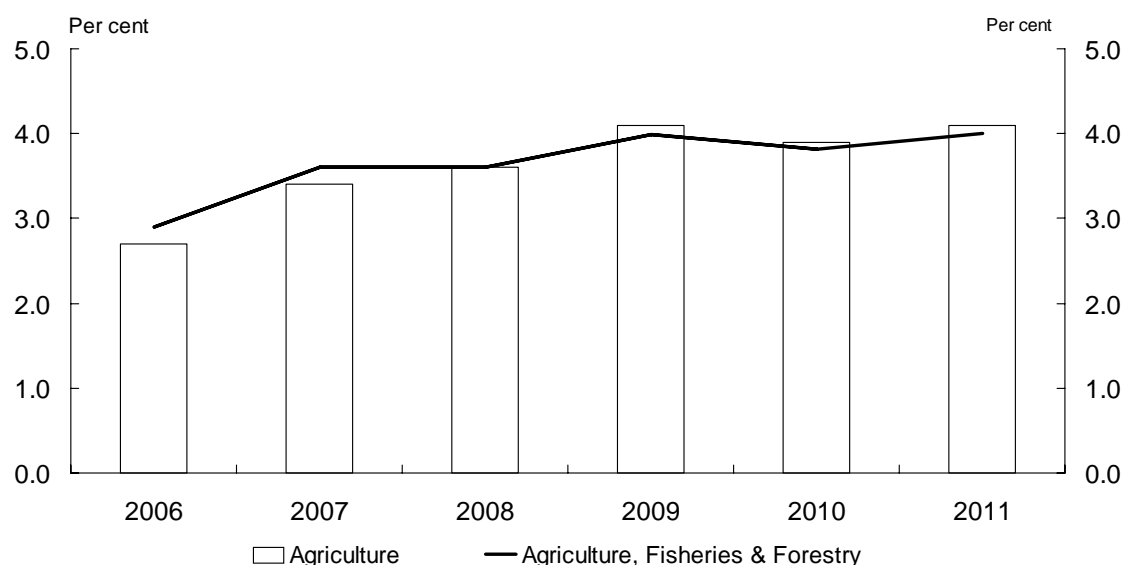
The agriculture sector is forecast to grow by 3.4 per cent in real terms 2007 reflecting solid growth in output of most major cash crops and continued growth in agricultural production for domestic consumption. Growth in agriculture production is expected to continue to increase over the medium term, to reach 4.0 per cent by 2011.

As in other sectors, the potential for growth in the agriculture sector is constrained by inadequate transport infrastructure, unreliable (or unavailable) and expensive utilities and relatively high levels of property crime. As these issues are addressed, the outlook for the sector over the medium term can be expected to improve further.

Forestry sector production is expected to grow strongly in 2007, as several new project areas come on line. However, as noted in the recent IMF review of PNG's macroeconomic statistics, it appears that official statistics are not properly capturing the full direct contribution of the forestry sector to the economy. While overall production in the forestry sector is expected to continue to grow in the medium term, the volume of unprocessed logs is expected to decline as a higher proportion of production is allocated to downstream processing.

Fisheries production is expected to grow at a solid rate of 3.5 per cent in 2007, reflecting strong results achieved in previous years and continued investment.

Figure 20: Agriculture, forestry & fisheries sector growth



Source: Department of Treasury

World prices of PNG's major agricultural commodities are projected to remain broadly stable in 2007. In US dollar terms, cocoa prices are expected to rise slightly, reflecting stronger global demand, while coffee prices are projected to fall somewhat from their recent peaks, but to remain well above the average price for the past decade. Over the medium term, the world price outlook for PNG's major agricultural exports is mixed, with cocoa and palm oil prices rising slightly, while copra and coffee prices gradually decline. Price projections for 2007 to 2011 are set out in Table 3 in Appendix 3.

7.3.3 Petroleum and Mining

The mining and quarrying sector is expected to grow strongly in 2007, reflecting increased gold production from the major mines and the expansion to full production at some newer, smaller mines.

