

2003 TARIFF REVIEW

*A Review
of the Tariff
Reduction Program*

*Commissioned
by
the Independent State
of
Papua New Guinea*

October 2003

Foreword

Rt Hon Sir Michael Somare, CH
Prime Minister

It is my honour and pleasure to present to you the Report of the 2003 Tariff Review Taskforce.

In presenting this Report, the Tariff Review Taskforce is mindful of the responsibility of government to provide the necessary policy, legal and administrative framework for the private sector to play its part in the development of our country. All governments want the best for their people and the country. Quite often this requires making judgements between competing interests. Tariff policy poses this inherent dilemma.

The task of getting the right balance in setting trade policy is made harder when groups with vested interests appeal to nationalistic sentiments for continued support. There is no argument that tariffs are an important and integral part of a country's trade and industrialization policy. But there is a time and place for their use. If a firm needs a tariff for it to be profitable, the tariff imposes costs on the economy that others have to pay. The government's decision must therefore be made in terms of the net benefit to the economy as a whole. If the firm's activity is in line with the country's comparative advantage, the net benefit is likely to be positive; in which case there will be no need for the tariff to be applied over a long period.

The Taskforce is thankful to you and your Cabinet for giving us this opportunity to advise Government on the impacts of the current Tariff Reduction Program (TRP). In the limited time given, we have consulted widely with the relevant government agencies, with key industry players, and with other interested private sector entities. We have analysed broad economic indicators as well industry-specific measures of rates of protection. While it is impossible to provide exact estimates of the net effect of the Tariff Reduction Program (TRP), there is convincing evidence to suggest that the TRP has been beneficial to the PNG economy.

The effective rates of protection have improved for sectors such as agriculture, mining and the service industry. For manufacturing, the level of protection has been reduced through the TRP but it is still positive for most and, in some cases, it is still quite high. Of greater significance is the impact of the TRP on ordinary Papua New Guineans, particularly the poorest groups. They are definite winners because the prices of the goods they buy with their limited cash incomes are now lower than what they would have been if there were no TRP. It is unfortunate that such benefits have not been obvious because of the overwhelming exchange rate effect on the prices of imported goods.

There is also evidence to suggest that industries whose tariffs have been reduced are making the necessary adjustments to be more competitive. These adjustments are taking place in all cost areas including capacity, labour and marketing. As well, these industries are stepping out and exploring other markets, both within and outside the country.

It is therefore our view that the reduction of tariffs has had a positive impact on the PNG economy and that the scheduled reductions should proceed without change. This view is taken also in recognition of the fact that consistency in government policy is critical for private sector development and investment.

During the course of the review, the Taskforce was assisted by many people in various organizations. The Manufacturers Council was very helpful in arranging presentations to the Taskforce by their members. On behalf of my colleagues I extend our sincere thanks to all who made presentations at the public meetings held in the various locations.

We are also grateful to the hardworking members of the Secretariat to the Taskforce, namely Napa Ipave and Avi Hubert from Treasury, Josephine Waiwai from IRC, and Shaun Larcom, Advisor. Their tireless efforts in assisting the Taskforce in compiling this Report are appreciated. Personnel from other departments were also very helpful to the Taskforce and the Secretariat.

Finally, to my colleagues on the Taskforce, Professor Ron Duncan and James Kiele, it has been a pleasure working with both of you on a Report which I hope will form the basis for a new approach to trade policy and industrial development in PNG.

Dr Ila Temu
Chairman, 2003 Tariff Review Taskforce

TABLE OF CONTENTS

<i>Abbreviations</i>	5
<i>Executive Summary</i>	6
<i>Conclusion</i>	12
<i>List of Recommendations</i>	16
<i>Chapter 1: The 2003 Review</i>	18
<i>Chapter 2: The Tariff Reduction Program of 1999</i>	21
<i>Chapter 3: Summary of Tariff Rates</i>	27
<i>Chapter 4: The Papua New Guinea Economy</i>	31
<i>Chapter 5: International Economy and Interactions with Papua New Guinea</i>	38
<i>Chapter 6: Tariff Reform and its Effect on the PNG Economy</i>	42
<i>Chapter 7: Industry Policy Principles versus Arguments for Suspending the TRP</i>	61
<i>Chapter 8: Tax Policy Principles</i>	68
<i>Chapter 9: Papua New Guinea's Rights and Obligations under International Trade Agreements</i>	72
<i>References</i>	81
<i>Boxes</i>	
<i>Box 1: Ad hoc changes to tariff rates</i>	29
<i>Box 2: Government's side of the bargain</i>	35
<i>Box 3: Effects of a tariff</i>	44
<i>Box 4: Differing industry views on the Tariff Reduction Program</i>	47
<i>Box 5: Summary of consumption patterns in Papua New Guinea</i>	50
<i>Box 6: Improving efficiency in the manufacturing sector</i>	53
<i>Box 7: Trade weighted currency index</i>	57
<i>Box 8: Businesses facing increased operating costs</i>	64
<i>Box 9: Customs administration, enforcement/compliance & misclassification</i>	71
<i>Box 10: Principles of WTO trading system</i>	73
<i>Box 11: List of benefits arising from the WTO system</i>	76
<i>Box 12: APEC 14 Points Collection Action Plan</i>	78

Tables

Table 2.1:	<i>Timetable for Tariff Reduction Program</i>	23
Table 3.1:	<i>Exceptional items: Schedule of reductions</i>	28
Table 4.1:	<i>Social and economic indicators</i>	32
Table 4.2:	<i>Contribution to GDP</i>	32
Table 4.3:	<i>Fiscal balance</i>	34
Table 5.1:	<i>Papua New Guinea's major trading partners</i>	39
Table 5.2:	<i>Total foreign direct investment</i>	41
Table 6.1:	<i>Consumer prices: percentage change</i>	48
Table 6.2:	<i>Purchased goods that are consumed by the poor and tariff rates</i>	49
Table 6.3:	<i>GDP by sector at market prices</i>	51
Table 6.4:	<i>GDP by sector at constant prices</i>	52
Table 6.5:	<i>Effective rates of protection for manufacturing</i>	53
Table 6.6:	<i>Effective rates of protection for agriculture and natural resources</i>	54
Table 6.7:	<i>Effective rates of protection for service industry</i>	55
Table 6.8:	<i>Formal employment by sector</i>	55
Table 6.9:	<i>Employment classified by industry</i>	56
Table 6.10:	<i>Exchange rates</i>	56
Table 6.11:	<i>Balance of trade</i>	57
Table 6.12:	<i>Exports</i>	58
Table 6.13:	<i>Agricultural exports by value</i>	58
Table 6.14:	<i>Agricultural exports by volume</i>	58
Table 6.15:	<i>Mineral exports by value</i>	58
Table 6.16:	<i>Non-agricultural exports by volume</i>	59
Table 6.17:	<i>Top 20 imported goods in Papua New Guinea</i>	59

Figures

Figure 2.1:	<i>Tariff Reductions (1998 - 2006)</i>	23
Figure 4.1:	<i>Inflation (1997 - 2002)</i>	33
Figure 4.2:	<i>Employment growth (non-mining)</i>	34
Figure 5.1:	<i>Papua New Guinea's trade balance versus net services by value</i>	40
Figure 5.2:	<i>Annual average exchange rates, export & import values</i>	40
Figure 5.3:	<i>Export price indices</i>	41
Figure 6.1:	<i>Revenue from tariff reform package</i>	48

Appendices

Appendix 1:	<i>Current PNG tariff rates</i>
Appendix 2:	<i>ABARE report</i>
Appendix 3:	<i>List of organizations & individuals that made submissions</i>

Abbreviations

23	ABARE	Australian Bureau of Agricultural and Resource Economics
28	APEC	Asia Pacific Economic Co-operation
32	AUD	Australian Dollar
32	BOP	Balance of Payments
32	BPNG	Bank of Papua New Guinea
34	CPI	Consumer Price Index
39	ERP	Effective Rate of Protection
41	GATT	General Agreement on Tariffs and Trade
48	GDP	Gross Domestic Product
49	HS	Harmonised System
51	IAB	Industry Assistance Board
52	IMF	International Monetary Fund
53	IPBC	Independent Public Business Corporation
54	IRC	Internal Revenue Commission
55	MSG	Melanesian Spearhead Group
55	MFN	Most Favored Nation
56	MTDS	Medium Term Development Strategy
56	NEC	National Executive Council
57	NRI	National Research Institute
57	PACER	Pacific Agreement on Closer Economic Relations
58	PACTRA	Papua New Guinea/Australia Trade and Commercial Relations Agreement
58	PICTA	Pacific Island Countries Trade Agreement
58	PNGBC	Papua New Guinea Banking Corporation
59	PNG	Papua New Guinea
59	QEB	Quarterly Economic Bulletin
59	SCCP	Sub Committee on Customs Procedures
59	TRIPS	Trade-Related aspects of Intellectual Property Rights
59	TRP	Tariff Reduction Program
59	UN	United Nations
59	USD	United States Dollar
59	VAT	Value Added Tax
59	WCO	World Customs Organization
59	WTO	World Trade Organization

Executive Summary

The 2003 Tariff Review

In the lead up to the 2003 Budget, the Manufacturers' Council of Papua New Guinea sought a temporary suspension of the Tariff Reduction Program (TRP). In response, the Government announced in the 2003 Budget that it would review the TRP, which had been in effect for four years.

On August 27 2003, the Prime Minister appointed Dr Ila Temu as Chair of the Taskforce to review the TRP and Mr James Kiele and Professor Ron Duncan as members of the Taskforce. The Government has undertaken to respond to the Report in the 2004 Budget.

The Tariff Reduction Program of 1999

The intention of the TRP, which began in 1999, was to encourage a more efficient and productive private sector through greater exposure to international competition. At the same time as the TRP began, the VAT was introduced in place of provincial sales taxes and to offset revenue losses from the reduction in tariffs.

This twin policy ensured that revenue concerns were dealt with adequately and was an important change in taxation policy, as tariffs were no longer needed as a *de facto* sales tax.

The 1997 White Paper on the TRP had found that the previous tariff system resulted in relatively high nominal rates of protection for some domestic companies, but made many other companies less competitive by taxing their inputs and raw materials. Therefore, effective protection was undermined by tariffs on inputs and some industries (particularly in the agriculture sector) were negatively protected.

The TRP saw an immediate reduction in tariffs and provided for three rates of tariff (intermediate, protective and prohibitive rates), and an announced schedule of further reductions over the next eight years.

Apart from the White Paper, there have been two major reviews of a tariff policy in Papua New Guinea in recent times. These are the World Bank Review published in 1996 and the Brogan Tariff Review of 1986, both of which are summarised in this report.

Summary of current tariff rates

Under the TRP, most goods can be imported into Papua New Guinea duty free. The only goods that are subject to import tariffs are goods produced, or which could potentially be produced, in Papua New Guinea.

The intermediate rate is currently 20 per cent, the protective rate is 30 per cent, and the prohibitive rate is 45 per cent. These rates are scheduled to decline to 15 per cent, 25 per cent and 40 per cent, respectively, in 2006.

A few exceptional products have tariff rates expressed according to weight or volume. These include beverages, tobacco products and animal fodder.

Another group of items is also treated outside the main tariff categories due to contractual obligations or previously very high levels of protection. These include sugar, salt, veneered and laminated wood. The tariff rates on these items are still quite high. Industry has raised concerns that *ad hoc* changes to tariff rates during the period of the TRP have created an

atmosphere of uncertainty and reduced investor confidence. Some businesses have argued that tariffs should be universally applied and special deals eliminated.

Examples of these *ad hoc* changes to tariff rates are sugar and salt. In 2002, the Government entered into an agreement with Ramu Sugar Limited to maintain a 70 per cent tariff on sugar until 2010. Under the Tariff Reduction Program, the sugar tariff was scheduled to fall to 40 per cent by 2006. In 2003, a tariff of 40 per cent was placed on salt to encourage local production. Previously, there was no tariff on salt.

Domestic Economy of Papua New Guinea

With a GDP per capita of US\$566.00 in 2001, Papua New Guinea is considered a lower middle income country. Compared to other East Asian and South Pacific countries, Papua New Guinea generally scores poorly on economic and social indicators.

The agricultural sector accounts for almost one-third of economic output but provides a livelihood for the majority of Papua New Guineans. The lowly protected agricultural and mining sectors account for over 50 per cent of the economy, compared to the more heavily protected manufacturing sector's contribution of around 9 per cent of GDP.

Despite having significant natural resources and foreign aid, Papua New Guinea has not performed well in recent years. The economy contracted by 2.3 per cent in 2002, after contracting by 1.2 per cent and 2.3 per cent in 2000 and 2001, respectively.

Prospects for 2003 are more optimistic. Treasury has recently upgraded its projected growth forecast from 2.7 to 3 per cent for 2003, due to improvements in the agricultural sector that are mainly driven by expected growth in the forestry and coffee industries in the second half of the year.

Expansionary fiscal policies have led to excessive government borrowing and high interest repayment costs. In 2002, the fiscal deficit reached an all-time high of 4.3 per cent of GDP.

Since coming to office, the Government has recognised the need to tighten fiscal policy. Current policy focuses on controlling expenditure through issuance of monthly warrants. The soon-to-be-finalised Medium Term Development Strategy will set out the national priorities for government spending while the Medium Term Fiscal Strategy will allocate resources in line with those priorities.

Manufacturers generally feel little has improved since the TRP began, and that costs (such as security and power) have risen substantially. This has resulted in a widespread view among manufacturers that they have been unfairly treated in that tariffs have been reduced but there has been little improvement in education and training, law and order, physical infrastructure, shipping, utilities, public sector performance and macroeconomic management.

The International Economy and Interactions with Papua New Guinea

Papua New Guinea is a small and relatively open economy, which is very dependent on trade to purchase imports it is inefficient at producing and to sell exports that it is efficient at producing. International developments affecting Papua New Guinea's major trading partners can therefore have a major impact on the domestic economy.

The world economy grew by 3 per cent in 2002 in year-average real terms. Given continued structural weakness and heightened uncertainties, the IMF expects world GDP growth to be 3.2 per cent in 2003, but to increase to 4.1 per cent in 2004.

Papua New Guinea's two major export destinations are Australia and Japan, which together purchase 35 per cent of Papua New Guinea's exports. The two major sources of imports to Papua New Guinea are Australia and Singapore, which together make up 70 per cent of the total.

Since 1994, the kina has depreciated significantly against all major currencies, including the US dollar.

International commodity price trends for cash crops and mineral commodities have shown considerable fluctuations over time. In recent years mineral prices have increased, while agricultural prices have fallen.

Tariff Reform and its Effect on the PNG Economy

Foreign trade offers opportunities for mutually beneficial exchanges between individuals and firms in different countries, increasing the welfare of the people of the trading countries. Tariffs, which are a tax on imported goods, reduce the benefits of trade.

A tariff on imports is also effectively a tax on exports. This is so because at any given time there is a fixed amount of resources such as capital and skilled labour. Tariffs alter the price relationship between imported and domestically produced goods and divert resources to protected industries at the expense of non-protected industries.

Tariffs also reduce the welfare of consumers. Raising the prices of goods through tariffs means that consumers are unable to purchase as many goods as they would without tariffs. Consumers also substitute away from tariffed goods to goods that do not face tariffs, so tariffs also distort consumption decisions.

The TRP has changed the prices of many goods and services in Papua New Guinea and the price relationships between goods and services. It has therefore impacted on the welfare of consumers and producers—increasing the volume and choice of goods and services that consumers can purchase, while reducing the costs of production of non-protected producers and reducing the profitability of protected industries.

During the period since 1999, Papua New Guinea has undergone considerable structural change and the economy has contracted by around 8 per cent in real terms. In discussing the impact of the TRP on the Papua New Guinea economy, one must separate out these factors and others from the effects of the TRP.

Government revenue from tariffs has decreased considerably since the TRP began from K394 million in 1998 to K84 million in 2002. Tariff revenue now only makes up 2.6 per cent of Government revenue compared to 17.3 per cent in 1998. Total revenue from tariffs, VAT, excise duty and the mining levy in 2002 was K585 million. The Government no longer needs to maintain tariffs for general revenue purposes.

While the prices of many goods have increased in recent years (due to the declining kina and increased costs), the TRP has resulted in these prices increasing less than if the higher tariffs remained. The kina decline has been so large that it has swamped reductions in prices due to the TRP. However, while the price of tinned mackerel, for example, has increased, the 70 per cent reduction in the tariff has ensured that the price has increased much less than if the high tariff remained.

One concrete way to help the poor is to reduce the prices of imported goods consumed by the poor by ensuring that they face minimal or zero tariff rates on those goods. Under the TRP, tariffs on such goods have been reduced substantially, including clothing; soap and cooking oil. Therefore, even though the prices of many staple goods have risen as the result

of inflation, they have risen much less than they otherwise would have, which is of much benefit to Papua New Guinea's poorest citizens.

Under the TRP, salt was to have a zero tariff rate and the tariff on sugar was to be reduced to 40 per cent by 2006. The recent decisions to place a 40 per cent tariff on salt and maintain the 70 per cent tariff on sugar until 2010, while advantaging local salt and sugar producers, diminishes the welfare of the people of Papua New Guinea. This is so especially for the most poor; as Gibson (1998) found, they spend a relatively large proportion of their disposable income on staples such as salt, rice, tinned fish and sugar.

When discussing the impact of the TRP on industry, we cannot ignore the continued depreciation of the kina since 1994. The kina has depreciated by around 60 per cent in nominal terms and 25 per cent in real terms since 1997. The impact of the kina depreciation has swamped any effects of the TRP.

The depreciation of the kina resulted in an increase in the international competitiveness of exporting and import competing industries and should encourage their expansion, and could more than offset the adverse effects of reduced tariffs on assisted industries. The lower kina means that Papua New Guinea producers receive higher kina incomes for their produce, and this provides an incentive to increase output. Also, the fall in the currency reduces demand for imports and provides opportunities for import replacement industries.

Manufacturing has neither declined nor grown in proportion to the rest of the economy since the TRP began. This indicates that the reduced prices of business inputs and the more favourable exchange rate conditions have, for the sector as a whole, at least offset any negative consequences for protected industries from the TRP.

Effective rates of protection (ERPs) account for both tariffs on goods produced and the tariffs on the inputs to produce those goods. That is, ERPs measure the effect of the total tariff regime on the profitability of different sectors and firms. They are therefore useful in examining the effect of the TRP on producers.

Prior to the TRP manufacturing was highly protected. Industries such as beverages and tobacco, sugar, tinned fish, soap, cooking oil and steel production received effective rates of protection in excess of 100 per cent. While the effective rates of protection remain high for many manufacturing industries, all industries have faced a reduction in tariff assistance as a result of the TRP.

From the consultation process there is some evidence to suggest that industries that have received much less tariff assistance as a result of the TRP have become more efficient.

Prior to the TRP, most agricultural producers and natural resource users faced negative rates of protection. That is, the previous tariff regime actually harmed the coffee, cocoa, palm oil, copra, mining, oil and quarrying industries and acted to hamper their growth. Since the TRP began, most agricultural industries and natural resource companies are no longer disadvantaged by the tariff regime. This should compliment the current Government's export driven growth strategy.

Most service industries faced negative rates of assistance prior to the TRP being introduced, and as a sector was the worst affected by the previous tariff structure. However, the TRP has seen considerable falls in negative rates of assistance for most service industries.

While the majority of Papua New Guineans (around 80 per cent) derive their livelihoods from subsistence and semi-subsistence agriculture, agriculture is also the largest employer of labour in the formal sector.

Tariffs have little, if any effect on the total level of employment in the economy as a whole. This is because the employment and production created by tariffs in some industries comes at the expense of employment and investment in other existing and potential new industries whose development is hampered by tariff protection.

Since the TRP began, both exports and imports have increased. The trade surplus has increased from around K1.5 billion in 1998 to around K2.6 billion in 2002, representing a 73 per cent increase in the trade surplus since the TRP began. This means that Papua New Guinea has continued to earn considerably more in export revenue than it has spent on imports since the TRP began; however, much of this increase in the trade surplus is due to the depreciation of the kina.

The dynamic efficiency gains of the TRP are likely to be much larger than the static gains of reduced consumer prices and the one-off gain in overall economic welfare associated with a better allocation of national resources. With the TRP, firms come under more pressure to improve management and production techniques and to understand their markets better. The removal of most tariff assistance for Australian industries in the 1980s, for example, led to widespread restructuring of firm management. Firms demanded managers who were more capable of innovation and of exploring new markets, rather than hiring managers who were skilled at lobbying governments for assistance. During the consultations some firms admitted that the depreciation of the kina and the TRP both contributed to an acceleration of localization and replacement of expatriate employees.

Industry Policy Principles versus Arguments for Suspending the TRP

For an economy to grow, governments need to provide certain goods; goods which the market will not supply. An example is the provision of public goods, which are necessary to establish the framework within which private enterprise and markets can operate efficiently.