Gold production from the Lihir mine is expected to increase significantly in 2007, in line with recent capital investment and the implementation of the mine plan. Production from the Porgera mine is expected to recover somewhat in 2007, as problems with the collapse of part of the mining wall are addressed. The smaller Kainantu and Sinivit mines commenced

production in 2006 and are expected to have their first full year of production in 2007, while the Simberi mine is expected to commence operations in late 2007. On the other hand, production from the Ok Tedi mine is projected to decline slightly in 2007, reflecting expected low ore grades.

Over the medium term, mining and quarrying production is forecast to grow by an average of around 9 per cent per year, reflecting improved production from existing mines and the commencement of production at Hidden Valley in 2008. Moreover, with several other projects at various stages of development, the outlook for the mining sector in the longer term is promising.

That said, reflecting the volatile nature of the industry, the mining and quarrying sector's contribution to economic growth is expected to fluctuate significantly from year to year.

In the petroleum sector, contraction of 3.2 per cent is expected in 2007 following strong growth of 13.7 per cent in 2006. This reflects the natural decline in production from existing mature fields (particularly Kutubu and Gobe) being only partially offset by increased production from Moran and South East Mananda.

Over the medium term, oil production is projected to continue its trend natural decline, falling from around 19 million barrels in 2007 to 10 million barrels in 2011. This outcome reflects natural depletion of reserve levels from the country's existing oil fields. Production from any new discoveries is not likely to begin before the end of the projection period to offset the decline in production.

In keeping with the Government's continued commitment to the commercialization of PNG's substantial gas reserves, the medium term projections assume that commercial gas production will commence in 2009.

In terms of prices, gold price is anticipated to remain at 2006 level. In contrast copper prices are forecast to be lower in 2007. Over the forecast period, the US dollar price for gold is assumed to remain around US\$450 per ounce. The copper price is forecast to progressively return closer to its historical trend over the medium term, reflecting the projected supply response to sustained higher prices. Price estimates for 2007 to 2011 are set out in Table 3 in Appendix 3.

The US dollar crude oil price is projected to remain high at 2006 level. It now appears clear that oil producers have not invested enough for supply to grow by more than demand over the medium term. This means that it is likely that the oil price will remain around current average levels over the medium term. Accordingly, the oil price is assumed to remain at around US\$60 per barrel over the medium term.

7.3.4 Other Sectors

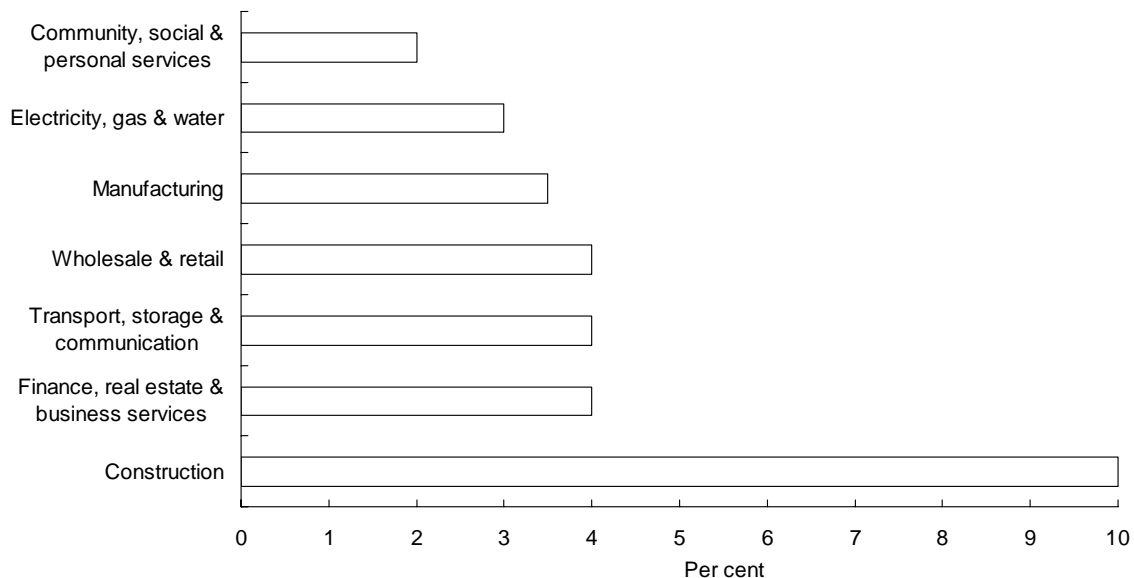
While less information is available on prospects for the non-commodity sectors of the economy, most sectors of the economy are expected to contribute to economic growth in 2007, in line with general improvement in business conditions from sustained period of macroeconomic and political stability and the increased focus of Government expenditure on the maintenance and rehabilitation of public infrastructure.

The construction sector in particular is projected to drive economic growth in 2007 by growing at 10 per cent, reflecting the first year of construction at the Ramu Nickel mine and significant Government expenditure on the rehabilitation of essential public infrastructure.

In addition, several other non-commodity sectors are expected to benefit from the development of several minerals projects over the short to medium term. More generally, growth in most sectors is expected to be underpinned by the strong growth in leading sectors of the economy stimulating domestic demand.

That said, the medium term outlook for the non-commodity sectors depends on continued macroeconomic stability and on addressing structural issues impeding the economy's competitiveness and productivity.

Figure 21: Sectoral Growth in Non-commodity sectors in 2007



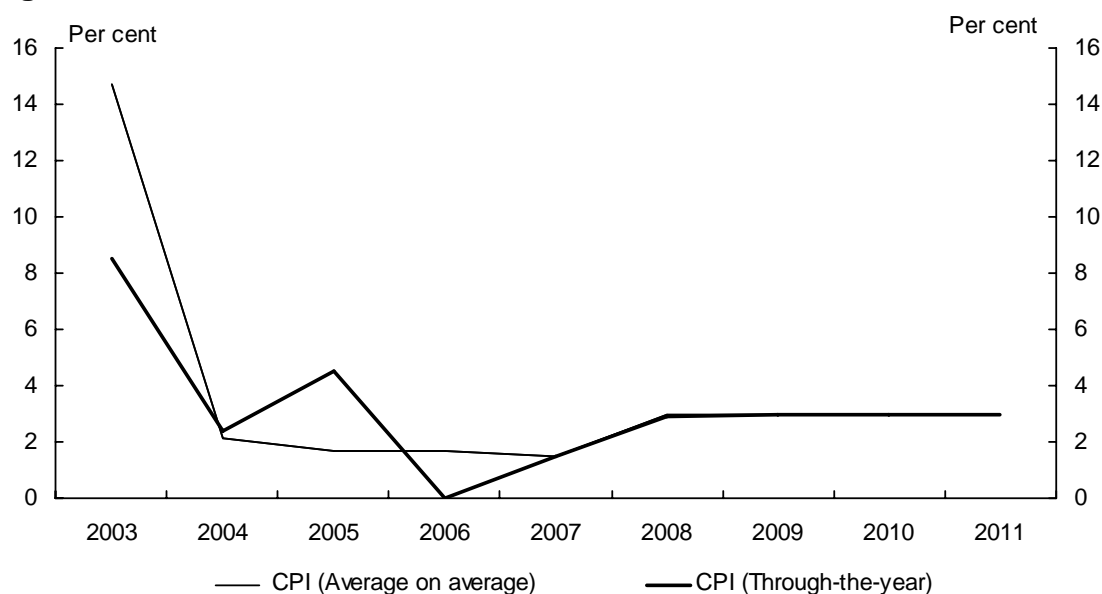
Source: Department of Treasury

7.4 PRICES

Annual average inflation, as measured in the consumer price index (CPI), is projected to be 1.5 per cent in 2007. This positive outlook reflects continued fiscal discipline, a stable exchange rate and assumed stabilization of world oil prices. Moderate wage increase policies, increasingly underpinned by productivity increases, have also played an important role in keeping inflation low.

With inflation now having been low for some time, inflationary expectations have also moderated and this should help lock in lower inflation over the medium term.