Policies to assist industry should be broad-based initiatives to address market and institutional failures through investment in, for example, law and order to secure property rights, education and training, regulation to prevent anti-trust practices, and transport and communications infrastructure.

Industry and firm-specific assistance increases consumer prices, which can particularly affect the poor and involve higher costs (taxes and prices) for other, usually more efficient, industries, thereby reducing national economic output and employment.

The Manufacturers' Council has argued that the TRP should be suspended as the cost of doing business in Papua New Guinea is very high and rising, and that this places Papua New Guinea businesses at a disadvantage in relation to other countries. From the consultation process, it seems that these costs have indeed increased in recent years. While increased costs such as those associated with law and order and utilities have negatively affected the profits of manufacturers, it must be remembered that these increased costs have also negatively affected the profits of non-protected industries such as agriculture, services, and mining.

The best way to deal with these additional costs, however, is by direct means rather than through indirect means. For example, to reduce law and order costs on businesses, it is better to directly address the problem of law and order, rather than by raising tariffs. Tariff increases may increase the profitability of protected manufacturing businesses but they increase the cost of manufactured goods for everyone else in the country.

The TRP has seen many highly protected industries receive less assistance than they did in the past. This may have made manufacturers more concerned with cost increases than before. In the past, due to the extremely high tariff rates, they could easily raise prices to

maintain profits. Therefore, it seems that tariff reform is leading to greater pressure on the Government to confront seriously many of the structural impediments to business in Papua New Guinea.

Tax Policy Principles

The fundamental purpose of taxation is to finance government spending. A tax system should be as efficient, equitable and simple as possible.

Taxes should transfer the required financial resources to government with as little disturbance as possible to the workings of the economy. The TRP has increased the efficiency of the Papua New Guinea taxation system by reducing the average taxation on imported items and reducing the variability of rates.

Those who are better able to bear a greater share of the tax burden should do so. By substantially reducing taxes on many basic household items consumed by the poor, the TRP has improved the equity of the tariff regime.

A tax system should also provide clarity, consistency and stability. While all taxes impose compliance costs on taxpayers and distort production and consumption decisions, an effort should be made to minimise these costs. A number of businesses raised concerns over the lack of consistency of the current customs administration, along with inadequate enforcement of current legislation, high compliance costs, and misclassification of imports.

Papua New Guinea's Rights and Obligations under International Trade Agreements

The current tariff rates and arrangements in Papua New Guinea are in accordance with the WTO/APEC and other international obligations.

Although, tariffs are no longer a barrier to exporting to other WTO member countries (which are PNG's major trading partners), some domestic producers feel disadvantaged by non-tariff barriers such as strict quarantine rules in some countries which continue to hinder PNG's exports.

Conclusions

TRP is achieving its objectives

The purpose of the TRP was to encourage a more efficient and productive private sector through greater exposure to international competition and reduce the burden of tariffs on consumers and businesses. The tax reform package also replaced tariffs with the VAT as a major source of Government revenue.

The TRP is leveling the playing field for domestic producers

The TRP has seen a reduction in tariff assistance for the manufacturing sector, however assistance for some manufacturers remains at very high levels.

The TRP has also led to considerable declines in negative rates of assistance for most agricultural, natural resource and service industries. Therefore, due to the TRP these industries are, for the most part, no longer disadvantaged by the tariff regime.

The TRP has promoted efficiency, not harmed employment levels and exports have increased

There is evidence to suggest that the TRP has promoted efficiency among firms that were previously very highly assisted. Efficiency improving measures were frequently mentioned such as reducing expatriate staffing levels and improving management and distribution.

From the available data, there is no evidence to suggest that the TRP has negatively affected aggregate employment levels in manufacturing or in the economy as a whole.

Since the TRP began, both exports and imports have increased. The trade surplus has increased from around K1.5 billion in 1998 to around K2.6 billion in 2002, representing a 73 per cent increase in the trade surplus since the TRP began. This means that Papua New Guinea has continued to earn considerably more in export revenue than it has spent on imports, however much of this increase in the trade surplus is due to the depreciation of the kina.

The TRP has benefited consumers including the poor

The TRP has benefited consumers, particularly the poor by reducing tariffs on basic items. One concrete way to help the poor is to reduce the prices of imported goods consumed by the poor by ensuring that there are minimal or zero tariff rates on those goods. Under the TRP, tariffs on goods such as clothing, tinned fish, soap and cooking oil have been reduced substantially.

While the prices of many goods have increased in recent years (due to the declining kina and increased costs), the TRP has resulted in these prices increasing less than if the higher tariffs remained. The kina decline has been so large that it has swamped reductions in prices due to the TRP. However, while the price of tinned mackerel, for example, has increased, the 70 per cent reduction in the tariff has ensured that the price has increased much less than if the high tariff remained.

Therefore, even though the prices of many staple goods have risen as the result of inflation, they have risen much less than they otherwise would have, which is of benefit to Papua New Guinea's poorest citizens.

Tariffs are no longer important for general revenue purposes

The Government no longer needs to maintain tariffs for general revenue purposes. At the same time as the TRP began, the VAT was introduced in place of provincial sales taxes and to offset revenue losses from the reduction in tariffs. This policy package has been successful and tariff revenue now only makes up 2.6 per cent of Government revenue compared to 17.3 per cent in 1998. In 2002 revenue from tariffs, VAT, excise duty and the mining levy was K585 million, compared to only K394 million from tariffs in 1998.

A conducive environment for investment

The economy as a whole seems to be improving, Treasury has recently upgraded its projected GDP growth forecast for 2003 from 2.7 to 3 per cent.

However, we recognize that the Government needs to address the economic concerns of the private sector, which include the need for better law and order, improved physical infrastructure, good governance and reduced corruption, sound macroeconomic management (low inflation, low interest rates and a stable exchange rate), control over public expenditure, and privatization of utilities to improve their reliability and reduce their prices. Suspending the TRP will not directly address these problems, nor do we consider the suspension of the TRP to be an appropriate policy to address them.

The TRP has seen many highly protected industries receive less assistance than previously. This has made manufacturers more concerned with controlling costs than before. In the past, due to the extremely high tariff rates, they could more readily raise prices to maintain profits. Therefore, it seems that tariff reform is leading to greater pressure on the Government to confront seriously many of the structural impediments to business in Papua New Guinea.

While increased costs associated with public services such as law and order, transport and utilities have adversely affected manufacturers, these increased costs have also adversely affected the other sectors - agriculture, services, and mining.

What is required is a direct and concerted effort by the Government to address all of these matters. Failure by the Government to address these problem areas could lead to further deterioration of the investment and operating environment, to increased costs (e.g. security) and erosion of confidence amongst an already disheartened private sector in PNG.

We note that the Government has yet to deregulate the domestic shipping industry, which was one of the measures identified in the White Paper of 1996.

Although compliance has increased since the TRP, customs administration, monitoring and enforcement should be improved, as misclassification and under valuation of imports is taking place.

Risk of Losing the Gains of the TRP

The TRP sends a strong message to both local investors and the international community that Papua New Guinea is serious about reforming its economy to make it more productive and internationally competitive.

Whereas the TRP appears to have had the desired effect on the economy and on investors, the risk of losing these gains with the suspension of the TRP is enough reason to maintain the current TRP schedule. Consistent signals from the Government about its intentions on public policy matters are needed for the private sector to maintain confidence in Government policies. Investors intending to invest in export industries or import replacement industries

alike require certainty and predictability in government decisions and actions. It must always be remembered that international investors have a wide choice of countries in which to invest. A country's policy credibility is an important factor in their decisions.

Furthermore, suspension of the TRP would be inflationary and would further reduce the already weak domestic demand. During the consultation process a common sentiment expressed by many speakers was the lack of demand for products because of reduced disposable income and erosion of purchasing power due to inflation. In fact, some companies said that they are willing to implement the proposed increase in the minimum wage recommended by the Employers Federation but are hesitant to do so unless all companies observe it.

PNG's obligations under WTO, APEC and other trade agreements.

When Papua New Guinea joined the WTO, it committed itself to the current tariff rates, which are binding. Whilst we note that the Government may have contravened its WTO obligations by not notifying the WTO when it introduced a higher rate for salt and has extended the existing high tariff rate of 70 per cent for sugar beyond the WTO agreed schedule for reduction in 2006, we do not view these as justifiable reasons for Papua New Guinea reneging on all or any other tariffs or changing the current schedule for reduction in tariffs. Papua New Guinea cannot act unilaterally to increase the levels of bound tariffs and will need to renegotiate the rates with other members of the WTO. Whilst failure to comply with WTO or any trade agreement can lead to counter measures being instituted by an affected country, parties are normally hesitant to resort to such measures unless it is justified by strong economic reasons or other strategic reasoning. Nevertheless, it is good international decorum for Papua New Guinea to observe international rules and obligations it has voluntarily signed up to.

Although tariffs are no longer a barrier to exporting to other WTO member countries (which are PNG's major trading partners), there is a perception amongst some exporters that non-tariff barriers such as strict quarantine rules continue to hinder PNG's exports. Government-to-Government discussions could help to overcome these problems. Government assistance could also be given to help develop uniform standards for export products.

Lack of transparency and special deals

Special deals and *ad hoc* changes to tariffs should be eliminated, as the costs to the economy as a whole far outweigh the benefits to the favoured producers.

Industry has raised concerns that *ad hoc* changes to tariff rates during the period of the TRP have created an atmosphere of uncertainty and reduced confidence. Also, the recent decisions to place a 40 per cent tariff on salt and maintain the 70 per cent tariff on sugar, while advantaging local salt and sugar producers, diminish the welfare of the people of Papua New Guinea. This is especially so for the most poor as they spend a relatively large proportion of their disposable income on such staples.

The current *ad hoc* nature of the approval process for special tariff rates creates uncertainty and inequality in the treatment of investors by the government. There is a lack of consultation between the key government agencies (Departments of Treasury, Trade & Industry, and IRC) which are responsible for determining tariff rates. This problem is compounded by the lack of will within the Government to activate the Industry Assistance Board. The Industry Assistance Board Act has been in place since 1985 but no new members of the Board have been appointed since the early 1990s when the terms of the then members expired.

The revival of the IAB would allow for a transparent and consultative process with concerned stakeholders in determining any new tariff assistance. Before any assistance is given, a "public interest test" should be conducted in the form of an inquiry to measure the benefits of this assistance to the country as a whole.

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Recommendations

The Taskforce makes the following five recommendations:

1. *That the existing schedule of the Tariff Reform Program remains in place.*

The Taskforce believes that on the whole the TRP has been successful in creating a more competitive manufacturing sector; it has also reduced the negative rates of assistance facing the agriculture, mining and petroleum and service industries; and it has benefited consumers, particularly the poorest.

Maintaining the announced schedule of tariff reductions will ensure that Government policy in the area of tariff remains consistent and predictable and that the benefits of tariff reform continue. Protected manufacturing industries have over two years before the next reduction in tariffs.

2. *The Government should intensify its efforts to reduce the structural impediments facing Papua New Guinean businesses in the following areas.*

- *Law and order;*
- *Physical infrastructure;*
- *Education and training;*
- *The domestic shipping industry;*
- *Public utilities;*
- *Public sector performance; and*
- *Macroeconomic management.*

These structural impediments in the PNG economy involve high and rising costs for all parts of society.

The Taskforce acknowledges the efforts already made by the Government to reduce the structural impediments to the PNG economy (such as its privatisation program and the national roads program) and that it takes time to make progress in these difficult areas. However, the Government's efforts need to be continued and intensified in order to create a conducive environment for business.

3. *That the TRP be continued beyond 2006. From 2009, the prohibitive rate and the protective rates should be reduced by 5 per cent every three years until all tariffs are at 15 per cent.*

All remaining non-advalorem tariff rates should be converted to the protective rate by 2006.

All goods should be subject to the uniform tariff rate of 15 per cent by 2021, except for those where it can be convincingly demonstrated that exceptional circumstances apply and that higher tariff would be in the 'public interest'.

Given its success, the Taskforce believes the TRP should be continued so that the majority of Papua New Guinean businesses and consumers continue to benefit from the tariff reform. However, the Taskforce sees no benefit or justifiable logic in having three tariff rates. A universal rate will greatly improve and streamline customs administration.

44. That the Government **should revive the Industry Assistance Board (IAB) and amend the Act to make it an independent statutory body and provide it with a sufficient budgetary allocation to perform its tasks.**

The role of the board should be broadened to include the WTO and APEC secretariats currently located within the Department of Trade and Industry and Department of Prime Minister.

The IAB should have not more than three members, and should include at least one consumer group representative.

In response to calls for special tariff assistance or customs administration issues, submissions should be brought to the IAB for evaluation using the following mandatory process:

- The IAB should first advertise that such assistance is being sought and call for public submissions. The IAB should consult with stakeholders, including affected businesses and consumer groups, and hold at least one public hearing.
- The IAB should evaluate the submissions, and make a recommendation to the National Executive Council for consideration.
- In evaluating the submissions, the IAB should make its recommendation based on the "public interest" test and undertake any necessary social cost-benefit analysis.

As tariffs are a tax, the Board should be located in the Minister for Treasury and Finance's portfolio and the Minister should also appoint board members.

This recommendation is aimed at ensuring that any future changes to tariff rates are transparent and that a proper evaluation process is followed.

45. That Customs **administration should be improved in the areas of enforcement, monitoring and classification.**

Improvement in these areas would ensure that protected industries receive the assistance that they are entitled to and ensure that the appropriate amount of tariff revenue is collected.

Chapter 1: The 2003 Tariff Review

Background to the review

In the lead up to the 2003 Budget, the Manufacturers' Council of Papua New Guinea sought a temporary suspension of the Tariff Reduction Program (TRP). The Council argued that the TRP was entered into during a time of greater economic stability, and that the combined impact of tariff reductions and the economic downturn was causing an erosion of the manufacturing base and leading to increased imports and reduced exports.

In response, the Government announced in the 2003 Budget that it would review the TRP, which had been in effect for four years. In his Budget Speech, the Minister for Finance and Treasury, the Hon. Bart Philemon stated that it "is now time to take stock of the program, to assess its merits and to see if appropriate rates of protection are being provided to Papua New Guinea based industries."

Subsequently, the National Executive Council decided on the Terms of Reference for the review and for it to be undertaken by a Taskforce of two or three eminent persons with experience in law, economics, international trade or business, supported by a small secretariat based within Treasury. On August 27, the Prime Minister announced the appointment of Dr Ila Temu as Chair of the Taskforce and Mr James Kiele and Professor Ron Duncan as the other members of the Taskforce.

1.1. Terms of Reference

The Terms of Reference require the Taskforce to report by 20 October 2003 after having inquired into:

- the level and composition of imports and exports;
- the effective rates of protection provided through import tariffs;
- the benefits, costs and overall effects of tariffs and the tariff reform program to Papua New Guinea, including consumers, employees and businesses (including importers and exporters);
- the extent to which the tariff program is providing incentives or disincentives to value-adding industries in Papua New Guinea, particularly the downstream processing of agricultural goods, minerals and hydrocarbons;
- whether the protection provided to any sector should be varied, based upon the contribution of that sector to the economy and long term sustainability of the industry; and
- the benefits and/or disadvantages arising to Papua New Guinea from international tariff and trade reforms under the APEC and WTO Agreements and other relevant international trade agreements.

In undertaking the inquiry, NEC also directed the Taskforce to:

- bear in mind the Government's desire to improve the overall economy of Papua New Guinea;
- consult with business (including importers and exporters) and consumers;
- take account of other reports and studies on the advantages and disadvantages of protecting manufacturing and agricultural sectors in small, open economies; and
- take account of Papua New Guinea's commitments under APEC, the WTO agreement and other relevant international trade agreements.

The Government has undertaken to respond to the Report in the 2004 Budget.

Four consultative forums were organized with the help of the Taskforce secretariat in Port Moresby, Mt Hagen, Lae and Kokopo to gauge the views of the private sector and members of the public. Advertisements were placed in the daily newspapers and letters were sent out

to individuals and organisations inviting them to make formal submissions to the Taskforce and to attend the consultative forums.

Whilst the Manufacturers Council was better prepared and had its members attending all four regional forums and made formal submissions, many other organizations were not as organized. A number of closed sessions were also held with individual firms that made requests for private briefings. Except for a union representative who attended the Mt Hagen session, consumer interest groups did not attend the consultative forums or make formal submissions to the Taskforce. A separate session was organized for government agencies and follow up meetings were made to obtain further details.

Chapter 2: The Tariff Reduction Program of 1999

2. The Rationale for the Tariff Reduction Program

The Government in November 1995 endorsed a tariff reform program and directed the Internal Revenue Commission to carry out a major overhaul of the tariff structure. The outcome of this was the 1997 White Paper on the Tariff Reform Program (the White Paper) which also drew on the 1996 World Bank review findings.

In 1995, on the invitation of the Papua New Guinea Government, the World Bank had undertaken a tariff review and company survey that was published in 1996. The findings of the World Bank review, along with the Brogan review of 1986, are summarised at the end of this chapter in order to give a historical perspective to tariff reform in Papua New Guinea.

The intention of the Tariff Reduction Program (TRP) of 1999 was to encourage a more efficient and productive private sector through greater exposure to international competition. At the same time as the TRP began, the VAT was introduced to replace provincial sales taxes and offset revenue losses from reduced tariffs. This twin policy ensured that revenue concerns were dealt with adequately. This was an important change in taxation policy, as tariffs were no longer needed as a *de facto* sales tax at the national level.

The White Paper noted that there was plenty of potential to increase exports of manufactured and agricultural products, and that the TRP would make it more profitable for businesses to focus on potentially large export markets.

The White Paper found that two-thirds of imported goods faced a duty of 5 or 11 per cent while the duty rate on the other one third was 40 per cent or higher. The average nominal rate was 22 per cent, while the average weighted tariff against imports was 14 per cent.

The White Paper found that the tariff system resulted in relatively high nominal rates of protection for some domestic companies, but made many other companies less competitive by taxing their inputs and raw materials. Therefore, effective protection was undermined by tariffs on inputs and some industries (particularly in the agriculture sector) were negatively protected.

The White Paper noted that it is generally accepted that some industries in developing countries may require some assistance for a period of time. However, the White Paper concluded that there were better ways to assist industries than by way of tariff protection. The White Paper found that generally the best way to assist industries is in the form of direct subsidies. Direct subsidies are preferred as they are more transparent and give decision-makers a clearer understanding about the costs of industry policy. Also, direct subsidies do not distort import prices at the expense of end users.

For most manufacturing firms, the White Paper concluded that the TRP would lead to a moderate reduction in effective rates of protection, but that this would be less than the reduction in nominal tariffs due to the positive impact of tariffs being removed on inputs to production. The end result would be that while still providing some tariff protection, Papua New Guinea would use its resources more effectively in line with what it produces best (that is, more in line with its comparative advantage).

The White Paper also concluded that the gradual implementation of the TRP would ensure that the transitional costs associated with this structural change would be minimised.

To ensure a positive supply response to the TRP, the White Paper concluded that the Government should intensify its efforts on reducing costs to the private sector. The White Paper found that the Government should assist the private sector by:

- strengthening human resources through better education and training programs;

- concentrating efforts on improving the law and order situation;
- upgrading and maintaining physical infrastructure;
- deregulating the domestic shipping industry;
- improving the supply and lowering the cost of public utilities
- implementing public sector reform to get a more efficient bureaucracy; and
- maintaining a low-inflation macroeconomic policy.

2.1 The Tariff Reduction Program

The Government accepted the recommendations of the White Paper and introduced the TRP in 1999. The TRP was in accordance with Papua New Guinea's WTO and APEC commitments and part of a reform agenda agreed to in exchange for International Monetary Fund-World Bank financial assistance. The program provided for three rates of tariff, an immediate reduction in import tariffs, and an announced schedule of reductions over the next eight years as indicated in the table below.

All provincial sales taxes of 3 to 4 per cent were removed along with import duties of 11 per cent on basic items and a 1.5 per cent import levy. A single rate of Value Added Tax at 10 per cent was introduced.