Over the medium term, annual average inflation is expected to average around 3 per cent, reflecting the assumption of continued fiscal discipline and sound monetary and wages policies.

Figure 22: Inflation Outlook

Source: Department of Treasury, NSO

7.5 EMPLOYMENT AND WAGES

The outlook for formal employment is expected to continue to improve in 2007, reflecting increased private sector investment, particularly in the minerals sector, and increased expenditure on public sector infrastructure.

Informal sector employment is also expected to increase, although this will depend, among other things, on the flexibility allowed to the sector; an overly regulated informal sector will not meet consumer demand or recognize its employment potential.

Solid employment growth will depend on a broad economic recovery. While mining production boosts output, it is not labour intensive and contributes very little directly to employment. A sustained pickup in employment requires broader economic growth, particularly in agriculture and tourism, the informal sector and formal sector activities such as building and construction, transport, manufacturing, wholesale and retail and business services.

The Government has allocated a significant amount of the windfall gains expected to be received by the end of 2007 to addressing impediments on business, including inadequate transport infrastructure and unreliable or unavailable power supply and telecommunications in rural areas, in addition to providing direct support for major agricultural projects.

The productivity-based wage agreement implemented in the public sector for 2004 to 2006 has supported the general growth in employment. Continued moderate growth in nominal wages based on productivity will help avoid inflationary pressures, increase real wages and support the outlook for stronger growth in private sector employment.

7.6 BALANCE OF PAYMENTS

The Balance of Payments position has continued to improve in 2006, with a current account surplus of K2.5 billion (14.2 per cent of GDP) projected in the year, following the K2.0 billion (12.9 per cent of GDP) current account surplus recorded in 2005, primarily driven by the continued rise in the world price of PNG's mineral commodity exports.

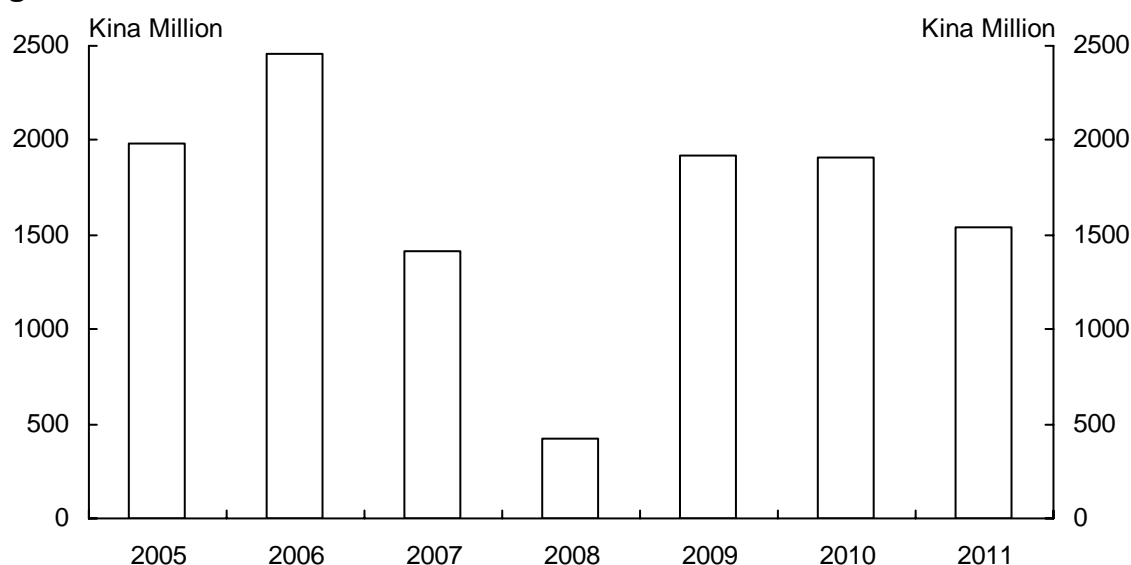
The current account surplus is expected to decline in 2007 to K1.4 billion (7.9 per cent of GDP).