Table 2.1: Timetable for tariff reduction program (1 January basis) 1998-2006

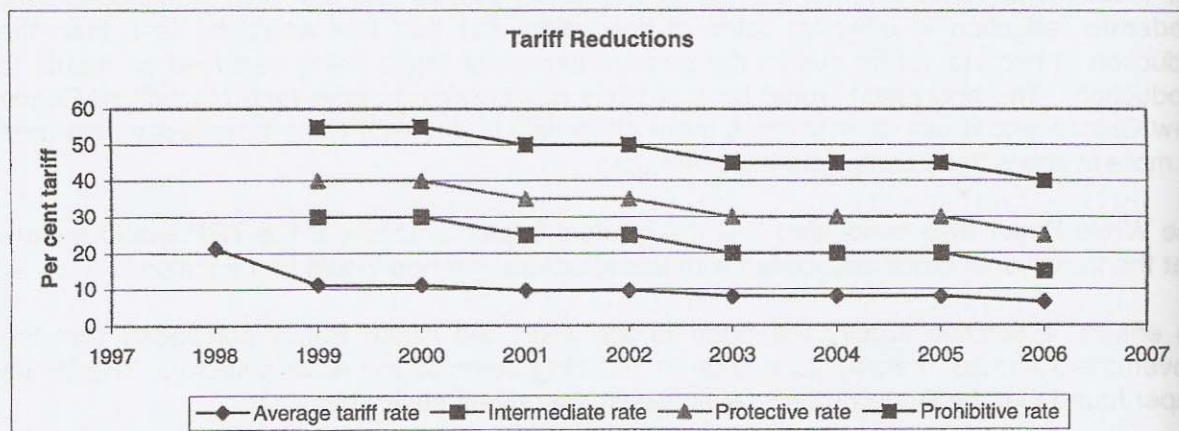
	1999 – 2000	2001 – 2002	2003 – 2005	2006
Intermediate rate	30%	25%	20%	15%
Protective rate	40%	35%	30%	25%
Prohibitive rate	55%	50%	45%	40%

Source: White Paper on Tariff Reform

Under the TRP, most goods can be imported into Papua New Guinea duty free. The only goods that are subject to import tariffs, are goods produced, or which could potentially be produced, in Papua New Guinea.

The protective rate is the principal duty rate. Goods in this category include most fish, coffee and tea. The intermediate rate applies to goods that constitute 'intermediate goods' in the production process (that is, they are utilised by other businesses or manufacturing companies). The prohibitive rate applies to a limited number of goods and is designed to act as a major deterrent to certain imports. The prohibitive rate applies to products such as fruit and vegetables, tinned mackerel, cigarettes, veneer and sugar. Figure 2.1 shows legislated tariff reductions from 1998 to 2006.

Figure 2.1: Tariff Reductions: 1998 - 2006



Source: White Paper on Tariff Reform and Secretariat Calculations

Note: Average tariff is lower because of zero rates for other items.

2.2 Manufacturers' Council views on the TRP

On 25 November 2002, the Manufacturers' Council made a submission to Government that the TRP should be temporarily suspended.

The Council argued that continued tariff reform would result in erosion of the manufacturing base, leading to increased imports and reduced exports.

The Council further argued that the suspension of the TRP was necessary due to:

- the high and rising costs of doing business in Papua New Guinea;
- the uneven nature of international trade; and
- increase government revenue.

The Council saw high and rising costs of doing business associated with law and order, poor infrastructure, the geographical spread of markets, high financing costs and the lack of economies of scale.

The Council suggested that:

- the reduced output in the resources sector will see Papua New Guinea facing current account deficits in the medium to long term. The Council noted, for example, that Australia currently exports approximately 25 times more food and beverages in value to Papua New Guinea than the reverse and that further reductions in tariffs will aggravate this situation;
- that developed countries, while having low tariffs, apply significant 'technical barriers to trade' and that these are used to restrict Papua New Guinean exports;
- Papua New Guinea does not have anti-dumping legislation in place in order to deal with unfair trade practices;
- that the suspension of tariff reform would not contravene WTO and APEC commitments and that the World Bank has indicated that this is not a major issue that would jeopardise assistance; and
- that the suspension of TRP would generate K11 million in additional Government revenue for 2003.

The Council concluded that the TRP should be suspended and that it should only be resumed after:

- three years with a review one year prior to this; or
- a meeting of a certain target (such as an agreed GDP growth percentage).

2.3 Reactions of the IMF to the TRP

In their recent Article IV assessment of Papua New Guinea, the IMF concluded that the TRP is on track and that Papua New Guinea is rated one (least restrictive) on the Fund's index of trade restrictiveness.

2.4 Summary of past tariff reviews

Apart from the White Paper, there have been two major reviews of tariff policy in Papua New Guinea in recent times. These are the World Bank Review published in 1996 and the Brogan Tariff Review of 1986.

The World Bank Tariff Review

The Papua New Guinea Government invited the World Bank to undertake a tariff review and company survey that was published in 1996.

The World Bank review found that protection levels were high, but at the same time the company survey found that some companies and sectors were internationally competitive. The review found that most protection in Papua New Guinea has been justified by the infant industry argument, despite the average age of companies being 17 years. However, the review concluded that 'in terms of the infant industry argument, the average Papua New Guinea company is grown up and should be able to fend for itself without such high levels of protection'.

The World Bank did warn against rapid liberalisation and noted that certain changes need to take place before companies could absorb the increased competition that a reduction in tariffs would bring about.

The review noted that the private sector must strive to reduce production costs and use resources more efficiently. The review also noted that the Government must take steps to reduce private sector costs, as businesses faced high costs that they cannot directly influence. These included costs associated with law and order, high transport costs (by sea, air and road), high labour costs and high costs associated with electricity and telecommunication use.

The review concluded that without supplementary Government policies to reduce the cost of doing business in Papua New Guinea, tariff reform would not deliver the expected supply response from the private sector.

The review also criticised previous industry policy followed by Papua New Guinea, which singled out individual companies that were often set up as domestic monopolies. The report found that this kind of industry policy tends to encourage economically unviable developments that can have significant negative downstream impacts on other producers, if intermediate goods (as in the case of cement) are involved, or on consumers, if final goods (as in the case of canned mackerel) are involved.

The World Bank review recommended that industry policy should instead provide relatively uniform protection to all manufacturing and agricultural industries to develop a market-based economy with the private sector being the driver of growth.

The review recommended the following principles should guide tariff reform:

- the primary purpose of import duties should be to provide protection to domestic production. However, protection should not be unlimited due to the costs associated with protection. These being – higher prices for consumers and resource allocation costs;
- there should be adequate and reasonable (effective real) protection for existing and potential producers;
- variations in protection should be minimal across sectors in order to give equal incentives to different activities;
- administrative and economic efficiency should be achieved;
- VAT and excise duties should be used for revenue purposes; and
- that the timetable and structure of the reform should be pre-announced so that companies know what has to be done to absorb the changes and be able to access any assistance that may be available to them to adjust to a more competitive environment.

To put these principles into effect, the World Bank review recommended that the following structure of indirect taxes and tariffs be introduced in the 1998 Budget:

- a single rate of VAT with few exemptions and a zero rate for exports;
- *ad valorem* excise duties of not more than two rates covering tobacco products, alcoholic and soft drinks, petroleum products, cars and other luxury goods;
- a tariff on imports with a cascading structure from raw materials and machinery through intermediate to final goods with minimum zero rates and no exemptions (as an illustration, this tariff structure could be 5 per cent on capital goods and raw materials; 15 per cent on intermediate goods and 30 per cent on final goods); and
- the long term target should be a uniform tariff rate.

The Brogan Review

A tariff review was undertaken in 1986 by the Working Group on Tariff Policy and Administration chaired by Professor Brian Brogan.

The Brogan Tariff Review recommended that:

- imports should be classified into four broad categories as follows:
 - Essential items – zero rate;
 - Basic goods and inputs (consumer goods and basic materials) – 7.5 per cent;
 - Intermediate goods (goods for which there are satisfactory but not necessarily exact substitutes or goods for which there are domestically produced alternatives) – 25 per cent;
 - Luxury goods – 50 per cent; and
 - Motor vehicles, beverages, fuels and tobacco products.
- tariff changes should normally be made with reference to the Budget; and
- there should be no exempt goods.

The Brogan recommendations aimed to simplify administration, provide a stable framework of industry assistance and raise revenue. The Brogan review saw import duties as a quasi-sales tax.

However, the review argued that for some products tariffs would also provide protection against foreign competition. The Brogan review warned, however, against using tariffs too much to achieve industry policy objectives and advised that:

'long term industrial policy should be targeted at reviewing the structural barriers to the development of Papua New Guinea and creating a sound and stable economic environment, not at improving the relative positions of sectoral interests by using tariffs and other barriers to trade which are essentially short term and redistributive although such expedients could play a role in redressing distortions created by other distortions.'

The Government accepted the broad thrust of the Brogan Review in 1986.

Chapter 3: Summary of Tariff Rates

3. Introduction

This chapter provides a brief summary of current tariff rates under the TRP and tariff changes since the TRP began. For specific tariff rates for all goods imported into PNG please see Appendix 1.

3.1 The Intermediate Rate

The intermediate tariff rate applies to those goods produced in Papua New Guinea or which could be produced here. These goods may be one producer's output while being an input into another producer's production process. Many of these goods have close substitutes. The intermediate rate was gradually reduced from 40 to 30 per cent in 1999, to 25 per cent in 2001, and to 20 per cent in 2003. A final 5 per cent reduction will be made in 2006 to bring the rate to 15 per cent.

3.2 The Protective Rate

The protective rate applies to goods that are also produced in Papua New Guinea or could be produced in Papua New Guinea but which were deemed to require protection for some time. The protective rate was reduced from 55 to 40 per cent in 1999, to 35 per cent in 2001, and to 30 per cent in 2003. The last reduction to 25 per cent will be made in 2006.

3.3 The Prohibitive Rate

The prohibitive tariff rate is very high and thus is intended as a deterrent to imports that attract this rate. The prohibitive rate covers items such as vegetables, fruits and precious stones. Before the tariff reform program, prohibitive rates ranged from 100 per cent to 55 per cent. These rates were reduced to 55 per cent in 1999, to 50 per cent in 2001 and 45 per cent in 2003. The last 5 per cent reduction to 40 per cent will be made in 2006.

3.4 Exceptional items

A few exceptional products are treated outside of the above categories due to contractual obligations or previously very high levels of protection. This category includes items such as tinned mackerel, sugar, salt, and veneered and laminated wood (including plywood). Tariff rates on these items before the reform program ranged from 100 to 85 per cent. Table 3.1 below shows the schedule of reductions.

Table 3.1: Exceptional items: Schedule of Reductions

Description of goods	Pre TRP 1997	Excise	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Mackerel	90	0	70	50	20	15
Cane/ beet sugar& chemically pure sucrose	85	0	82	76	70	70
Plywood, veneered panels & Laminated wood	100	0	95	85	75	40

3.5 Non advalorem items

Another group of products also treated outside the above categories includes beverages, tobacco products and animal fodder. Before the tariff reform program, tariffs on these items were either expressed in percentage terms or according to weight or volume. The rates expressed in percentages ranged from 125 to 55 per cent.

3.6 Developments since the TRP began

In May 2002, the Papua New Guinea Government entered into an agreement with Ramu Sugar Limited to maintain a 70 per cent tariff on sugar. Under the TRP, the sugar tariff was scheduled to fall to 40 per cent by 2006. The 70 per cent tariff on sugar will now expire on 31 December 2010.

In 2003, a tariff of 40 per cent was placed on salt to encourage local production. Previously, there was no tariff on salt.

Also, in 2003 the Department of Trade & Industry announced an import ban on pork, which already enjoys a very high degree of protection. The issue caused considerable confusion among consumers and businesses as the ban could not be enforced since it would have breached WTO requirements.

Through the consultation process, industry raised concerns that *ad hoc* tariff changes outside the TRP have created an atmosphere of uncertainty and reduced business confidence. Arguments were put forward that tariffs should be applied universally and that special deals should be eliminated, so that all domestic manufacturers operate on a level playing field. (See Box 1 for industry views on this matter). *Ad hoc* tariff setting is especially destabilising when one takes into account the lead times involved in planning and launching new products.

Box 1: Ad hoc changes to tariff rates

Arnotts Biscuits (PNG) Limited:

'Tariff policy should be predictable, stable and fair to encourage long term investment. Special deals would be eliminated if tariffs were consistent and universally applied. A consistent tariff policy will encourage investment, create employment and not unduly punish consumers.'

Why is sugar (a matured industry) protected by a 70% tariff when an emerging industry, rice, is totally unprotected?

(Source: Arnotts Biscuit (PNG) Ltd submission, September 2003)

Ramu Sugar

'The reasons Ramu sought to extend tariff assistance were:

- Weakening exchange rate increased production costs.
- 70% of cost of production is subject to exchange rate fluctuation.
- Locally produced sugar was at a disadvantage to imported sugar because of slowing domestic growth in both retail and industrial.
- Plant and equipment is unable to run at optimum levels.
- World sugar prices were and remain at unsustainable levels.
- Current World price (US 6c/lb) is below cost of growing cane for even the most efficient of producers.
- Ramu's domestic prices remain constrained, as its local price is indexed to the NY11 world price.
- Ramu's social and infrastructure cost structure places it at a disadvantage to other producers.
- 'Ramu would not survive without tariff protection and a viable domestic industrial sector.'

(Source: Ramu Sugar presentation at Lae)

Manufacturer's Council of PNG, Lae:

'It is also worth adding some worrying trends that have developed since 1997.

- Increased instances of ad hoc decisions affecting manufacturing such as the imposition of Tariff/Duties on certain inputs ranging up to 30% and the suggestion to place bans on certain categories of products.'

(Source: Manufactures Council of PNG submission, September 2003)

There have been calls to place a tariff on rice imports to encourage the development of domestic production. Such a move would place high costs on consumers and be a

regressive form of taxation. If the Government wishes to encourage development of the rice industry, a preferred option would to be fund agricultural extension programs and research and development in the area of rice production.

Chapter 4: The Papua New Guinea Economy.

4.0 Living Standards

With a GDP per capita of US\$566.0 in 2001, Papua New Guinea is considered a lower middle income country. Compared to other East Asian and South Pacific countries, Papua New Guinea generally scores poorly on economic and social indicators. The living standard of the vast majority of people is poor even by comparison with other developing countries in the region, as indicated in Table 4.1. The household survey conducted by the World Bank in 1996 showed that 41 per cent of the population fell below the poverty line. Hence, poverty alleviation is a major development priority in the Government's Medium Term Development Strategy (MTDS), which is currently being developed.

Table 4.1: Social & Economic Indicators, 2001

	Population growth rate (annual %)	Life expectancy (years)	Infant mortality rate (per 1000 live births)	Illiteracy rate (% of age 15 & above)	GDP per Capita (US\$)
PNG	2.3	57.2	70.0	35.4	566.0
Vanuatu	2.2	68.3	34.0	na	1057.7
Solomon Is.	2.9	68.9	20.0	na	614.0
Samoa	1.3	69.3	20.0	1.3	1464.9
Fiji	0.8	69.3	18.0	6.8	2080.8
Thailand	0.7	69.0	24.0	4.3	1874.2
Indonesia	1.3	66.0	33.0	12.7	501.0

Source: World Development Indicators database, April 2003: World Bank

4.1 Structure of the Economy

The agricultural sector accounts for almost one-third of the Papua New Guinea economy (see Table 4.2). This sector has two components. The market component forms part of the formal sector and comprise commodities such as coffee, cocoa, copra, logs and fish. The non-market component is the agricultural produce that is sold on local markets or used for personal consumption.

The mineral sector accounts for 21 per cent of the economy. Hence, the relatively lowly protected agricultural and mining sectors account for over 50 per cent of the economy, compared to the more heavily protected manufacturing sector's contribution of around 9 per cent.

Table 4.2 Contribution to GDP: 1998 - 2002

Sector	Share of GDP
Agriculture (including forestry & fishing)	30.5%
Mineral	20.8%
Manufacturing	8.7%
Wholesale & Retail	10.2%
Transport	4.9%
Construction	3.9%
Other	20.9%
Total	100.0%

Source: Treasury Department

4.2 Recent Macroeconomic Developments

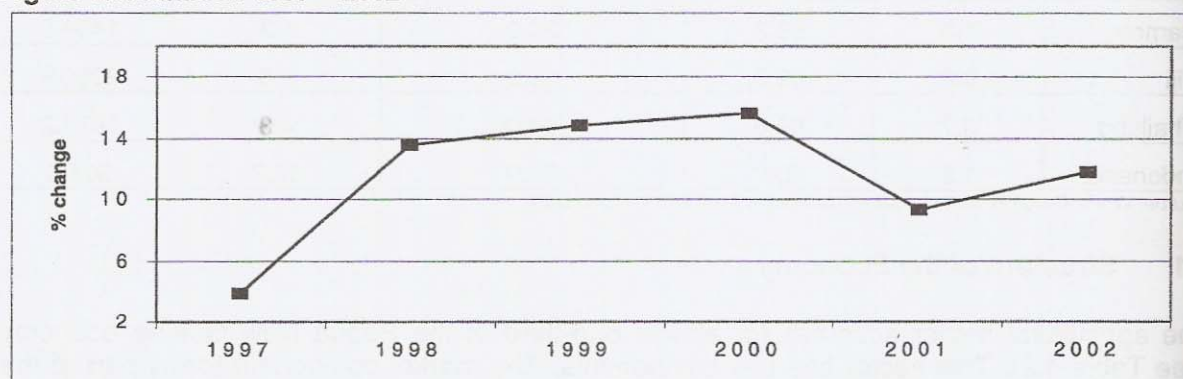
Economic Growth

Despite having significant natural resources and foreign aid, Papua New Guinea has not performed well, and has especially poorly in recent years. The economy contracted by 2.3 per cent in 2002, after contracting by 1.2 per cent and 2.3 per cent in 2000 and 2001, respectively. Prospects for 2003 are more optimistic. Treasury has recently upgraded its projected GDP growth forecast from 2.7 to 3 per cent for 2003, due to improvements in the agricultural sector that are mainly driven by expected growth in the forestry and coffee industries in the second half of the year.

Inflation

Inflation, as measured by the Consumer Price Index, was relatively low in the early 1990s. After the floating of the kina in 1994 and the subsequent sharp depreciation in the currency, inflation increased substantially (see Figure 4.1). The current annualised rate is 19 per cent.

Figure 4.1: Inflation 1997 – 2002



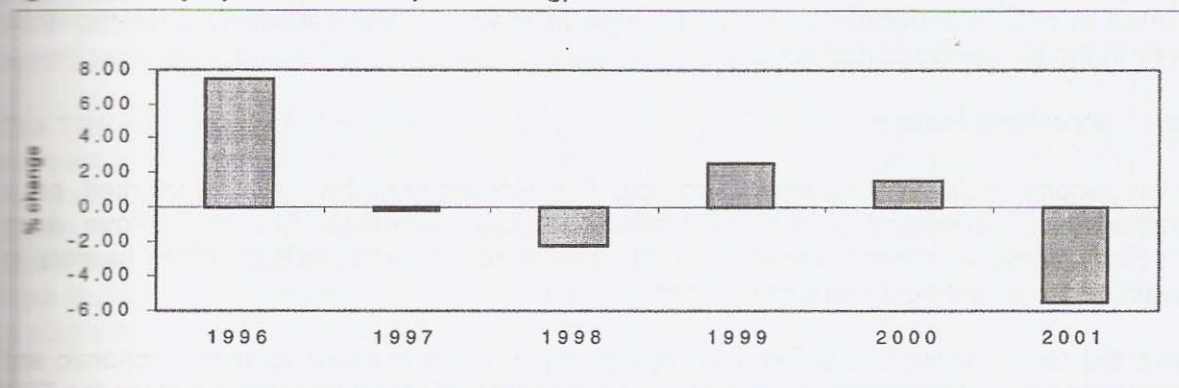
Source: Quarterly Economic Bulletin, March 2003: BPNG

Employment

The informal sector dominates the Papua New Guinea economy. The informal sector mainly involves small scale farming and fishing and, to a much lesser extent, manufacturing activities such as handicrafts, sewing and baking. The rapidly growing urban informal sector is dominated by street selling of artifacts and manufactured items ranging from bios to clothes and food items.

In contrast, employment in the formal sector is a small proportion of total employment. The combination of the negative growth in formal sector employment in recent years and the rapidly increasing urban population has been an important contributing factor to the increased law and order problems. (See Figure 4.2 for formal employment growth rates in recent years).

Figure 4.2: Employment Growth (Non Mining) 1996 - 2001



Source: Quarterly Economic Bulletin, March 2002: BPNG

One of the main objectives of the Government's Medium Term Development Strategy is to create employment opportunities in both the formal and informal sectors of the economy.

4.3 Fiscal policy

Expansionary fiscal policies have led to excessive government borrowing and high interest repayment costs. In 2002, the fiscal deficit reached an all time high of 4.3 per cent of GDP (see Table 4.3).

Table 4.3: Fiscal Balances 1998 - 2002

Year	Deficit (-)/Surplus(+) K'm	% of GDP
1998	-K127.1	1.4%
1999	-K232.3	2.6%
2000	-K230.4	2.4%
2001	-K359.4	3.7%
2002	-K445.6	4.3%

Source: Economic & Development Policies, Volume 1: Treasury

Since coming to office, the Government has recognised the need to tighten fiscal policy. Current policy focuses on controlling expenditure through issuance of monthly warrants. The soon-to-be-finalised Medium Term Development Strategy will set out the national priorities for government spending while the Medium Term Fiscal Strategy will allocate the available resources in line with those priorities.

4.4 Monetary Policy

The Central Bank's ability to control price stability in the mid-nineties was undermined by excessive government spending financed by domestic borrowing and an overdraft facility from the Central Bank. In 2000 the Central Banking Act was passed by Parliament, enabling the Central Bank to operate independently from the Government and giving it capacity to resist inflationary financing of the deficit.

In the second half of 2002, uncertainty over the election and high public expenditure in the final months of the previous government contributed to an increase in interest rates. At the same time, the kina depreciated rapidly. The Bank responded by tightening monetary policy and this tightening has continued into the first half of 2003. According to the Bank's Monetary

Policy Statement released in June 2003, the Bank will continue to monitor developments in the key macroeconomic indicators and if the assumptions that underpin the downward trend in inflation hold, the Central Bank will be able to gradually and cautiously ease monetary policy in the remaining part of 2003.

4.5 Structural Issues

Given recent social and economic trends, the Government has also embarked on a comprehensive structural reform program. The key objectives are to improve living standards, improve the performance of the public sector, and address other barriers to private sector investment and export growth.

While the Government has undertaken recent initiatives to improve its microeconomic and macroeconomic performance, manufacturers generally feel little has improved since the TRP began, and that costs (such as security and electricity) have risen substantially. This experience has resulted in an apparently widespread feeling among manufacturers that they have been unfairly treated, in that tariffs have been reduced but there has been little improvement in education and training, law and order, physical infrastructure, shipping, utilities, public sector performance and macroeconomic management. (See Box 2 for views by manufacturers on this issue).

Box 2: Government's side of the bargain

Manufacturers' Council, Lae

'The TRP was agreed to by the manufacturing sector as a way to move forward provided that the Government did its job.'

'It could be said that the Government has failed to manage any one of its responsibilities. These include:

- strengthening human resources through better education and training programs;
- concentration of efforts on improvements in the law and order situation;
- upgrading and maintaining physical infrastructure;
- deregulating the domestic shipping industry;
- improving the supply of and lowering the cost of public utilities;
- implementing public sector reforms to get a more cost efficient bureaucracy; and
- maintaining a low inflation macroeconomic policy'

'These are the very things that the Government agreed to achieve in return for the manufacturing sector agreeing to a declining tariff regime.'

(Source: *Manufacturers' Council presentation, September 2003*)

Tropic Frond Oils Limited

'I think most manufacturers would agree that if all the above were met then the increase in efficiency gained would allow them to remain profitable with a lower level of protection.'

(Source: *Tropic Frond Oils Limited Submission, September 2003*)

Paul A Luk Spokesperson – Clothing, Footwear and Textile Industry, Port Moresby

'The Government's White Paper on the TRP, also pointed out the need for the Government to play its part in assisting manufacturers by reducing costs to manufacturers.'

'Unfortunately, this has not been the case, all Clothing and Textile Factories in PNG have been seriously disadvantaged by the Government's failure to deliver its obligations. We need a temporary suspension of the program, until the Government delivers on its promises.'

'The Government was supposed to tackle the law and order problem, reducing the need for manufacturers to spend a substantial part of their budgets on the security to their investment in property and staff; we are having to spend more than ever on security.'

(Source: *Paul A Luk – Clothing, Footwear and Textile Industry Submission, September 2003*)

Transport & Infrastructure

Inadequate maintenance of road networks has increased transport costs to the private sector and hampered access to government services by the general population. In the 2003 Budget, the increased allocation for the upgrade and maintenance of rural infrastructure, particularly feeder roads and the Highlands Highway, should help to address this problem.

Irregular supply of water and electricity involves high costs for businesses. Producers have had to invest in additional assets such as water storage tanks and stand-by generators.

Privatization and Competition

The Government has embarked on a major privatization exercise to sell state owned enterprises to increase competition and efficiency and promote new investments. The state owned bank (PNGBC) has been privatized along with the majority of its equity holdings in Orogen Minerals.

Selected state owned enterprises such as Telikom, Post PNG, Harbours Board, Air Niugini and PNG Power have been corporatised. These assets are expected to be privatized once all preparations are completed. The Independent Public Business Corporation (IPBC) has been tasked with this responsibility. The approach endorsed by NEC on the recommendation of the IPBC is that of a public and private partnership where a private partner is accorded majority ownership and management rights and the responsibility to provide an efficient service.

As part of the reform process, the newly established Independent Consumer and Competition Commission will administer the regulatory framework to ensure that competition laws are adhered to.

Security of land tenure

Land compensation claims and tribal fights over ownership of land discourage investors as they involve numerous and time consuming negotiations with different groups including government. A more secure land tenure system would help to expand activity in the mining, agriculture, and forestry sector as well as boost the tourism industry.

A land registry system was proposed in 1991 to help secure business confidence and investment. However, it has not progressed due to opposition from the general population. As much customary land is used for subsistence agriculture, traditional owners view the development of a land registry system as an indirect way of losing ownership. In order to move forward, means a new system will have to be found to provide more secure tenure to investors while giving landowners confidence that they will retain the ownership of their land.

Business licenses/work permits

Stringent bureaucratic rules and procedures characterise the current system of business licenses and work permits. Long and unnecessary delays translate into extra costs for private sector businesses.

In the 2003 Budget, the Government announced that it is considering improvements to the current migration policies. Specific attention is being given to developing a business migration scheme. In addition, special business visas for business visitors from APEC countries are being considered to streamline the issuance of visas.

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Chapter 5:

International Economy and Interactions with Papua New Guinea

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5. Introduction

Papua New Guinea is a small and relatively open economy, which is very dependent on trade to purchase imports it is inefficient at producing and to sell exports that it is efficient at producing. International developments affecting Papua New Guinea's major trading partners can therefore have a major impact on the domestic economy. In addition, because Papua New Guinea is a 'price taker' for its main export industries (agriculture and mining), world commodity prices also play a dominant role in export performance, the level of foreign reserves, and the welfare of Papua New Guineans as a whole.

5.1 Global growth

Global economic growth is expected to continue to be subdued in a highly uncertain environment, with risks being predominantly on the downside. This is due to ongoing risks and vulnerabilities, such as weak economies, equity markets and financial systems. In addition, new risks have emerged, such as the spread of SARS and tension on the Korean peninsula. The combination of these factors has created a weak and uncertain international economic environment.

The world economy grew by 3 per cent in 2002 in year-average real terms. Given continued structural weakness and heightened uncertainties, the IMF expects world GDP growth to be 3.2 per cent in 2003, but to increase to 4.1 per cent in 2004.

5.2 PNG's Major Trading Partners

Table 5.1 shows Papua New Guinea's top five trading partners classified by exports and imports. Papua New Guinea's two major export destinations are Australia and Japan, which together purchase 35 per cent of Papua New Guinea exports. The two major sources of imports to Papua New Guinea are Australia and Singapore, which together make up 70 per cent of the total.

Table 5.1: Papua New Guinea's major trading partners

(In percentage of total)	2001
Exports (f.o.b) by destination	
Australia	24.6
Japan	10.6
Germany	4.0
United Kingdom	2.1
Korea	3.0
Others	55.7
Total	100.0
Imports (c.i.f.) by origin	
Australia	51.2
Singapore	19.0
Japan	4.6
New Zealand	4.0
Malaysia	2.8
Others	18.8
Total	100.0

Source: Papua New Guinea-Selected Issues and Statistical Appendix, April 2002: IMF

5.3 Balance of Payments

The Balance of Payments (BOP) refers to the annual statistical statement of a country's trade and financial transactions with the rest of the world.

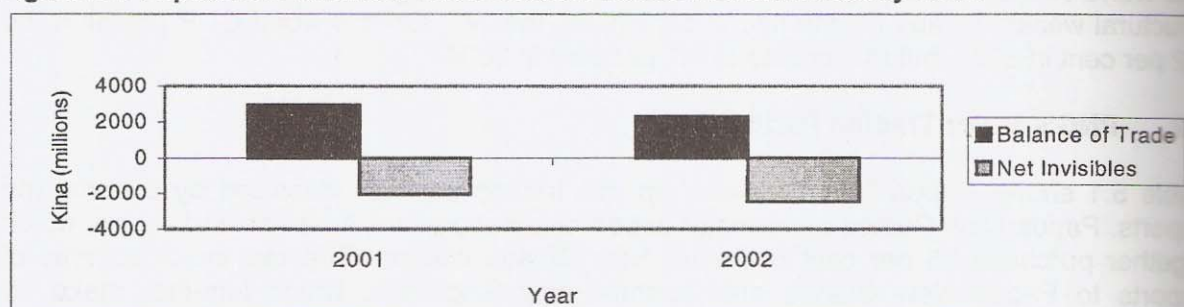
If the BOP is in surplus the country can add to its international reserves and, if necessary, repay foreign loans. An increase in international reserves would also allow for higher import cover. If the BOP is in deficit, it has to be covered by running down international reserves or by international borrowing.

The deficit in the BOP in 2002 was K239 million, compared to a surplus of K708 million in the previous year. The 2002 deficit was mainly the result of an increase in merchandise imports and services.

5.4 Current Account

The current account captures the country's goods and services transactions with the rest of the world and consists of the visible trade balance (balance of trade), which is the difference between the value of exports and the value of imported goods. Also placed in the current account are invisible earnings from, and payments for, services such as banking, insurance and tourism. Other items included are interest on loans, profits on investment, and government receipts and outlays.

Figure 5.1: Papua New Guinea's Trade Balance versus Net Invisibles by value

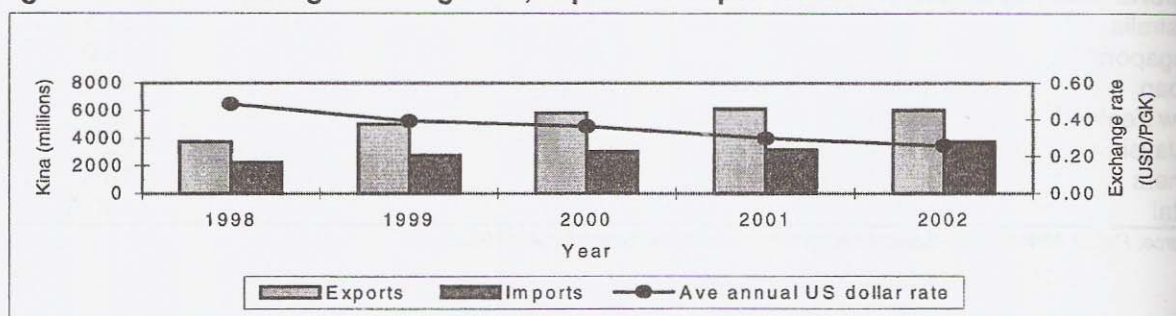


Source: Quarterly Economic Bulletin, December 2003: BPNG

As shown in Figure 5.1, the current account turned to deficit in 2002, mainly reflecting increased imports and a large increase in payments for services.

Prices received by exporters and prices paid by importers of goods and services are influenced by the exchange rate. Therefore, if the exchange rate falls, Papua New Guinea exporters become more competitive in the world market, while imports become more expensive, thus increasing the competitiveness of import competing industries. Figure 5.2 shows the evolution of the annual average kina exchange rate against the US dollar and exports and imports since 1998.

Figure 5.2: Annual average exchange rate, Export and Import Values

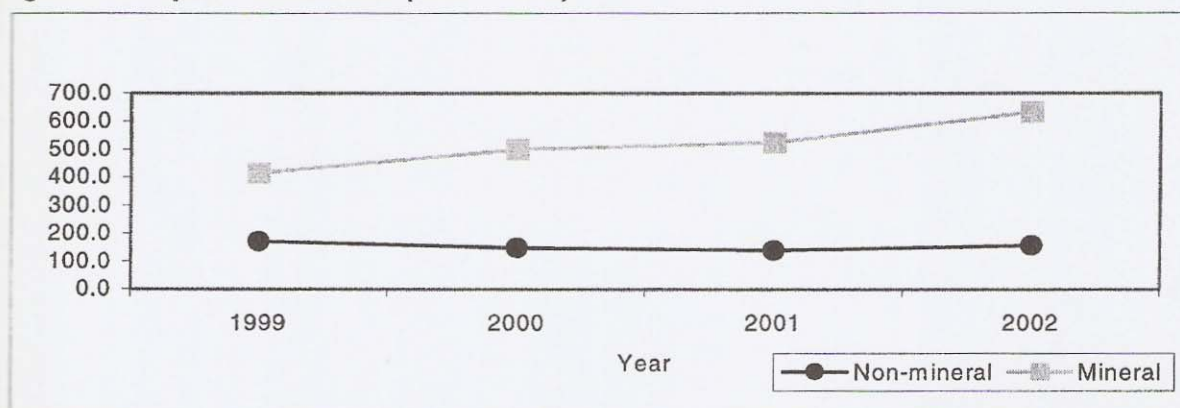


Source: Quarterly Economic Bulletin, March 2003: BPNG

Since 1994, the kina has depreciated significantly against all major currencies including the US dollar. Lower commodity prices for Papua New Guinea's exports and the generally poor performance of the economy have contributed to the depreciation of the exchange rate.

International commodity prices for cash crops and mineral commodities have experienced considerable fluctuations. However, export earnings for mineral commodities have continued to increase due to recent favourable prices. Mineral receipts now make up around three-quarters of total export earnings. Figure 5.3 shows the export price indices for the major export commodities, both mineral and non-minerals.

Figure 5.3: Export Price Indices (1999 – 2002)



Source: Quarterly Economic Bulletin, March 2003: BPNG

5.5 Capital Account

Currency flows into and out of the country as captured under the capital account relate to capital items, i.e., investments on physical assets and financial securities, borrowings by the Government, and inter-bank dealings in foreign currency.

As a developing country reliant on foreign capital, the capital account has generally been in deficit and is likely to remain so over the medium term. This means that movement of domestic funds abroad, representing interest payments on external loans by the government, the purchase of foreign financial securities and physical assets by domestic residents, repatriation of profits by foreign companies operating in Papua New Guinea, or the borrowing of domestic funds by foreigners, will be greater than incoming capital over the same period.

5.6 Direct foreign investment in Papua New Guinea

Table 5.2 depicts direct foreign investment in Papua New Guinea.

Table 5.2: Total Foreign Direct Investment (K' million)

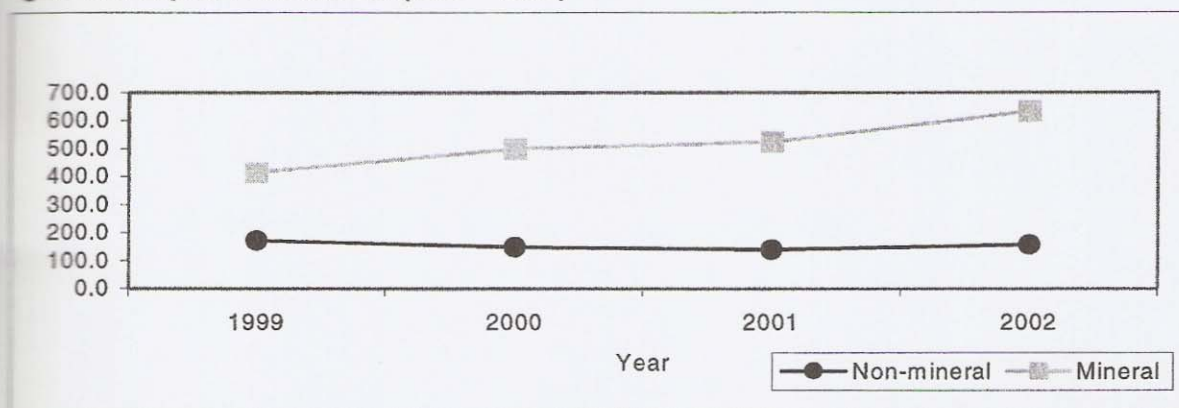
Year	Mar Q	Jun Q	Sept Q	Dec Q	Total
2002	11	30	15	15	71
2003	-1	na	na	na	na

Source: Quarterly Economic Bulletin, March 2003: BPNG

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Source: Quarterly Economic Bulletin, March 2003: BPNG

Chapter 6: Tariff Reform and its Effect on the PNG Economy

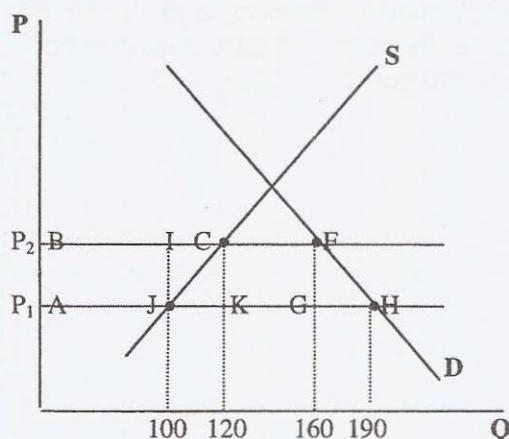
Box 3: Effects of a Tariff

Partial Equilibrium

Tariffs are used to (1) protect domestic industries from foreign competition, and (2) raise revenue for the government. The effects of a tariff are illustrated below. Let us deal with a simple case in which the nation is a competitive "price taker" in the world market for the goods we import, taking the price as given. This scenario is also called the small country case and is consistent with Papua New Guinea's circumstances. In figure 1, D and S are the domestic demand and supply curves for a good (X). In the presence of trade, the world price for good X is P_1 and therefore the domestic price is also P_1 . At price P_1 domestic consumption is 190 units, domestic production is 100 units, and imports being the difference between the two equal 90 units (190-100). The imposition of a tariff will cause the domestic price of imports to increase by the full amount of the duty, to price P_2 . At this price domestic consumption falls from 190 units to 160 units due to the higher price, while domestic production increases from 100 units to 120 units and imports are reduced to 40 units (160-120). The area $CKGF$ represents government revenue from the tariff. Although domestic producers of good X gain by now being able to increase their supply of good X (that is from 100 units to 120 units), the overall effect of the tariff is a reduction in the productive efficiency of the economy and consumer welfare. The triangle FGH represents the consumption loss to society. The triangle CJK represents the production loss to the economy if there is full employment.

In summary the distributional effect of the tariff is the increase in domestic price and government revenue, but a decrease in domestic consumption. The net effect is a welfare loss as the gains to producers and government are less than the losses to consumers.

Figure 1: The Welfare Effects of a Tariff in a Small Country.



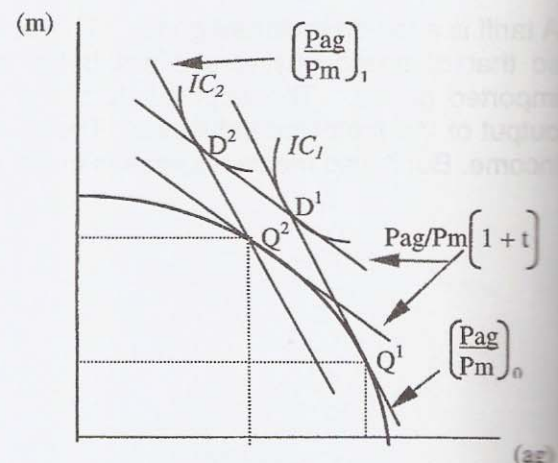
Source: Pass *et al* Collins Dictionary of economics (1993) and Krugman, International Economics (2003)

General equilibrium

Imagine a country that produces and consumes agricultural output and manufactured goods. Let us assume that it exports agricultural output and imports manufactured goods. Thus the country sells its agricultural output to the world market at a given world price P_{ag} and buys manufactured goods at a given world price P_m . In the absence of a tariff the economy produces at point Q^1 and consumes at D^1 . The introduction of a tariff sees the price of manufactured goods rise to $P_m(1+t)$. This sees the relative price of manufactured goods increase to $P_{ag}/P_m(1+t)$. This results in a fall in agricultural output while the output of manufactured goods increases. The distortion in production is shown by production moving from Q^1 to Q^2 and consumption from D^1 to D^2 . Faced with distorted prices, society is forced to consume at indifference curve (IC_2) , which is lower than (IC_1) ; therefore the society's welfare declines. Although producers of the protected good gain by increasing production and receiving a higher price for their good, producers of agricultural output face a lower price and produce less. The overall effect of the tariff is a decline in the productive efficiency of the economy and consumer welfare.

Similar to the partial equilibrium case, a tariff raises the price of the good taxed and induces its production, while generating revenue for the government. Because of the tariff, some consumers are forced to switch to less desired substitutes, while others who are willing to maintain their consumption of the taxed good are faced with a higher price and lower real income.

Figure 2: The General Equilibrium Effects of a Tariff in the Small Country.



By raising the domestic price of goods produced overseas, tariffs inhibit international trade and the benefits associated with it. Excessive tariffs have the potential to reduce the country's opportunities to exploit its comparative advantage in production and increase the price of goods used by Papua New Guinea's consumers and businesses. Domestic businesses that use tariffed imports as inputs to production will be less competitive.

Furthermore, as at any given time there is a fixed amount of capital and skilled labour, tariffs alter prices and divert resources to protected industries at the expense of non-protected industries. In this sense a tariff on imports is also effectively a tax on exports. Therefore, taxing imports is inconsistent with the current Government's export driven growth strategy.