This mainly reflects the impact of the flow of goods and services and capital flows associated with the Ramu Nickel project and the commercial development of PNG's significant gas reserves. The projects bring with them substantial capital inflows which will be used to fund substantial capital imports (and to a lesser extent, increased domestic production) for the project.

The expected reduction in the current account surplus in 2007 and 2008 does not reflect any excess demand pressures or underlying structural imbalances in the economy. Rather, the capital inflows reflect a response to projects potentially yielding a high rate of return. The physical capital investment, which will largely be imported and which the flows will fund, will generate a long-run revenue stream, which will be very positive for PNG's external accounts.

In addition, the value of merchandise exports is expected to decline somewhat in 2007 to K13.3 billion, reflecting the assumed decline in the world price for copper, and an expected moderate decline in oil production.

Figure 23: Current Account Balance



Source: BPNG for 2005, Department of Treasury for 2006 to 2011

7.7 MONETARY POLICY

Monetary policy formulation and implementation is the independent responsibility of the Bank of Papua New Guinea.

Interest rates have eased substantially over the past two years in line with lower inflation and inflationary expectations and increased liquidity in the financial system.

The Government's policy is that the exchange rate should be determined by the market and implemented by an independent central bank. Consistent with Government policy, the exchange rate will continue to be set by the market in 2007, with the Bank of Papua New Guinea using foreign reserves only to perform the role of appropriately managing short term exchange rate volatility.

The Government will continue to support the conduct of monetary policy through a continuation of prudent fiscal policy, the progressive shift to a productivity-based wages policy and the allocation of windfall gains to capital investment in areas that will improve the productivity of the economy.

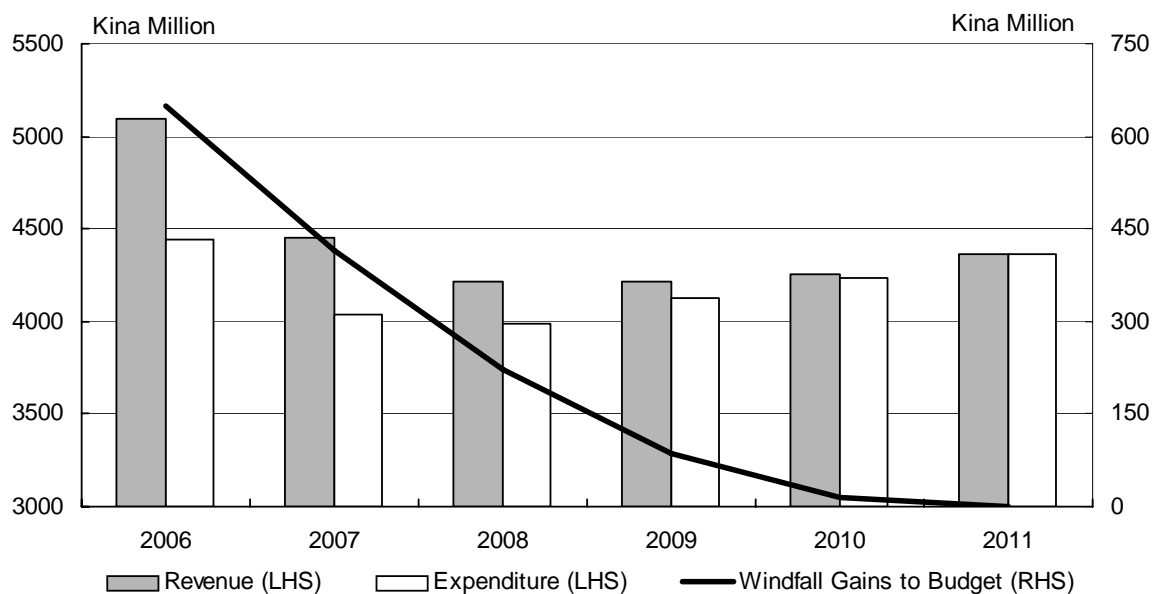
7.8 MEDIUM TERM FISCAL OUTLOOK

7.8.1 Overview

The medium term fiscal outlook has been prepared in the context of the Medium Term Fiscal Strategy (MTFS) and conservative and achievable estimates for economic growth and revenues.