Raising the price of goods also means that consumers are unable to purchase as many goods as they would without tariffs. Consumers also substitute away from goods whose prices have been raised by tariffs to goods that do not face tariffs, so tariffs have the effect of distorting consumption decisions.

By reducing the range of products available in Papua New Guinea, tariffs can also reduce the choice of goods available to consumers and restrict investment opportunities for businesses that need imported goods as inputs to production. The end result of tariffs is an overall loss of welfare for producers (even though the producers of the tariffed goods benefit), for consumers, and therefore for the economy as a whole.

See Box 3 above for the theoretical effects of tariffs on a small open economy like Papua New Guinea.

6.3 The effects of other trade restrictions on the economy

Import quotas

An import quota is a direct restriction on the *quantity* of a good that may be imported. It is important to note that import quotas not only reduce the supply of imported goods, they also increase the domestic price. When imports are restricted by the quota, the immediate result is that at the original price the demand for the good exceeds domestic supply plus imports. This causes the price to be bid up until the demand for the good equals the new supply. In the end, an import quota will raise domestic prices by the same amount as a tariff that limits imports to the same level.

The difference between a quota and a tariff is that with a quota the Government receives no revenue from a quota. When a quota (instead of a tariff) is used to restrict imports, the sum of money that the Government would have received as revenue from a tariff is collected by whoever holds the import licences. Licence holders are able to buy imports and resell them at a higher price. The profits received by the holders of import licences are known as quota rents.

When the right to sell in the domestic market is assigned to governments of exporting countries, or foreign owned firms, the transfer of rents overseas makes the overall costs of a quota substantially higher than the equivalent tariff.

Also, import quotas can see the price of imported goods rise dramatically in times of economic hardship. For example, if the domestic production of a necessary staple food were to fall as the result of drought, a quota could see the price of the good rise dramatically. This is so as food supply has fallen dramatically due to unforeseen circumstances, while demand would remain relatively stable. However, under a tariff the price would remain equal to the imported good's price plus the tariff. The risk of consumers being severely harmed in times of hardship is therefore much less with a tariff than under a quota.

Box 4: Differing industry views on the tariff reduction program***PNG Retail and Wholesale Traders Association***

'Definitely no tariffs for any food or consumer items should go up, the cost of living is high enough already and with the value of the kina the poor wage earner cannot afford any higher prices as a result of tariff increases. If anything tariffs should be reduced on many items.'

(Source: PNG Retail and Wholesale Traders Association submission, September 2003)

Lae Biscuit Company Ltd

'Speaking with our members from the PNG Chamber of Commerce & Industry it is clear that the depressed economic conditions have hurt our members severely, survival is in doubt for some and some relief is necessary for a breathing space'

(Source: Lae Biscuit Company Ltd Submission, September 2003)

Hargy Oil Palms Ltd

'Our submission is that the Tariff Reduction Program (TRP) is too slow and destructive to business. PNG does not need a TRP, it needs nil import duty (tariffs) and substantial investments in rural based agricultural projects and items.'

(Source: Hargy Oil Palms Ltd Submission, September 2003)

Arnott's Biscuits (PNG) Limited

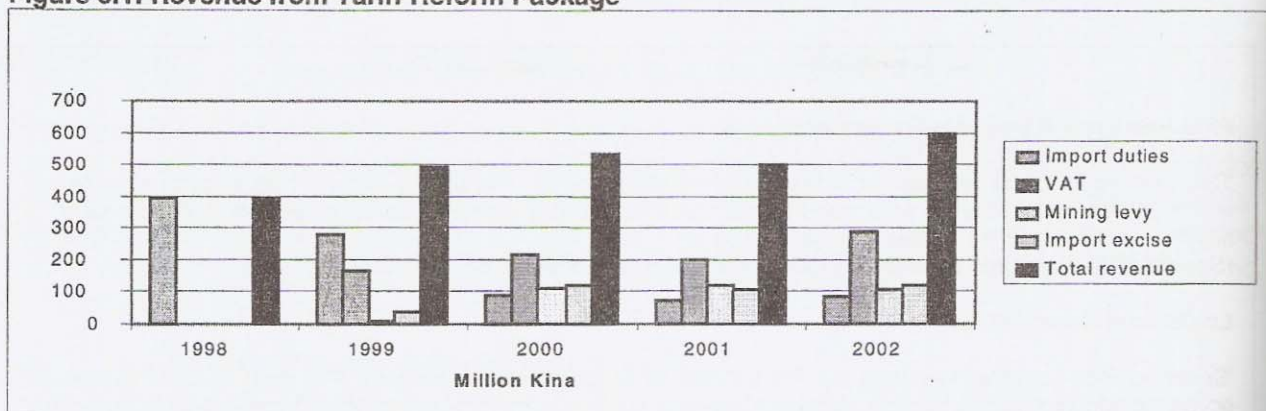
'Tariffs have for many years been used as a "crutch" for domestic manufacturing and agriculture, particularly in import replacement industries where some of the protection has been onerous on the consumers. This practice is not confined to PNG alone, which is a relatively open economy. There is however some merit in protecting local production, and from the statistics provided, manufacturing contributes 9% to GDP and 14% to formal employment, figures which cannot be ignored.'

(Source: Arnott's Biscuits (PNG) Limited Submission, September 2003)

During the period since 1999, Papua New Guinea has undergone considerable structural change and the economy has contracted by around 8 per cent in real terms. The structural changes and negative growth have been due to a number of factors, including macroeconomic policy, decreased production of gold and oil due to the depletion of reserves at existing projects, continuing law and order problems and declining physical and social infrastructure. Therefore, in discussing the impact of the TRP on the Papua New Guinea economy one must separate out these other factors from the effects of the TRP. However, this is a particularly difficult task given that the kina has depreciated by around 60 per cent since 1997. This depreciation and its effects on the structure of the economy has been much larger than the effects of the TRP that will see average tariffs reduced from 22 per cent in 1999 to 6.4 per cent in 2006.

Government revenue

As can be seen from Figure 6.1 below, import duties have decreased considerably since the TRP began, from K394 million in 1998 to K84 million in 2002. Tariff revenue now only makes up 2.6 per cent of Government revenue compared to 17.3 per cent in 1998. Total revenue from tariffs, VAT, excise duty and the mining levy in 2002 was K585 million. Hence, the Government no longer needs to maintain tariffs for general revenue purposes.

Figure 6.1: Revenue from Tariff Reform Package

Source: Treasury Department, 2002

The TRP was part of a broader policy package to reform the indirect tax base. The tariff reductions were combined with the introduction of a broad Value Added Tax (VAT), excise duty and mining levy and the abolition of provisional sales taxes. The main objectives were to broaden the tax base and to reduce the risk of distorted behaviour caused by the highly variable tariff rates on goods.

Consumers

Consumers benefited from the TRP because many of the goods they consume have become cheaper than they otherwise would be. The removal of tariffs reduces the price of imports and domestically produced substitutes. These price reductions increase the real incomes of consumers who purchase these goods. Real incomes are defined as incomes divided by the prices of goods and services purchased.

Table 6.1 below shows the percentage change in the price of goods and services since 1999. As can be seen, the inflation rate, as measured by the Consumer Price Index (CPI), has been quite high in recent years. This is mainly due to the depreciation of the kina, arising from past loose fiscal policy. The decline of the kina results in higher import prices that feed through the economy. Faced with rising import prices, businesses will generally pass them on by increasing the prices of their goods and services, even at a time of depressed domestic economic conditions such as at present.

Through lowering the prices of imported goods and their domestically produced substitutes, the TRP has ameliorated the rise in import prices stemming from the kina decline. Some evidence of this can be seen from the fact that the prices of clothing and footwear and household equipment and operations, which are primarily imported, have increased slightly less than the general inflation rate since the TRP began.

Table 6.1: Consumer Prices: percentage change from year

	1999	2000	2001	2002
CPI	13.3	10	10.3	14.8
Food	18.7	7.7	12.5	17.8
Drinks, tobacco and bettlenut	-3.8	13.9	13.5	13.9
Clothing and footwear	16.1	13	11.1	6.5
Rents, fuel and power	3.7	7.3	7.7	2.7
Household equip. and operations	29.4	2.2	2.6	12.7
Trans. and Communications	27.8	11.3	4.6	17.8
Miscellaneous	5	11.5	9.5	1.2

Source: NSO and IMF (2003)

The TRP has reduced poverty

One of the primary objectives of the Government's Medium Term Development Strategy is to reduce poverty. In his study of household expenditure in Papua New Guinea, Gibson (1998) found that the poor consume mostly self-produced foods and collected firewood. Of their cash income, however, poor people spend most on garden tools, clothing, cooking implements, salt, rice, tinned fish, matches, sugar, linen, soap, kerosene, school books and stationary, cooking oil and flour.

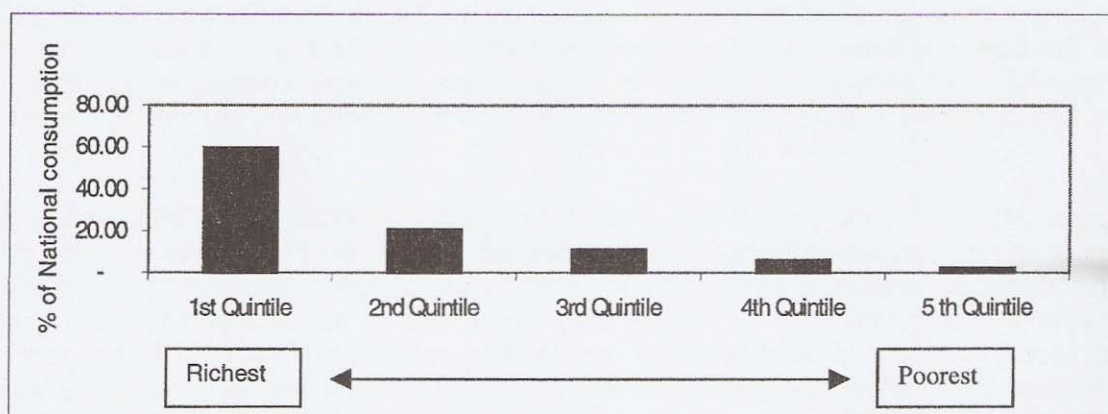
One concrete way to help the poor is to reduce the prices of imported goods consumed by the poor by ensuring that they face minimal or zero tariff rates. Under the TRP, tariffs on these goods have been reduced substantially, as can be seen from Table 6.2 below. However, under the TRP, salt was to have a zero tariff rate and the tariff on sugar was to be reduced to 40 per cent by 2006. The recent decisions to place a 40 per cent tariff on salt and maintain the 70 per cent tariff on sugar beyond 2006, while advantaging local salt and sugar producers, diminishes the welfare of the people of Papua New Guinea.

Table 6.2: Purchased goods that are consumed by the poor and tariff rates

	Pre TRP rate	Post TRP rate			
		1999-2000	2001-2002	2003-2005	2006
Gardening tools	11	0	0	0	0
Clothing	40	40	35	30	25
Pots and pans	40	30	25	20	15
Salt	11	0	0	40/20	15
Rice	11	0	0	0	0
Tinned fish					
<i>Mackerel</i>	90	70	50	20	15
<i>Sardines</i>	11	0	0	0	0
<i>Other</i>	55	30	25	20	15
Matches	5 t/box	5 t/box	4.5 t/box	4 t/box	3.5 t/box
Sugar	85	80	75	70	70
Linen	40	30	25	20	15
Soap	55	40	35	30	25
Kerosene	0	0	0	0	0
School stationary	40	0	0	0	0
School books	40	30	25	20	15
Cooking oil	40	30	25	20	15
Flour (wheat)	40	30	25	20	15

Source: Gibson, 1998

Box 5: Summary of Consumption patterns in Papua New Guinea.



Source: Gibson (1996) and tariff secretariat calculations.

As can be seen in the figure above, consumption patterns are skewed towards the richest fraction of the society. It shows that the richest 20 per cent of individual account for around 60 per cent of total consumption. In contrast, the poorest 60 per cent consume less than 20 per cent with the poorest 20 per cent consuming only 2.3 per cent of total consumption.

Also, wealthy individuals consume more *purchased* goods and services than poor individuals. Most income/consumption generated by poorer Papua New Guinea comes from subsistence agriculture as cash incomes are very low. Estimates show that the poorest 20 per cent purchase 35 per cent of their goods and services while the remaining 65 per cent they produce themselves.

Producers

When discussing the impact of the TRP on industry, one cannot ignore the continued depreciation of the kina since 1994. The impact of the kina depreciation has likely swamped any effects of the TRP. For producers protected by tariffs, the increase in prices of imported goods resulting from the depreciation has been an offset to the lowering of import prices through the TRP.

The TRP acts to reduce the profitability of industries that are assisted by tariffs. The reduced profitability should, over time, reduce production and investment in protected industries, along with reduced demand for inputs from their supplier industries.

On the other hand, the TRP has reduced the costs of businesses that use protected goods as inputs in their production. This should lead to increased profits and production in these industries. New industries may also be established as the result of lower costs of inputs.

The depreciation of the kina has resulted in an increase in the international competitiveness of exporting and import competing industries and should encourage their expansion, which could more than offset the adverse effects of reduced tariffs on assisted industries. The lower kina means that Papua New Guinea producers will receive higher kina incomes for their produce, and this will provide an incentive to increase output. Also, over time, the fall in the currency reduces demand for imports.

Table 6.3 below shows GDP by sector at market prices in 1998 (the year before the TRP began) and in 2002. It shows the percentage of output that each sector contributes to national income. By looking at sectoral shares of output, one can determine whether various sectors have grown or contracted as a per cent of total output since the TRP began.

The data show that agriculture has fallen in proportion to the rest of the economy while the mining sector has grown. Manufacturing has neither declined nor grown in proportion to the rest of the economy since the TRP began. This indicates that the reduced prices of business inputs due to the tariff reductions and the more favourable exchange rate conditions have, at least for the sector as a whole, offset any negative consequences for protected industries from the TRP. While the manufacturing sector exports little, the exchange rate depreciation, which has increased the kina price of imports, has probably reduced demand for imports.

Table 6.3: GDP by sector at market prices

	1998	Percent of output	2002	Percent of output
Real GDP	7789		10881	
Agriculture, forestry and fishing	2355	30%	2653	24%
Mining and quarrying	1639	21%	3157	29%
Manufacturing	722	9%	958	9%
Electricity, gas and water	88	1%	131	1%
Construction	370	5%	420	4%
Wholesale and retail trade	710	9%	937	9%
Transport, storage and communication	386	5%	551	5%
Financing, insur, real estate and bus. serv	81	1%	130	1%
Community, social and personal services	1045	13%	1449	13%
Other	229	3%	121	1%

Source: NSO and IMF and Secretariat calculations (2003)

Table 6.4 below shows GDP by sector at constant prices and as a percentage of output. GDP at constant prices represents the volume of output rather than output at market prices in different years. While this measure of output is useful in examining changes in the structure of the Papua New Guinea economy, market prices are the best way to measure valued added, as they account for changes in prices for various goods and services over time. The market price for a good is generally the best way to measure its benefit to consumers and welfare generally.

Table 6.4 shows that manufacturing volumes have slightly decreased as a proportion of total volumes. Also, interestingly, agricultural volumes have grown slightly in relative terms while mining volumes have fallen slightly as a proportion of the overall economy. A comparison of Tables 6.3 and 6.4 indicates that while agricultural volumes have increased, lower prices have seen the sector decline in relative size. The opposite holds for the mining sector, where the increase in volumes has been outweighed by a rise in relative prices. Similarly, the decrease in manufacturing volumes has been offset by a rise in relative prices.

Table 6.4: GDP by sector at constant prices (millions of 1983 Kina)

	1998	Percent of output	2002	Percent of output
Real GDP	3536		3516	
Agriculture, forestry and fishing	1042	29%	1065	30%
Mining and quarrying	734	21%	705	20%
Manufacturing	340	10%	310	9%
Electricity, gas and water	49	1%	50	1%
Construction	159	4%	131	4%
Wholesale and retail trade	396	11%	339	10%
Transport, storage and communication	188	5%	173	5%
Financing, insur, real estate and bus. serv	40	1%	49	1%
Community, social and personal services	421	12%	539	15%
Other	167	5%	155	4%

Source: NSO and IMF and Secretariat calculations (2003)

Producers - Effective rates of Protection

One method for measuring the effects of the TRP on different sectors and industries is the effective rates of protection (ERPs). Effective rates of protection account for both tariffs on goods produced and the tariffs on the inputs to produce those goods. That is, ERPs measure the effect of the total tariff regime on the profitability of different sectors, industries and firms. For more information on ERPs and the ERP estimates in detail, please see Australian Bureau of Agricultural Resource Economics Report titled *Effective Rates of Protection in Papua New Guinea* which is attached to this report.

Manufacturing

As can be seen from the table below, manufacturing was highly protected in 1998. A number of industries, such as beverages and tobacco, sugar, tinned fish, soap, cooking oil and steel production received effective rates of protection in excess of 100 per cent. While the effective rates of protection remain high for many manufacturing industries, all industries have faced a reduction in tariff assistance as a result of the TRP. However the reduction in assistance varies widely in degree. For instance beverages, tobacco and tinned fish producers have received substantial reductions in assistance in tariff protection, while sugar and soap producers have received only minor reductions in assistance.

The Table 6.5 below also illustrates that most of the large reductions in tariff protection to the manufacturing sector occurred in the period from 1998 to 2001.

Table 6.5: Effective rates of Protection for Manufacturing

	1998	2001	2003	2006
	%	%	%	%
processed food	49	11	10	8
beverages & tobacco	102	26	25	22
metals & engineering	44	4	4	3
machinery & repairs	14	1	1	1
chemicals & oils	39	5	5	4
sugar	114	98	95	96
rice	14	0	0	0
salt	17	-2	98	37
flour	86	52	48	37
tinned fish	122	52	48	37
biscuits	86	74	73	62
soap	107	72	77	64
bottled cooking oil	28	62	51	38
clothing	77	46	45	37
steel products	110	47	42	32
other manufacturing	37	4	4	3

Source: ABARE, 2003

From the consultation process there is some evidence to suggest that industries that have received much less tariff assistance as a result of the TRP have become more efficient. For example, see Box 6 on how one manufacturer, Coca Cola Amatil, has embarked on a number of cost saving measures in recent times, due to falling profit margins, brought about partly by falling demand and reduced tariff assistance.

Also, a number of companies indicated they had reduced the numbers of their expatriate staff and replaced them with local staff. One firm indicated that it had adopted a new strategy of producing 'culturally relevant products' which are more appropriate for the domestic market and also for export to other Melanesian countries. A number of firms also indicated they had improved efficiency and reduced their production staff but maintained the overall staff numbers by increasing their sales force.

Box 6: Improving efficiency in the manufacturing sector: Coca-Cola Amatil

'We have managed many projects to reduce costs in our business. We closed our POM production facility because it is more cost effective to manufacture in one location and ship from there. We have started a dc [distribution center] rationalization and channel management program such that in areas where wholesalers can manage our business for us. We are pulling out of inventory holding facilities. Combined with improved process management such as 24hr deliveries, automated materials handling techniques, improved sales call routing and productivity, we have reduced staff numbers from 652 to 512. At the same time we have maintained our commitment to the TLP and reduced expat staff numbers from 15 to 9.'

'SOM efficiencies such as freight unbundling, elimination of can base coating, innovative shipping, storage and handling projects with vendors have produced annual savings in the region of AUD1.5 million.'

(Source: Coca-Cola Amatil presentation in Lae, September 2003)

While many highly protected manufacturing firms have made efficiency improvements in their business operations, it seems that some have suffered reductions in profits due to depressed economic circumstances and the tariff reductions.

There seems little doubt that many of the most highly protected industries that have seen considerable reductions in effective tariff protection have had their profits reduced due to the TRP. This has been exacerbated by the depressed economy and reduced disposable incomes

that have seen consumers substituting away from discretionary consumer items such as soft drinks and biscuits to more staple items such as rice and basic protein items. As pointed out in the World Bank tariff review, many manufacturing industries in PNG were set up as domestic monopolies, and have paid little attention to export markets. They are therefore unable or unwilling to take full advantage of the increase in competitiveness due to the recent falls in the real exchange rate by setting up export activities. Information gathered during the consultation process suggests that the small amount of manufactures that has been exported has been mostly to MSG countries, where it receives preferential treatment.

Agriculture and Natural Resource Industries

As can be seen from Table 6.6, prior to the TRP most agricultural producers and natural resource users faced negative rates of protection (albeit at relative low levels). That is, the previous tariff regime actually harmed the coffee, cocoa, palm oil, copra, mining, oil and quarrying industries and acted to hamper their growth. The TRP is therefore consistent with the Government's export driven growth strategy. The exceptions to this were fruit and vegetable producers, the fishing industry and timber producers, which all faced positive rates of protection.

Following the implementation of the TRP, most agricultural industries and natural resource companies are no longer disadvantaged by the tariff regime. Fruit and vegetable growers, timber producers and the fishing industry have seen effective rates fall but ERPs for fruit and vegetables and timber products are still high.

Table 6.6: Effective rates of Protection for Agriculture and Natural Resources

	1998	2001	2003	2006
	%	%	%	%
large-scale coffee plantations	-4	-1	-1	-1
large-scale cocoa plantations	-2	0	0	0
large-scale palm oil plantations	-5	-2	-1	-1
large-scale copra plantations	-1	0	0	0
other large-scale tree crop plantations	-1	0	0	0
large-scale fruit & vegetables	57	35	31	27
fishing	10	9	9	8
forest products	-8	0	0	0
gold mining	-3	0	0	0
Ok Tedi mine	-4	-1	0	0
other mining	-3	0	0	0
petroleum products	-3	0	0	0
quarrying	-4	-1	-1	-1
timber products	67	31	28	25

Source: ABARE, 2003

Service Industries

As can be seen from the Table 6.7 below, most service industries faced negative rates of assistance prior to the TRP, and as a sector was the worst affected by the previous tariff structure. Some industries, such as building and construction, air transport, and hotels and accommodation, faced considerable negative rates of assistance, at 21 per cent, 14 per cent and 14 per cent, respectively.

However, the TRP has seen significant falls in negative rates of assistance for most service industries, particularly air transport, which has fallen from -14 per cent to -1 per cent, and building and construction, which has fallen from -21 per cent to -1 per cent.

Table 6.7: Effective rates of Protection for Service Industries

	1998	2001	2003	2006
	%	%	%	%
road transport	-4	0	0	0
water transport	-6	0	0	0
air transport	-14	-1	-1	-1
education	-2	0	0	0
health	-4	-1	-1	-1
electricity & garbage	-1	0	0	0
building & construction	-21	-1	-1	-1
commerce	-2	0	0	0
hotels & accommodation	-14	-3	-3	-2
restaurants & fast food	-12	-3	-3	-2
finance & investment	0	0	0	0
other private services	-2	0	0	0
security services	0	0	0	0

Source: ABARE, 2003

Formal Employment

While the majority of Papua New Guineans (around 80 per cent) derive their livelihoods from subsistence and semi-subsistence agriculture, agriculture is also the largest employer of labour in the formal sector (see Table 6.8).

Although not in the same league as agriculture, manufacturing, retail and finance combine to account for over 45 per cent of total formal employment. It is worth noting that while mining makes a major contribution to GDP, due to its highly capital intensive nature it is a relatively minor employer of labour.

Table 6.8: Formal employment by sector 2002 (per cent of total)

Agriculture	33
Mining	8
Manufacturing	14
Construction	4
Wholesale	5
Retail	14
Transport	7
Finance	14

Source: Bank of Papua New Guinea, 2003

It has long been recognised that tariffs have little, if any, effect on the total level of employment in the economy. This is because the employment and production created by tariffs in protected industries comes at the expense of employment and investment in other existing and potential new industries whose development is hampered by tariff protection. Therefore one would expect the TRP to have little, if any, effect on total employment in Papua New Guinea.

However, one can expect movements in sectoral employment to reflect the varying fortunes of industries and sectors. Therefore, one would expect the TRP to result in some reallocation of labour towards the mining, agriculture, and service sectors and the manufacturing industries that are not heavily protected, and away from the protected manufacturing industries. Any changes in sectoral employment would generally represent slight deviations from underlying trends and it must be remembered that the kina depreciation has had a much larger effect on manufacturing industry than the TRP.

Table 6.9 below shows changes in employment from 1998 to 2002 and we can see that total employment in the formal sector has declined by around 3 per cent over this period, reflecting the general economic downturn of recent years.

Employment in agriculture and mining has increased since the TRP began, with employment in agriculture having increased by almost 9 per cent. Also of importance is that employment in manufacturing, while being somewhat volatile has increased by around 4 per cent since 1998, indicating that while particular industries may have suffered under the TRP, the manufacturing sector as a whole has held up reasonably well.

Table 6.9: Employment classified by industry (Index March 2002 = 100)

	Retail	Wholes.	Manufac.	Construc.	Trans.	Agric.	Finance	Total	Mining
1998	97.3	108.7	99.4	136.6	118	95.7	109.7	106.8	93.4
1999	99.9	114.7	103.1	130.8	109.4	99.2	116	109.6	94.5
2000	102.8	115	108.8	128	103.2	103.8	108.2	111.2	103.4
2001	100.6	102.7	99.5	92.9	99.4	102.2	100.5	106.1	96.9
2002	99.9	97.1	103.5	105.4	107.4	104.1	103.6	103.3	96.8

Source: Quarterly Economic Bulletin, March 2003: BPNG

Exchange rate movements

Exchange rate changes can be much more important than tariff assistance in determining the competitiveness of industries, particularly exporters, importers and businesses that compete with imports. This point is particularly relevant to Papua New Guinea, which has experienced substantial declines in both the nominal and real exchange rate since 1994.

Table 6.10 demonstrates that the nominal exchange rate and the real exchange rate have declined substantially since 1997, which has improved the international competitiveness of exporters and import competing industries.

Table 6.10: Exchange Rates, Papua New Guinea

Year	1997	1998	1999	2000	2001	2002	Percent fall over period
US\$/Kina	0.7	0.49	0.39	0.36	0.3	0.26	-63%
Real exchange rate	108	92	84	93	87	81	-25%

Sources: Quarterly Economic Bulletin, March 2003: (BPNG) and International Financial Statistics 2003 (IMF)

The real exchange rate is the best measure of the international competitiveness of a country, as it accounts for both nominal exchange rate changes and inflation levels in both Papua New Guinea and its trading partners. Since 1997, the real exchange rate has declined by 25 per cent, indicating that exporters and import-competing industries have become 25 per cent more competitive. There is considerable economic evidence to suggest that exchange rate movements of this order of magnitude are far more significant than labour costs and taxation regimes (including tariffs) in determining international competitiveness.

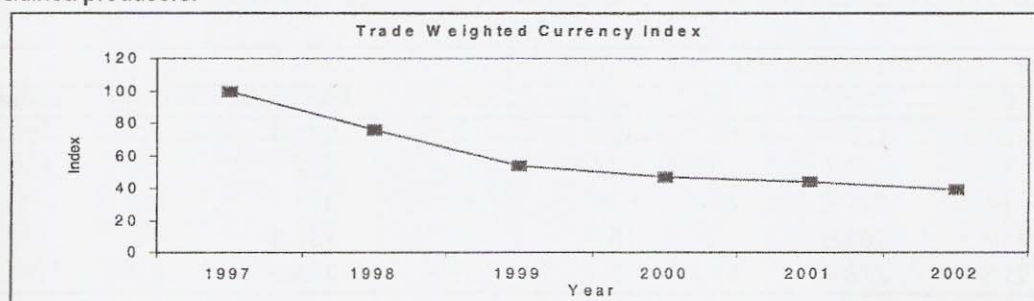
Box 7: Trade Weighted Currency Index

The Trade Weighted Currency Index is an estimate of the effective value of the kina against Papua New Guinea's main trading partners. The currency weights of the index are based on bilateral merchandise (goods) trade and include Australia, Japan, United States and Great Britain.

The strength of the kina against other currencies is reflected by the amount of foreign currency the kina can buy of its major trading partners. The price of the kina expressed in terms of other foreign currency is called the exchange rate. The difficulty in determining the true strength of the kina amongst all the different foreign currencies arises when Papua New Guinea is faced with the problem of deciding which foreign currency to use in order to measure the strength of the kina.

To solve this problem, currencies of Papua New Guinea's major trading partners are considered and trade weightings are given to each country according to the amount of goods traded with Papua New Guinea. The sum of the annual trade weightings of each country is then multiplied by each respective country's year-end foreign exchange rate. This then determines the effective value of the kina against all these foreign currencies in that particular year.

The figure below depicts the Trade Weighted Currency Index of Papua New Guinea from 1997 to 2002. As can be seen, the Trade Weighted Currency Index (effective value of the kina) has decreased considerably over this period (around 60%) indicating a decline in the strength of the kina against these foreign currencies, and therefore an increase in competitiveness for Papua New Guinea producers.



Source: Quarterly Economic Bulletin, 2003 March: BPNG

Imports and Exports

As noted earlier, tariffs are often described as a tax on exports as well as a tax on imports. As a result of tariffs a country produces more of the tariffed goods that it would otherwise import and less of the goods that it would otherwise export. Therefore, under the TRP one would expect over time both an expansion in exports and an expansion in imports: whereas a currency depreciation should result in an expansion of exports and a reduction of imports. Table 6.11 below shows that both imports and exports have increased considerably since 1998.

Also from Table 6.11 it can be seen that the trade surplus has increased from around K1.5 billion in 1998 to around K2.6 billion in 2002, which represents a 73 per cent increase in the trade surplus since the TRP began. This means that Papua New Guinea has continued to export considerably more goods than it has imported since the TRP began; however, much of this would be due to the continued depreciation of the kina.

Table 6.11: Balance of Trade (million Kina)

	1998	1999	2000	2001	2002
Mechanise exports	3707	5006	5813	6105	6387
Merchandise imports	2231	2760	2779	3165	3738
Balance of trade	1476	2246	3034	2940	2649

Source: Quarterly Economic Bulletin, March 2003: BPNG

Exports

Table 6.12 shows that exports by value have increased in all major exporting industries since 1998, with particularly strong growth in the minerals, marine and forestry sectors. Agricultural exports have fluctuated but there has been moderate growth over the period.

Table 6.12: Exports (million Kina)

Year	Agriculture	Forestry	Marine	Mineral	Total
1998	1020.2	173.2	42.2	2452.1	3687.7
1999	1165	265.9	30.4	3524	4985.3
2000	955.5	308.8	33.7	4494.6	5792.6
2001	801.1	310.9	77.2	4895.6	6084.8
2002	1084.9	414.9	94.1	4774	6367.9

Source: Quarterly Economic Bulletin, March 2003: BPNG

From Tables 6.13 and 6.14, it can be seen that there has been considerable growth in exports of cocoa and palm oil since 1998. This is due to both higher prices and volumes. However, there have been large falls in coffee and copra exports, both in volume and value terms largely due to depressed international prices for copra since 2001 and for coffee since 1999.

Table 6.13: Agricultural Exports (million Kina)

Year	Cocoa	Coffee	Tea	Copra	Copra Oil	Palm Oil	Rubber	Other	Total
1998	81.7	476.4	18.9	38.8	69.7	271.9	7.3	55.5	1020.2
1999	84.6	417.1	19	65.5	95.8	337.9	5	139.1	1164
2000	84.6	294.8	20.4	59.9	65.8	306.6	6.4	117	955.5
2001	110.3	188.8	22	15.5	27.3	290.5	6.8	139.9	801.1
2002	226.3	276.6	18.1	10.7	33.3	389.9	8.8	121.2	1084.9

Source: Quarterly Economic Bulletin, March 2003: BPNG

Table 6.14: Agricultural Exports ('000 tonnes)

Year	Cocoa	Coffee	Tea	Copra	Copra Oil	Palm Oil	Rubber
1998	26.1	83.5	6.6	58.1	53.2	213	4.9
1999	29	79.2	8.2	63.6	50.3	253.8	3.7
2000	38	66.6	8.5	67.2	48	336.3	3.7
2001	36.5	51.6	8.8	46.4	27.1	327.6	3.6
2002	34.9	63.1	5.2	15.8	28.2	323.9	3.8

Source: Quarterly Economic Bulletin, March 2003: BPNG

From Table 6.15, it can be seen that mineral exports by value have increased substantially from 1998 to 2002. However, Table 6.16 shows that in volume terms crude oil exports have almost halved and that gold exports have remained unchanged, while by value they have increased substantially. This is primarily due to the depreciation of the kina and higher mineral prices, particularly for crude oil.

Table 6.15: Mineral Exports (million Kina)

Year	Crude oil	Gold	Copper	Total
1998	813.1	1227.8	395.7	2436.6
1999	1382.4	1546.1	574.3	3502.8
2000	1921.7	1950.8	595.4	4467.9
2001	1889.4	2115.1	859.1	4863.6
2002	1431.2	2294.8	1018.7	4744.7

Source: Quarterly Economic Bulletin, March 2003: BPNG

Table 6.16: Non Agricultural Exports

Year	Logs (‘000 m)	Marine (‘000 tonnes)	Crude oil (‘000 barrels)	Copper (‘000 tonnes)	Gold (‘000 tonnes)
1998	1066.9	10.0	28033.6	109.5	58.2
1999	1312.3	2.7	30646.2	143.9	63.0
2000	1398.5	1.8	23629.2	126.8	72.8
2001	1212.2	5.1	21369.7	170.1	69.1
2002	1834	15.6	15370.5	170.1	59.1

Source: Quarterly Economic Bulletin, March 2003: BPNG

Imports

As can be seen from Table 6.11, imports have increased considerably since 1998 due mainly to the kina depreciation (that sees import prices rising) and the further opening of the economy to trade. Table 6.14 shows the top 20 categories of imports to Papua New Guinea by value. These top 20 categories of goods represent around 80 per cent of the total value of imports. An examination of Table 6.17 shows that the majority of goods imported by Papua New Guinea are inputs to industry. Of consumer items the main imports are cereals (such as rice and wheat), vehicles, meat, books, pharmaceutical products and clothing.

Table 6.17: Top 20 imported goods in PNG 2002

Imported goods	Value (Kina)
Machinery and mechanical appliances	984,862,018
Mineral fuel oil and products	600,172,746
Articles of iron/steel	332,846,327
Electrical machinery	311,826,625
Cereals	309,260,606
Vehicles	261,487,445
Rubber and article thereof	155,367,385
Meat	127,006,984
Plastic and Article thereof	104,684,480
Aircraft	102,348,289
Optical, Photographic	97,316,553
Aluminium and Article thereof	94,484,653
Printed books, newspapers	91,349,322
Paper and Paperboard	83,167,937
Miscellaneous edible preparation	78,310,227
Pharmaceutical products	68,209,457
Iron and steel	66,645,346
Tools, Implements, cutlery	58,245,815
Other made up textile	56,209,184
Fertilisers	55,936,337

Source: Internal Revenue Commission, 2003

Dynamic Impact of Tariff Reductions

The dynamic efficiency gains of the TRP are likely to be much larger than the static gains of reduced consumer prices and the one-off gain in overall economic welfare associated with a better allocation of national resources.

Dynamic gains refer to the continuing effects of the TRP on the behaviour of firms operating in a more competitive market place. These dynamic effects can have positive long-term implications for economic growth and the overall welfare of the people of Papua New Guinea.

With the TRP, firms come under more pressure to improve management and production techniques and to understand their markets better. They may be induced, for example, to undertake research and development, adopt new technologies to improve productivity and cater better to customers' needs. The TRP provides greater certainty to firms about future government decisions and sends a strong signal to firms about the availability of government support, which can encourage greater effort in improving efficiency rather than using scarce resources to lobby governments for assistance. For example, the removal of most tariff assistance for Australian industries in the 1980s led to widespread restructuring of firm management. Firms demanded managers who were more capable of innovation and of exploring new markets, rather than hiring managers who were skilled at lobbying governments for assistance.

**Chapter 7: Industry Policy Principles versus
Arguments for Suspending the TRP**

7. The necessary role of government in an economy

While the appropriate role of government is a decision for the elected representatives of a country, there is considerable evidence to suggest that in order to have a well functioning market economy, governments must establish and enforce the 'rules of the game' that underpin the operation of markets.

Governments also must provide certain goods: goods, which the market will not supply. An example is the provision of public goods, which are necessary to establish the framework within which private enterprise and markets can operate efficiently. For this to happen, Governments need to:

- ensure that contracts can be enforced, private property is protected and rule of law is established;
- ensure necessary public goods, such as roads and law and order and national defence are provided; and
- maintain competition among businesses by outlawing non-competitive practices and not allowing monopolies.

7.1 Industry Policy

In addition to providing the above necessary public goods and services, governments may also choose to provide other policies to encourage the development of industry.

The challenge for industry policy is to foster competitive, innovative and outward-looking industries without distorting national resource allocation and imposing unnecessary costs on the taxpayer and other parts of the economy.

Consensus for genuine economic reform can be difficult to achieve. The benefits can take time to be realised and are not as apparent as the short-term costs such as job losses in industries that lose protection. Vested interests can easily focus on the short-term costs, which makes it difficult to obtain community support for reform.

7.2 Industry Policy Principles

Active Policies to Address Market and Institutional Failures

Policies to assist industry should be broad-based initiatives to address market and institutional failures through investment in, for example, law and order to secure property rights, education and training, and transport and communications infrastructure.

- Providing broad-based assistance allows the best firms to self-select. For instance, high growth firms may benefit from the skills of staff educated and trained in Papua New Guinea's education and training system.

Macroeconomic Policies

Sound macroeconomic policies underpin a low inflation, low interest rate, high economic growth environment that is conducive to industry profitability and growth.

Industry and Firm-Specific Assistance

Such assistance:

- increases consumer prices which can particularly affect the poor;

- involves higher costs (because of taxes and higher prices) for other, usually more efficient industries, thereby reducing national economic and employment growth;
- may be directed at propping up industries in decline that probably should not have been supported by government, if not based on the economic advantages of the Papua New Guinea economy. Removing such assistance allows resources to flow from such low efficiency activities to areas of higher efficiency, thus improving productivity performance;
- divert substantial taxpayers' funds that could be put to more effective uses, such as reducing taxation, investing in law and order, and infrastructure, and reducing poverty; and
- may create vulnerable new industries that are not based on the economic advantages of Papua New Guinea and may not be sustainable in the long term without continued government assistance.

Private business has a better record than government in determining where investments should take place. Businesses are risking their own money and therefore have strong incentives to choose wisely.

Ideally, therefore, it would seem that governments should:

- remove existing industry-specific assistance; and
- resist new pleas for special treatment.

7.3 Arguments for Suspending the TRP

A variety of reasons were put forward for suspending the TRP. Below is a summary of the main reasons put forward and some analysis of their applicability to Papua New Guinea at this time.

Market Failure

This argument relies on the identification of market failure in the economy and the proposition that overall economic welfare can be improved by correcting the market failure. If market failure can be identified, the question must then be asked whether tariffs are the best policy tool to correct the failure and whether the benefits of overriding the market failure are greater than the costs. For example, if the government wishes to encourage certain industries it may be best to directly subsidise them. This means consumers do not face higher prices and reduce their consumption choices. However, taxes on incomes or other goods would still have to be increased (or government services reduced) to fund the subsidy.

The cost of doing business in PNG is high

It has been argued that the cost of doing business in Papua New Guinea is very high and that this places Papua New Guinea businesses at a disadvantage in relation to other countries. From the consultation process, it seems that these costs have increased in recent years (see Box 8). There are a number of factors that increase the cost of doing business in Papua New Guinea: law and order problems that increase security and insurance costs and dampen the general business environment; inadequate transport infrastructure that substantially raises costs; geographically fragmented markets that make it harder for firms to benefit from economies of scale; and the unreliable nature of utilities which cause damage to machines and electrical appliances and force investment in back-up generators and water tanks.

Box 8: Businesses facing increased operating costs

Lae Biscuit Company Limited

'Essential overheads rising disproportionately out of control: it is out of our control to see essential overheads rising disproportionately and out of our control. We are talking about essential overhead expenses. These cannot be cut without going out of business.

- an important one is security...in 18 months to mid 2003, security costs up 67%.
- Unusual social disturbances.....ethnic tensions, student disturbances and rioting etc.
- Breakdown of mail service...need a company driver for the simplest task.
- Delivery and receiving of other services affected due to " dangerous areas" of Port Moresby. " No- go" areas have been created and these vary according to company policy and industry experience....this distorts company decisions for locations and adds costs all round.
- Infrastructure breakdowns. Generally at least 25% increase in cost of vehicle acquisition. Down time of vehicles increasing. At least 60% of downtime is attributed to bad roads infrastructure.
- Carjacking – losses to this and similar matters has become so predictable that our insurance excess has jumped from K1,500 to K5,000 per claim.
- Multiplication of government fees and levies. NAQIA quarantine services is one of these imposts that are hitting Chamber members.
- Telephones. Reliable services are not even available at a premium price.
- Costs of skills base a real cost.

The toughness of the market is seen in the effects of imported inflation. In the past five years it is generally acknowledged that companies have had to reduce margins to remain alive in the market place. Imported inflation is a reality in PNG whenever there are adverse exchange rate movements.'

(Source: *Lae Biscuit Company submission, September 2003*)

British American Tobacco (PNG) Limited

'Increased cost and reliability in freight both sea and land, increased cost of security, increased cost of utilities, labour, high inflation and declined in the value of kina against US/AUD are still with us.'

(Source: *British American Tobacco presentation, September 2003*)

Arnotts Biscuits (PNG) Limited

The additional input costs we now experience are in direct contravention of the intent of the tariff reforms for manufacturing.