Total Revenue and Grants are projected to decline over the medium term, as the decline in revenue from the minerals sector more than offsets continued growth in non-mineral sector. This revenue outlook means that to ensure consistency with the MTFS, total government expenditure is also forecast to decrease over time. This highlights the importance of the Government's approach of ensuring windfall gains in 2006 and 2007 do not get built into ongoing recurrent and development expenditure.

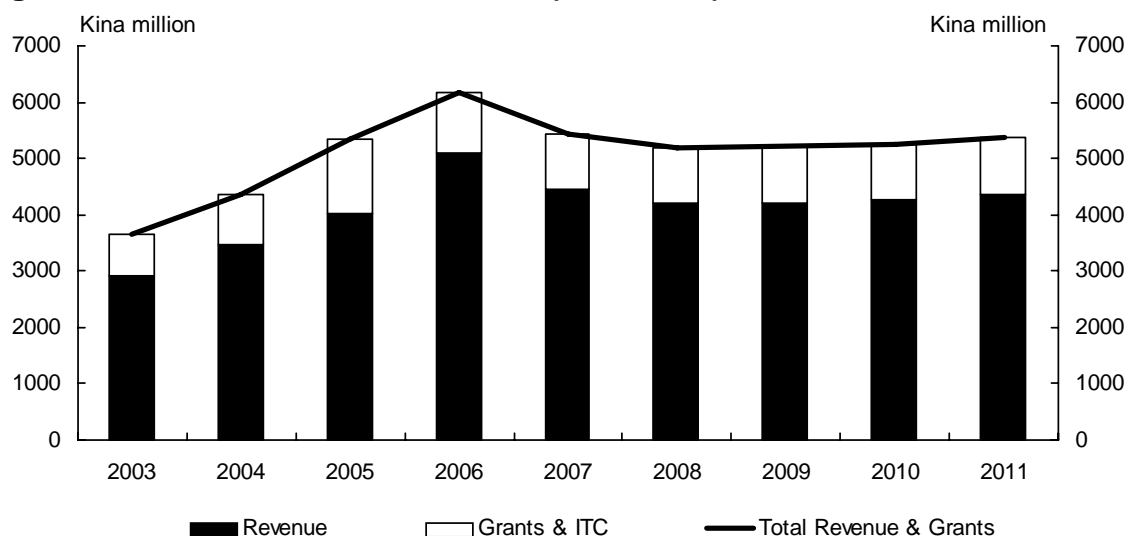
Figure 24: Estimated Windfall Gains to Budget



Source: Department of Treasury.