(Source: *Arnotts Biscuits (PNG) Ltd Submission, September 2003*)

Coca-Cola Amatil

- Since 2001 increases in costs have outstripped revenue increases.
- Despite being reduced as a percentage of Net Sales Revenue our overheads have increased substantially.
- Cost Of Goods & Services up 14% over 2002.
- Indirect expenses up 14% over 2002.
- D&A doubled to 4.2% of Gross sales over the prior years.
- Ongoing obstacles to business. These factors add cost to our business.
- Law and order, exchange rates, high cost of money, failing transport infrastructure, ineffective public services sector interruption of communication and utilities.

(Source: *Coca-Cola Amatil presentation: September 2003: Lae*)

While there are a number of factors that lead to high and increasing costs of doing business in Papua New Guinea, this, in itself, is not a justification for suspending the TRP. This is so for the two reasons discussed below.

The first reason is that the best way to deal with these additional costs is by direct means rather than indirectly. That is, in order to reduce law and order costs on business, the government should directly address the problem of law and order, rather than raise tariffs, which may increase the profitability of protected manufacturing businesses but also directly increases the cost of manufactured goods for everyone else in the country. More importantly,

the fundamental problems would not be resolved. The same can be said for other factors such as transport costs and the high costs and unreliable nature of utilities.

The second reason is that where the manufacture of goods in Papua New Guinea is not profitable without tariff protection, there is a strong case that these goods should not be produced in Papua New Guinea but rather be imported. This argument is essentially the principle of comparative advantage discussed earlier. The notion of comparative advantage is that each country gains from specialising in producing goods and services that it is relatively good at producing and purchasing goods from overseas that it is not relatively good at producing. The end result of specialisation is that all countries gain from trade. Therefore, if a country hopes to improve the living standards of its people, it cannot attempt to produce everything it consumes, as this would dramatically raise production costs and substantially reduce real incomes and consumers' access to goods and services.

High adjustment costs

As resources such as labour and capital do not easily move from one activity to another, rapid removal of tariffs can result in a lower level of welfare for some time. For instance, labour may not be able to shift easily and quickly from protected industries to industries better suited to the country's comparative advantage.

However, because of the potential for significant adjustment costs for labour and capital, the TRP was deliberately staged over a number of years and reductions have been phased to ensure sufficient time for industries to adjust and for displaced capital and labour to be absorbed by the more efficient and expanding sectors of the economy. If reform is too slow, it imposes its own costs in terms of unnecessarily burdening the economy with inefficient industries and the higher cost of imports for a longer period.

Infant industry argument

The infant industry argument is one of the oldest arguments for protection. It has been argued that a relatively new industry may be unable to withstand foreign competition during its infancy. It is suggested that protection is needed until the potential comparative advantage of the industry is realised and free trade can be accepted.

The World Bank Tariff Review of 1996 found that the average age of Papua New Guinea's companies was 17 years. The study concluded that 'in terms of the infant industry argument, the average Papua New Guinea company is grown up and should be able to fend for itself without such high levels of protection'.

Also a period of protection will not create a competitive manufacturing sector if there are fundamental reasons why a country lacks comparative advantage in certain areas of manufacturing. In order to have a comparative advantage in manufacturing, a country must have law and order, reliable infrastructure and low-cost, skilled labour. Developing these conditions is not beyond the reach of economic policy, but it cannot be done by trade policy.

Dumping

Dumping is defined as the sale of goods overseas at a cheaper price than in the domestic market where they were produced. Dumping may be a private activity on the part of the firm, be subsidised by the state, or it may take place by a state-owned company. Where dumping is a long-run-activity on the part of a private company, it is acting as a discriminating monopolist in the international market. Short term dumping may be carried out to remove unwanted stocks or it may be predatory, where an overseas producer deliberately lowers its price to force out a domestic producer to gain a monopoly position.

Predatory dumping may justify anti-dumping tariffs on anti-monopoly grounds. However, economic analysis suggests that where the dumping is long-run and there are no fears about the exercise of monopoly power by the foreign supplier, the country subject to dumping benefits from the favourable price of imported goods, as its consumers are better off.

Currently there is no anti-dumping legislation in Papua New Guinea although the Department of Trade and Industry is intending to introduce one and is supported by Customs officers of the IRC. However, the Government should be wary about introducing anti-dumping legislation as the danger is that it will become a means of providing assistance to industry on an *ad hoc* basis.

"Dutch disease" and economic diversification

"Dutch disease" is the name given to the de-industrialization of a nation's economy that occurs when the discovery of a natural resource and the resulting increase in exports raises the value of that nation's currency, making manufactured goods less competitive with those of other nations', increasing imports and decreasing other exports. The term originated in the Netherlands after the discovery of large quantities of oil in the North Sea.

The argument has been made that support of manufacturing industries is justified during a resource boom. A contrary argument is that there is no way of knowing whether the increase in exports of natural resources is temporary or not. However, regardless of the validity of the argument for support of industries that are adversely affected by a natural resource boom, it would seem that Papua New Guinea is coming out of a resource boom rather than being in the midst of one, and therefore the Dutch disease argument is not applicable for this stage of Papua New Guinea's development.

Conclusions

Most arguments advanced for assistance to industry, other than to correct for market failure, are problematic.

The key point of such assistance – and one that is not widely understood – is that the provision of such assistance comes with costs. These include:

- cost imposed on other industries by the need to raise extra revenue or in the case of tariffs the costs to consumers from higher prices; and
- costs imposed on other industries by having to pay more for their inputs, as capital and labour are drawn to the protected sectors.

The use of industry assistance for reasons other than the correction of market failure limits the Government's macroeconomic options, and results in resources shifting from more efficient to less efficient industries.

Allowing industries to be competitive and sustainable requires a focus on indirect measures – a stable macroeconomic environment with low inflation and interest rates which encourage investment, and a regime which provides the necessary infrastructure to do business – such as law and order, efficient telecommunications and transport, productive, skilled labour, and flexible land and labour markets.

In summary, 'picking winners' via the provision of direct assistance to particular industries or firms amounts to shifting risk from entrepreneurs to the rest of the community. Experience elsewhere questions whether that is an appropriate role for Government. Such intervention also limits the capacity of Government to use fiscal policy to deal in areas where there is

clear market failure, and provides incentives for firms to use resources to seek concessions rather than in productive activity.' But most importantly, it slows down – but doesn't stop – the shifting of productive inputs from less efficient to more efficient industries, making the whole process of industrial restructuring renewal slower and more costly.

Chapter 8: Tax Policy Principles

8. The purpose of taxation

The fundamental purpose of taxation is to finance government spending. Without taxes, governments could not fund expenditure in areas as diverse as defence, public order and security, education, health, transport and communication infrastructure, and many other goods and services.

8.1 The three principles of tax policy

It is generally agreed that taxes should be efficient (that is, have the minimum impact on the behaviour of producers or consumers), equitable (fair), and simple (easily understood). A more detailed explanation of the meanings of these three tax principles is found below.

Despite the widespread acceptance of these key tax principles, their full attainment may be hindered where the objectives conflict. For example, equity objectives might entail more complex legislation, which could conflict with simplicity and possibly also efficiency objectives. Careful consideration is required when balancing trade-offs between these objectives. Decisions on these trade-offs are policy matters for governments.

Efficiency

The general principle is that taxes should transfer the required financial resources to government with as little distortion as possible to the workings of the economy. That is, an efficient tax is one that has minimal impact on people's behaviour.

In general terms, as the rate of tax increases, the adverse effects on efficiency become more severe. One way to minimise these effects while retaining the overall level of revenue is to broaden the tax base instead of raising the tax rate. It follows that a more broadly based tax system will tend to lead to less distortion in terms of the relative prices of goods and services, the relative rewards of different types of work, the relative attractions of work and leisure, and the relative returns from different types of investment and saving.

The TRP has increased the efficiency of the Papua New Guinea taxation system by reducing the price distortions between domestic production and imported items by reducing the average rate of taxation on imported goods and reducing the variability of the tariff rates.

Equity

Equity, or fairness, generally is seen as having two dimensions:

- horizontal equity, which means that people in similar economic circumstances should be treated similarly; and
- vertical equity, which means that people with different means, should be treated differently, with those who are better off bearing a greater share of the tax burden.

Horizontal equity

A tax that places significantly different burdens on taxpayers in similar economic circumstances is generally considered to be unfair.

Vertical equity

Tax systems across the world vary widely not only in their interpretation of the meaning of 'vertical equity' but also in the way they have been designed to achieve it. Vertical equity is

the proposition that those who are better placed financially should bear a greater tax burden than those who have less financial resources.

By substantially reducing taxes on many basic household items consumed by the poor, the TRP has improved the equity of the tariff regime.

A key question that needs to be addressed in the pursuit of vertical equity is the degree of progressivity that is necessary in the tax system. There is a wide variety of opinion on this issue.

Clearly, the balance of the overall tax system needs to be considered in determining progressivity. Progression in the tax system is usually introduced through direct taxes on income or assets. These taxes allow for adjustments to be made according to capacity to pay. Papua New Guinea's personal income tax system is progressive. Commodity taxes are less easily adapted to capacity to pay, and attempts to do so through exemptions or different rates may compromise efficiency and/or simplicity. The level of vertical equity should also take into account tax-funded transfer payments from government.

Simplicity

A simple tax system should provide clarity, consistency and stability. While all taxes impose compliance costs on taxpayers, effort should be made to minimise them. Greater complexity tends to impose higher compliance costs on the community and higher administrative costs on tax authorities, both in terms of monetary costs and the time and effort spent complying with the tax system.

Clarity means that taxation provisions should be sufficiently clear for taxpayers to understand the tax implications of their actions. Taxation policy should be internally consistent as well as being consistent with broader economic policy. Stability requires the direction of policy to be well articulated and understood, so that, taxpayers have confidence that the broad direction of policy will be maintained.

Whilst the IRC has successfully prosecuted a number of cases under the Customs Act and the recent impounding of dozens of containers in Port Moresby for under-valuation demonstrates the seriousness of the IRC, several submissions expressed concern over the lack of consistency of current customs administration, along with inadequate enforcement of current legislation, high compliance costs and misclassification of imports (see Box 9 below). This appears to be an area where the application of the current legislation is performing poorly.

Box 9: Customs administration, Enforcement/Compliance & Misclassification

Luk Poy Wai Tailoring Ltd

'Customs need to be more vigilant against the import of finished products against lower tariff item numbers and under declaration of consignments.'

(Source: Luk Poy Wai Tailoring Ltd submission, September 2003)

Tropic fronds Oil Limited

'It's no great secret that the administration of Customs is openly abused, misclassification, under-pricing of invoices subject to tariffs, over-pricing of nil-rated inputs and subsequent company tax evasion are common place with little apparent will or resources by the IRC to prosecute offenders.'

'I suggest that the current system should be made to operate effectively before changes are made to it. All of the soap manufacturers would agree that it is probable that large amounts of finished soaps are entering PNG without paying import duty. The country loses out on revenue, the industry loses out on protection, and economy loses employment. Again, let's maximise revenue by getting the existing system working fairly and efficiently and then review whether further cuts should be made.'

(Source: Tropic Fronds Oil Ltd submission, September 2003)

Arnotts Biscuit (PNG) Limited

'PNG's ability to enforce existing tariff legislation is limited. The "honest" importers correctly declare their imports, which are generally imported at arms length from reputable suppliers.'

'Unscrupulous importers often under declare the values of their imports to reduce duties, and in the case of biscuits, have been known to actually not declare them at all. The legal case in Lae between the IRC and an importer a few years ago is a case in point. We do not think that an outcome in favour of IRC (and PNG) was ever concluded in this case. Another recent case in Port Moresby of under-declaration is another example of what can be done if enforcement is good, however, we do not know the outcome of this one.'

The laws are adequate, but need properly enforcing. This means resources need to be allocated to enforcement, and away from "clerical" type work and the tariff structure simplified to create less administration (thereby reducing costs) and a better understanding by those affected - customers, manufacturers etc...(thereby improving efficiency).'

(Source: Arnotts Biscuits (PNG) Ltd submission, September 2003)

Manufactures Council of PNG, Lae

'Well-publicised cases of seizure of undervalued imports. These practices are widespread and it is suggested that K11 million per annum is lost through these practices. In addition such undervalued goods are not passed on at lower prices to consumers. Manufacturers cannot compete with such practices.'

(Source: Manufacturers Council of Lae presentation, September 2003)

8.2 Other Considerations

Efficiency, equity and simplicity are the traditional and fundamental criteria for tax systems. However, there are other issues that can be relevant when evaluating a tax or tax system. These include the extent to which the design of the system contributes to voluntary compliance, achieves an appropriate level of tax expenditures, aligns the tax and income support systems, and is consistent with the current fiscal strategy.

Another important element to consider is the distinction between the legal incidence of a tax (who has responsibility for remitting the tax) and the economic incidence (who effectively bears the financial cost of the tax). For instance, while a tax may be imposed at say, the business level, ultimately some or all of that tax may be paid by another category of taxpayer, such as consumers. The issue of incidence can make judgements on equity issues particularly difficult.

Chapter 9: Papua New Guinea's Rights and Obligations under International Trade Agreements

9. Introduction

The TRP the result of an initiative by the Papua New Guinea Government as part of its policy of gradual trade liberalization. The policy is reflected in Papua New Guinea's membership of the WTO and the APEC Forum. This chapter covers the main features of the various international trade agreements that Papua New Guinea is a member of, most notably WTO, APEC and MSG Trade Agreements.

Whilst officers of the relevant government agencies involved with international trade agreements are normally conversant with the rules of the respective agreements, there is need for wider dissemination of information relating to trade agreements to ensure private sector participants and policy makers in all government agencies are familiar with the rights and obligations these agreements bestow upon the country.

9.1 The World Trade Organization

The WTO is the body that deals with the rules of trade between nations. It is the legal and institutional foundation of the multilateral trading system. The WTO administers the body of international rules which countries are required to abide by in their trade relations with one another. The basic aim of these rules is to encourage countries to pursue open and liberal trade policies. At its heart are the WTO agreements, negotiated and signed by the majority of the world's trading nations.

The WTO agreements cover agriculture, textiles and clothing, banking, telecommunications, government purchases, industrial standards, food sanitation regulations, intellectual property, and much more. However, simple fundamental principles run through all of these documents - the trading system should be without discrimination; promote freer trade; be predictable and more competitive. (See Box 10 below for an elaboration of these principles).

Box 10: Principles of WTO trading system

Without discrimination – a country should not discriminate between its trading partners (they all, should be equally, granted "most favored nation" or MFN status); and it should not discriminate between its own and foreign products, services or nationals (they are given "national treatment");

Freer trade – with barriers coming down through negotiations;

Predictable – foreign companies, investors and governments should be confident that trade barriers (including tariffs, non-tariff barriers and other measures) would not be raised arbitrarily; more and more tariff rates and market-opening commitments are "bound" in the WTO;

More competitive – by discouraging "unfair" practices such as export subsidies and dumping products at below cost to gain market share; and

More beneficial for less developed countries – by giving them more time to adjust, greater flexibility, and special privileges.

The rules that make up the WTO system are contractually binding. All WTO member countries, whether they are developed, developing, least developed or transitional, are required to adopt national legislation and regulations to implement the rules prescribed by the Multilateral Agreements on Trade in Goods.

PNG signed the "multilateral agreement" of the WTO on the 9 June 1996. This is a legally binding agreement and therefore the Government is under contract to keep its trade barriers within agreed limits.

The objective of the multilateral trading system for trade in goods is to provide industries and business enterprises from different countries a secure, stable and predictable environment in which they can trade with one another under fair and equitable competition. Through increased trade, this open and liberal trading system is expected to promote greater investment, production and employment and thus facilitate the economic development of countries. While the detailed rules may appear complex, the entire framework is based on four rules. These are:

Protection to domestic industry through tariffs

Even though WTO membership aims at the progressive liberalization of trade, it recognizes that its member countries may wish to protect domestic production against foreign competition. However, it requires countries to provide such protection through tariffs. The use of quantitative restrictions is prohibited, except in a limited number of situations.

Binding of tariffs

Countries are urged to reduce and, where possible, eliminate protection to domestic production by reducing tariffs and removing other barriers to trade in multilateral trade negotiations. The tariffs so reduced are bound against further increases by being listed in each country's national schedule. The schedules are an integral part of the GATT legal system.

Most Favored Nation (MFN) treatment

This important rule of GATT lays down the principles of non-discrimination. The rule requires that tariffs and other regulations should be applied to imported or exported goods without discrimination among countries. Thus it is not open to a country to levy customs duties on imports from one country at a rate higher than it applies to imports from other countries. There are, however, some exceptions to the rule. Trade among members of regional trading arrangements, which are subject to preferential or duty-free rates, is one such exception. Another is provided by the Generalized System of Preferences. Under this system, developed countries apply preferential or duty-free rates to imports from developing countries, but apply MFN rates to imports from other countries.

National Treatment Rule

While the MFN rule prohibits countries from discriminating among goods originating in different countries, the national treatment rule prohibits them from discriminating between imported products and domestically produced like goods, both in the matter of the levying of internal taxes and in the application of internal regulations. Thus, after a product has entered its market on payment of customs duties, it is not open to a country to levy internal taxes (eg, sales tax or value added tax) at rates higher than those payable on a product of national or domestic origin.

9.2 Benefits to the business community of the WTO system

Governments have negotiated improved market access to enable business enterprises to convert trade concessions into trade opportunities. The objective behind the rule-based system is to ensure that the markets remain open and that this access is not disrupted by sudden and arbitrary impositions of import restrictions.

Business communities in a number of developing countries, however, continue not to be entirely aware of the advantages of the WTO trading system. The main reason for this is the

immense complexity of the systems, which has so far prevented these communities from taking an interest in, and becoming acquainted with, its rules. It is, for instance, not widely known that the legal system not only confers benefits on producing industries and business enterprise but also creates rights in their favour. For a list of benefits that the WTO confers on businesses see the Box 11 below.

9.3 The Asia Pacific Economic Co-operation Forum (APEC)

Since its inception in 1989, APEC has assumed a role in promoting trade facilitation and liberalization at the same time as its members pursued trade barrier reductions under the auspices of the GATT and, more recently, the WTO.

APEC members are pursuing trade facilitation and related administrative regulatory reforms with the ultimate objective of increasing standards of living. They aim to ensure that their economic systems deliver the goods and services people need at the lowest possible cost. For businesses and the wider community the reform initiatives increase efficiency through the use of computerised systems and smarter management techniques, assist in cutting costs, increase trade volumes, and contribute to improving transparency, certainty and fairness.

There has been substantial progress with tariff liberalization in the Asia-Pacific region over the past decade. In part, this has occurred through negotiated tariff reductions. But much has come from unilateral tariff reforms as economies have recognized the gains in economic growth arising from trade liberalization. Applied tariffs have declined faster than tariff commitments bound under the WTO.

A significant milestone was the Bogor Declaration, made by the APEC leaders in November 1994. It commits industrialized APEC economies to achieving "free and open trade and investment" no later than 2010, with non-industrialized APEC members to do so by 2020.

APEC members agreed to the Bogor Declaration because they recognized that an open multilateral trading system provides a secure international basis for the pursuit of comparative advantage and economic specialization, which, in turn, enhances economic growth and the improved welfare that it makes possible.

Trade facilitation is often initiated through APEC expert working groups or sub-forums including the Sub Committee on Customs Procedures (SCCP). Papua New Guinea is part of this working group.

More recently the approach to trade facilitation has been used to simplify and harmonize Customs procedures on the basis of the Kyoto Convention (discussed below).

9.4 APEC and customs reform

In APEC the SCCP is responsible for developing initiatives on customs and customs related issues. The SCCP has the objective of facilitating trade in the Asia-Pacific region by simplifying and harmonizing customs procedures. The SCCP was established in 1994.

Box 11: List of benefits arising from the WTO system

Binding of concessions and commitments

Business implication	Security of access to foreign markets.
Rights of exporters	<p><i>Trade in goods.</i> Right to expect that the exported product will not be subject to customs duties that are higher than the bound rates or that the value of the binding will be reduced by the imposition of quantitative and other restrictions.</p> <p><i>Trade in services.</i> Right to expect that access of service products and foreign service suppliers to a foreign market will not be made more restrictive than indicated by the terms and conditions given in the countries' schedule of commitments.</p>
Rights of importers	<p><i>Trade in goods.</i> Right to expect that imported raw materials and other inputs will not be subject to customs duties at rates higher than the bound rates.</p> <p><i>Trade in services.</i> Right to expect that the domestic service industries will be permitted to enter into joint venture or other collaboration arrangements, if the conditions provided in the schedule of commitments are complied with.</p>

Valuation of goods for customs purposes (Agreement on Customs Valuation)

Business implication	Assurance that the value declared by the importer will, as a rule, be accepted as a basis for determining the value of imported goods for customs purposes.
Right of importers	<p>Importers have a right:</p> <ul style="list-style-type: none"> ▪ To expect that they will be consulted at all stages of the determination of values; ▪ To justify the declared value, where customs expresses doubts about the truth or accuracy of the declared value or about the documents submitted; and ▪ To require customs to give in writing the reasons for rejecting the declared value, so that they can appeal to the higher authorities against the decision.