7.8.2 Revenue and Grants

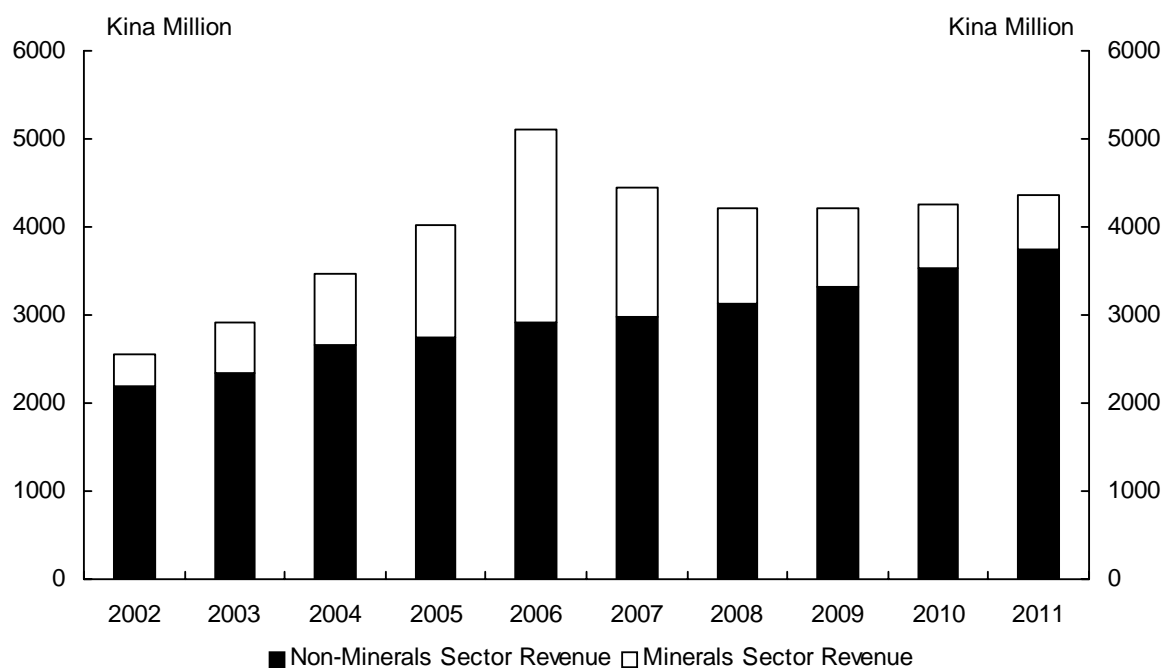
Total Revenue and Grants are forecast to fall steadily over the medium term, from K5,421.6 million in 2007 to K5,375.6 million in 2011, primarily driven by lower minerals sector revenue in the medium term. This decline is greater when expressed as a proportion of GDP, with Total Revenue and Grants projected to fall from 30.3 per cent of GDP in 2007 to 25.0 per cent of GDP in 2011. In addition to weaker minerals sector revenue, this reflects several projects (such as the Ramu Nickel project) that contribute to GDP not initially being either in a position to, or required to, pay income tax.

Figure 25: Total Revenue and Grants (2003-2011)

Sources: Department of Treasury, Department of National Planning and Monitoring.

7.8.2.1 Revenue

Government Revenue is projected to fall from K4,457.1 million in 2007 (24.9 per cent of GDP) to K4,359.1 million in 2011 (20.3 per cent of GDP). As illustrated in the Chart below, this reflects minerals sector revenue returning to more moderate levels over the medium term, while non-mineral sector revenue continues to grow in line with economic growth.

Figure 26: Minerals & Non-Minerals Sector Revenue (2002-2011)

Source: Department of Treasury.

7.4.2.1.1 Tax Revenue

Tax Revenue is projected to fall from K4,129.9 million in 2007 to K4,113.3 million in 2011.

Mining and Petroleum Taxes are projected to decline from K1,292.8 million in 2007 to K530.2 million in 2011. This reflects several reasons including the natural decline in oil production, easing of mineral commodity prices from current historically high levels and production from several new projects (such as Ramu Nickel) not initially being subject to income tax.

Minerals sector tax revenue is also affected by the phasing out of the Mining Levy, with 2007 being the last year of collections.

7.4.2.1.2 Non-Tax Revenue

Non-Tax Revenue is projected to decline from K327.2 million in 2007 to K245.8 million in 2011, primarily reflecting lower dividends from the State's 15 per cent share of the Ok Tedi mine, as world copper prices decline.

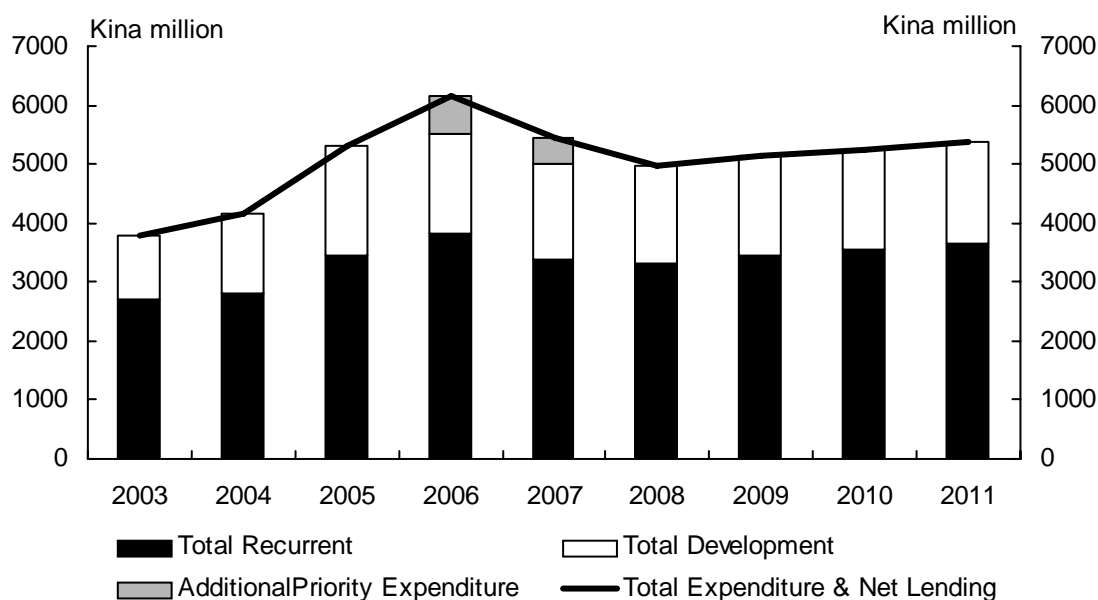
7.8.2 Grants

As Grants are provided at the discretion of donors, a technical assumption is made that Grants are constant in real terms over the medium term. This implies that Grants will decline as a share of GDP over the medium term.

7.8.3 Expenditure and Net Lending

Total Expenditure and Net Lending is projected to decrease from K5,456.6 million in 2007 (30.5 per cent of GDP) to K5,375.6 million in 2011 (25.0 per cent of GDP). This projected reduction in expenditure is consistent with the projections for Revenue and Grants and the fiscal targets in the *Medium Term Fiscal Strategy*.

Figure 27: Total Expenditure and Net Lending (2003-2011)



Sources: Departments of Treasury, National Planning and Monitoring.

7.8.3.1 Recurrent Expenditure

Total Recurrent Expenditure is projected to increase from K3,370.0 million in 2007 (18.8 per cent of GDP) to K3,654.8 million in 2011 (17.0 per cent of GDP).

Total Government personal emoluments expenditure is projected to increase by an average annual growth rate of around 3 per cent over the medium term. The expected growth in National Department personal emoluments expenditure includes provisions for superannuation contributions to reflect the Government's contribution rate increasing to 8.4 per cent in 2009 and future moderate public sector pay rises based on productivity.

Goods and Services Expenditure by National Departments is projected to decline from K1,112.9 million in 2007 to K1,052.3 million in 2011, primarily reflecting the K130 million in expenditure in 2007 for the conduct of elections.

Education subsidy funding is projected to increase to take into account the projected population growth rate and inflation over the medium term.

Goods and Services Transfers by Provincial and Regional Governments allow for the expected cost of the new arrangements for Intergovernmental Government Finance, expected to commence in 2008.

Transfers to Statutory Institutions are projected to increase by the estimated inflation rate over the medium term. Nevertheless, it is expected that over time agencies should become increasingly self-funding and looking to cost savings and productivity gains to fund additional expenditures themselves.

Interest payments and fees on existing debt are projected to increase moderately over the medium term, reflecting the shift away from high-risk external debt to domestic debt, consistent with the Medium Term Debt Strategy.

7.8.3.2 Development Budget

Development Budget expenditure is expected to increase from K1,636.6 million in 2007 to K1,720.7 million in 2011. The projected increase in domestic funds provided for development spending over the medium term, reflects the Government's commitment to shift resources to development spending as specified in the *Medium Term Development Strategy (MTDS)*.

7.8.4 Financing

The Medium term outlook is consistent with the *Medium Term Fiscal Strategy*. As a result, financing requirements are now manageable over the medium term.

7.8.5 Public Debt

Reducing Government indebtedness is a central objective of the Government's *Medium Term Fiscal Strategy*. Fiscal consolidation, coupled with economic growth, is projected to yield successive declines in the debt-to-GDP ratio, from current levels of 42.5 per cent of GDP in 2006 to 32.9 per cent of GDP in 2011.