Use of pre-shipment inspection (PSI) (Agreement on pre-shipment inspection)

Business implications	By assisting governments in controlling such malpractices as the overvaluation and under valuation of imported goods, PSI services help improve the trading environment. Experience has shown that these services speed up clearance of goods through customs and reduce customs-related corruption.
Right of exporters	<p>Exporters to developing countries using mandatory PSI services have a right:</p> <ul style="list-style-type: none"> • To be informed of the procedures that PSI companies follow for physical inspection and price verification. • To expect that any complaint they may have regarding the prices determined by the inspectors is considered sympathetically by designated higher officials in the PSI company; and • To appeal to the independent Review Entity when they are not satisfied with the decision of the above mentioned senior officials.
Benefits to importers	<p>Importers benefit as:</p> <ul style="list-style-type: none"> • The utilization of PSI services speeds up customs clearance and in some cases reduces customs-related corruption. • The physical inspection carried out by PSI companies prior to price verification provides an assurance that imported products will conform to the quality and other terms of the contract.

Import licensing Procedures (Agreement on import licensing procedures)

Business implication	Assures importers and foreign suppliers that for products for which import licenses are required these licenses will be issued expeditiously.
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Right of importers	Importers and foreign suppliers have a right to expect: <ul style="list-style-type: none"> • That the procedures adopted for the issue of licenses at the national level conform to the guidelines prescribed by the agreement; • That they will not be penalized unduly for clerical and other minor errors in the application; and • That the licenses will be issued within the time periods prescribed by the agreement.
Rules applicable to exports	
Reimbursement of indirect taxes borne by exported products	
Right of exporters	Exporters have a right to expect that they will be: <ul style="list-style-type: none"> • Either exempted from payment of, or reimbursed for, customs duties on input used in the manufacture of exported products; and • Reimbursed for all indirect taxes borne by the exported products.
Export duties	In addition, exporters have a right to expect that where government levies export duties for revenue or other considerations, these will be applied at the same rate to exports at all destinations.
Anti-dumping and countervailing duties	
Right of exporters	<ul style="list-style-type: none"> • Right to expect that exporters alleged to be dumping or exporting subsidized products will be notified immediately after the investigations begin; • Right to give evidence to defend their interests in such investigations; and • Right to expect that procedures will be terminated when preliminary investigations establish that the dumping margin/subsidy element is a <i>minimis</i> and imports are negligible.
Rights of domestic	Right to petition for the levy of anti-dumping or countervailing duties where dumped or subsidized imports are causing material injury to the domestic industry provided the petition is supported by producers accounting for at least 25% of the industry's production.

Physical and market infrastructure such as utilities, roads and financial services is vital to trade. Poor quality infrastructure and inefficiencies in its provisions harm importers and exporters by adding to their costs.

APEC recognizes that trade facilitation and liberalization can be achieved only with the commitment of governments and the co-operation of industry. The SCCP is open to cooperating with business to develop a modernized customs framework, which accords with the needs of business.

Customs role to facilitate international trade

Customs administrations play a vital role in the growth of international trade and the development of the global market place. The efficiency and effectiveness of customs procedures can significantly influence the economic competitiveness of nations.

In a highly competitive world environment, international trade and investment will move towards efficient, supportive and facilitative locations. At the same time it will rapidly ebb away from the locations that are perceived by business as bureaucratic and synonymous with high costs. Customs systems and processes must not be allowed to serve as a barrier to international trade and growth.

The Kyoto Convention

The international convention on the simplification and harmonization of customs procedures (Kyoto Convention) entered into force in 1974. The growth in international cargo, the incredible developments in information technology, and a highly competitive international business environment based on quality service and customer satisfaction, are influences that have created conflict with traditional customs methods and procedures.

The WCO has therefore revised and updated the Kyoto convention to ensure that it meets the current demands of international trade. The WCO council adopted the revised Kyoto Convention in 1999 as the blue print for modern and efficient customs procedures in the 21st century.

Chief among the new governing principles of the Kyoto Convention is the commitment by customs administrations to provide transparency and predictability for all those involved in aspects of international trade. Papua New Guinea is yet to accede to this convention, but preparations are in place.

Papua New Guinea Customs, as part of its commitment to the WCO, to APEC and, on a global level, to the WTO is a member of the SCCP, which is a working group under APEC. Selected officers within the Internal Revenue Commissions' Customs Branch, are currently responsible for implementation of the 14 Point Collection Action Plans which are to assist Customs as it modernises in the APEC region. See Box 12 below for the 14 Point Collection Action Plan.

Box 12: APEC 14 Point Collection Action Plan

1. Harmonization of tariff structure with the HS convention
 - *To ensure consistency of application, certainty and a level playing field for business through the Harmonised System (HS) convention, the standard international HS for the classification of goods.*
2. Public availability of information on Customs laws, Regulations, Administrative guidelines and Rulings provided to the business sector on an on going basis
 - *To ensure traders have access to all the pertinent information for business decisions through the provision of accurate, consistent and user-friendly information to business on an on going basis.*
3. Simplification and Harmonization on the basis of the Kyoto Convention
 - *To improve efficiency in customs clearance and the delivery of goods to benefit importers, exporters and manufacturers through simplified customs procedures and best practice.*
4. Adoption and support for the UN/EDIFACT Paperless Trading
 - *To use the standard UN electronic messaging format for automated systems, the United Nations Electronic Data Interchange for Administration, Commerce and Transport, to promote an electronic highway for business.*
5. Adoption of the Principles of the WTO Valuation Agreement
 - *To facilitate administration of the WTO's Valuation Agreement on standards procedures for valuing goods*
6. Adoption of the Principles of the WTO Intellectual Property (TRIPS) Agreement
 - *To implement border enforcement procedures for protecting intellectual property rights.*
7. Introduction of the Clear Appeals Provision
 - *To provide business with an opportunity to challenge potentially erroneous or inequitable customs decisions through mechanisms for transparent, independent and timely appeals.*

8. Introduction of an Advance Classification Ruling System
 - *To establish simplified procedures for providing classification information prior to importation, thus bringing certainty and predictability to international trading and helping traders to make sound business decisions based on legally binding advice.*
9. Provisions for temporary importation, eg, acceding to the ATA Carnet Convention or the Istanbul Convention
 - *To help business move goods such as commercial samples, professional equipment, tools of trade and exhibition material across borders with a high degree of certainty as to how these goods will be treated by Customs having standard procedures for admitting goods on a temporary basis.*
10. Harmonized APEC data elements
 - *To develop a comprehensive directory supported by the United Nations, which includes a simplified "core set" of data elements, largely derived from commercially available data that would satisfy the standard data requirements of the majority of APEC trade transaction and so facilitate to exchange of information and provide a foundation for common forms and electronic commerce.*
11. Risk Management Techniques
 - *To focus customs enforcement efforts on high-risk goods and travelers and facilitate the movement of low-risk shipments, through a flexible approach tailored to each APEC economy.*
 1. Guidelines on Express Consignment Clearance
 - *To implement principles contained in the WCO guidelines on Express Consignment Clearance,*
 - *the international standard procedures for clearance of express goods, working in partnership with express industry associations.*
 2. Integrity
 - *To raise level of integrity in customs administrations.*
 3. Customs-Business Partnership
 - *To enhance the co-operation and communication between Customs and the business sector.*
12. Guidelines on Express Consignment Clearance
 - *To implement principles contained in the WCO guidelines on Express Consignment Clearance, the international standard procedures for clearance of express goods, working in partnership with express industry associations.*
13. Integrity
 - *To raise level of integrity in Customs administrations*
14. Customs-Business Partnership
 - *To enhance the co-operation and communication between Customs and the business sector.*

As traditional trade barriers such as tariffs are reduced, trade facilitation reforms that address these impediments to trade in goods and services become more important.

International trade can be made more efficient, less costly and less time consuming if countries review complex and redundant administrative procedures that affect the mobility of business people, payments and insurance. The benefit of trade facilitation reforms accrues not only to traders but also to other business and consumers.

9.5 Preferential Trade Agreements

Agreement on Trade and Commercial Relations between the Government of Australia and the Government of Papua New Guinea (PACTRA II)

PACTRA II seeks to strengthen trade, investment and private sector co-operation between Australia and Papua New Guinea. It aims to see that the trading relationship between the two countries is mutually beneficial and takes account of the capacity, resources and development needs of both countries. Under PACTRA II, Papua New Guinea goods receive duty free entry into Australia for goods meeting relevant rules of origin.

While Papua New Guinea goods receive duty free entry into Australia, during the consultations a number of producers raised concerns that strict quarantine rules made it very difficult to export agricultural products and processed food to Australia. They suggested that such rules inhibited exports and were a non-tariff barrier to trade.

Melanesian Spearhead Group Preferential Trade Agreement

The Melanesian Spearhead Group (MSG) Preferential Trade Agreement is a trade treaty governing the four Melanesian States of Vanuatu, Papua New Guinea, the Solomon Islands and Fiji.

The MSG Trade Agreement, signed in 1994, is a sub-regional trade treaty established to foster and accelerate economic development through freer trade relations on a MFN basis and provide a political framework for regular consultations and review on the status of the Agreement.

This Agreement covers over 400 tariff lines of the Harmonised Systems of Customs Tariff Code and is consistent with agreed international trade rules and obligations.

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APPENDIX 1: Current PNG tariff rates

Summary of Intermediate rates (per cent)

Description of goods	Pre TRP -1997	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Chapter 2: Meat and Edible meat offal					
Cow meat, fresh or chilled	30	30	25	20	15
Cow meat, fresh or chilled	30	30	25	20	15
Frozen	30	30	25	20	15
Manufactured in canneries	40	30	25	20	15
other meat except of poultry	40	30	25	20	15
Chapter 4: Dairy produce, Birds eggs, Natural honey, Edible products of animal origin					
Egg Yolks	40	30	25	20	15
Other edible products of animal origin	40	30	25	20	15
Chapter 5: Products of animal origin					
Feathers, bones, ivory, shell, coral, etc	40	30	25	20	15
Chapter 9: Coffee, tea, mate and spices					
Spices (except chillies, vanilla, cardamons & ginger)	40	30	25	20	15
Chapter 11: Products for the milling industry					
Wheat flour	40	30	25	20	15
Cereal flour	11,40	30	25	20	15
Flour, meal and flakes of potatoes	55,40	30	25	20	15
Chapter 12: Oil seeds & oleaginous fruits, miscellaneous grains, seeds & fruits, industrial/medicinal plants; straw and fodder					
Palm nuts and kernels	40	30	25	20	15
Poppy seeds and shea nuts	40	30	25	20	15
Apricot, peach or plum stones and kernels	40	30	25	20	15
Sugar beet	40	30	25	20	15
Sugar cane	40	30	25	20	15
Other	40	30	25	20	15
Chapter 14: Vegetable plating materials; vegetable products not elsewhere specified/included					
Vegetable materials used primarily for plating (eg. Bamboos, rattans, ree	55,40	30	25	20	15
Vegetable materials used primarily as stuffing or padding	40	30	25	20	15
Vegetable materials used primarily in brooms/brushes	11	30	25	20	15
Chapter 15: Animal/ vegetable fat & oils & their cleavage products: prepared edible fats; animal vegetable waxes					
Soya-bean oil bottled for retail sale	55	30	25	20	15
Ground-nut oil bottled for retail sale	11	30	25	20	15
Palm oil bottled for retail sale	55	30	25	20	15
Copra, palm kernel or babassu oil and their fractions	55,11	30	25	20	15
Animal or vegetable fats and oil bottled for retail	11	30	25	20	15
Other (including canned dripping)	40	30	25	20	15
Other animal or vegetable fats bottled for retail	11	30	25	20	15
Chapter 16: Preparations of meat, fish & other seafood					
Sardines	55,11	30	25	20	15
Chapter 17: Sugars and sugar confectionary					
Molasses resulting from extraction or refining of sugar	40	30	25	20	15
Chapter 18: Cocoa & cocoa preparations					
Cocoa and cocoa preparations	40	30	25	20	15
Chapter 19: Preparations of cereals, flour, starch/ milk; Pastry products					
Other	40	30	25	20	15
Pasta	40	30	25	20	15
Chapter 21: Miscellaneous edible preparations					
Prepared baking powder, packed for retail sale	11	30	25	20	15
Powders for table creams, jellies & ice-cream	40	30	25	20	15
Pastes and other preparations	40	30	25	20	15
Other food preparations	40	30	25	20	15
Chapter 23: Residues & wastes from the food industry: Prepared animal fodder					
Other	11	30	25	20	15
Dog or cat food	55	30	25	20	15
Other preparations used for animal feeding	11	30	25	20	15

Chapter 25: Salt; Sulphur; Earths & stone and Plastering materials					
Portland white cement	40	30	25	20	15
Chapter 28: Inorganic chemicals, Organic/ inorganic compound of precious metals, of rare earth materials, of radio active elements/isotopes					
Sodium Hypochlorite	5	30	25	20	15
Chapter 32: Tanning/ dyeing extracts, tanning & their derivatives; Dyes, Pigments & other colouring matters, paints & vanishes, putty and other mastics, inks					
Paints	40	30	25	20	15
Chapter 33: Essential oils and resinoids; Perfumery, cosmetics/ Toilet preparation					
Beauty or make-up preparations	55	30	25	20	15
Preparations for use on the hair	55, 40	30	25	20	15
Pre-shave, shaving or after-shave preparations, personal deodorants & other toilet preparations	40, 55	30	25	20	15
Chapter 35: Albuminoidal substances; Modified starches, Glues, Enzymes					
Glues or adhesive for retail sale	40	30	25	20	15
Chapter 38: Miscellaneous chemical products					
Other disinfectants & deodorizers	40	30	35	20	15
Chapter 39: Plastic and Articles thereof					
Tubes, pipes, and hoses	40	30	25	20	15
Of polymers or ethylene	40	30	25	20	15
Of polymers of propylene, printed	11	30	25	20	15
Of vulcanised fibre, printed	40	30	25	20	15
Of cellulose acetate, printed	40	30	25	20	15
Of other cellulose derivatives, printed	40	30	25	20	15
Baths, shower-baths and wash-basins	11	30	25	20	15
Sacks and bags of polymers or ethylene	40	30	25	20	15
Sacks and bags, other plastics	40	30	25	20	15
Carboys, bottles and flasks	40	30	25	20	15
Caps and lids	11	30	25	20	15
Other	40	30	25	20	15
Tableware, kitchen ware & other household articles	40	30	25	20	15
Disposable drinking cups	40	30	25	20	15
Reservoirs	11	30	25	20	15
Seedling bags having aeration		30	25	20	15
Chapter 43: Furskins and artificial fur: Manufacture thereof					
Tanned or dressed furskins	40	30	25	20	15
Articles or apparel and clothing accessories	40	30	25	20	15
Artificial fur	40	30	25	20	15
Chapter 44: Wood and articles of wood; wood charcoal					
Fuel wood and chips or particles	40	30	25	20	15
Wood in the rough, poles sawn or chipped	40	30	25	20	15
Wood continuously shaped	40	30	25	20	15
Board of wood	55	30	25	20	15
Carpentry articles	40	30	25	20	15
Pallets, box pallets, and other load boards	40	30	25	20	15
Chapter 48: Paper & paperboard; articles of paper pulp; of paper/ of paperboard					
Corrugated paper and paperboard	40	30	25	20	15
Other corrugated paper	40	30	25	20	15
Paper & paperboard used for writing, printing or other graphic purposes	40, 11	30	25	20	15
Paper, of size A3 or under	40	30	25	20	15
Lightweight coated paper of size A3/ under	11	30	25	20	15
Paper, printed	40	30	25	20	15
Bleached, printed	40	30	25	20	15
Wallpaper and floor coverings	10	30	25	20	15
Carbon or similar copying paper, size A3 or under	40	30	25	20	15
Self-copy paper, size A3 or under	40	30	25	20	15
Envelopes, printed and personalised	40	30	25	20	15
Letter cards and post cards	40	30	25	20	15
Boxes, pouches, wallets & writing compendiums	40	30	25	20	15
Articles of apparel and clothing	40	30	25	20	15
Cartons, boxes and cases	40, 11	30	25	20	15
Folding cartons, boxes and cases	11	30	25	20	15
Other sacks and bags	40	30	25	20	15
Other packaging containers	11	30	25	20	15
Box files, letter trays, storage boxes	40	30	25	20	15
Registers, account books, note books, receipt books, letter pads & similar articles	40	30	25	20	15
Printed labels	40	30	25	20	15
Other paper and paperboard	40	30	25	20	15
Self-adhesive, printed	40	30	25	20	15
Moulded or pressed	40	30	25	20	15

Chapter 49: Printed books, Newspapers, Pictures & other products of the printing industry, Manuscripts,**Type scripts and plans**

Other printed matter	40, 11	30	25	20	15
Illustrated post cards & printed cards, calendars	40	30	25	20	15

Chapter 56: Wadding, Felt & non-woven special yarns, Twine, Cordage, Ropes and cables and articles thereof

Other articles of yarn and strip	40	30	25	20	15
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Chapter 57: Carpets and other Textile Floor Coverings

Carpet and other textile floor coverings	55	30	25	20	15
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Chapter 58: Special woven fabrics, Tufted textiles fabrics, Lace, Tapestries, Trimmings, Embroidery

Mechanically and hand-made lace	40	30	25	20	15
Hand-woven tapestries	40	30	25	20	15
Braids in the piece	40	30	25	20	15
Embroidery in the piece	40	30	25	20	15
Quilted textile	40	30	25	20	15

Chapter 59: Impregnated, Coated, Covered/ laminated textile fabrics, Textile Articles suitable for industrial use

Textile wall coverings	40	30	25	20	15
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Chapter 61: Articles of Apparel & Clothing accessories, Knitted/ crocheted

Other	40	30	25	20	15
Dress shields or shoulder pads	40	30	25	20	15
Labels, badges and emblems	40	30	25	20	15

Chapter 62: Articles of Apparel and Clothing Accessories, Not Knitted or Crocheted

Labels, badges and the like	11	30	25	20	15
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Chapter 63: Other made up articles; sets, worn clothing & worn textiles; rags

Blankets and travelling rugs	40	30	25	20	15
Bed linen, table linen, toilet linen & kitchen linen	40	30	25	20	15
Other furnishing articles	40	30	25	20	15
Other Sacks and bags	11	30	25	20	15
Pneumatic mattresses	40	30	25	20	15
Other (camping goods)	40	30	25	20	15
Sets	40	30	25	20	15

Chapter 64: Footwear, Gaiters & the like, Parts of such articles

Other waterproof footwear	40	30	25	20	15
Other footwear	40	30	25	20	15
Parts of wood	40	30	25	20	15

Chapter 65: Headgear and Parts Thereof

Hats and headgear	40	30	25	20	15
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Chapter 66: Umbrellas, Sun Umbrellas, walking sticks, seat-sticks, whips, riding crops and parts thereof

Umbrellas and sticks	40	30	25	20	15
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Chapter 67: Prepared feathers and down and articles of feather or down; artificial flowers; articles of human hair

Skin and other parts of birds	40	30	25	20	15
Artificial Flowers, foliage and fruit	55	30	25	20	15

Chapter 68: Articles of Stone, Plaster, Cement, Asbestos, Mica or Similar material

Fabricated asbestos fibres	40	30	25	20	15
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Chapter 69: Ceramic Products

Tableware and kitchenware	40	30	25	20	15
Other ceramic articles	40	30	25	20	15

Chapter 70: Glass and Glassware

Unframed mirrors	40	30	25	20	15
Glassware for table, kitchen, toilet, office & indoor decoration	40	30	25	20	15

Chapter 72: Iron and Steel

Corrugated iron or steel	5	30	25	20	15
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Chapter 73: Articles of Iron and Steel					
Bridges and bridge-sections	11	30	25	20	15
Reservoirs, tanks and vats	40	30	25	20	15
Tanks, casks, drums, cans and boxes	40, 11	30	25	20	15
Other	40	30	25	20	15
Barbed wire	55	30	25	20	15
Cloth, grill, netting and fencing	55	30	25	20	15
Nails, tacks, drawing pins and staples	40	30	25	20	15
Table, kitchen or other household articles	40	30	25	20	15
Articles of iron or steel wire	40	30	25	20	15
Other articles of iron or steel	40	30	25	20	15
Chapter 74: Copper and Articles Thereof					
Table, kitchen or other household articles	40	30	25	20	15
Chapter 75: Nickels and Articles thereof					
Other Articles of Nickel	40	30	25	20	15
Chapter 76: Aluminium and Articles thereof					
Table, Kitchen and other household articles	40	30	25	20	15
Aluminium structures	40	30	25	20	15
Chapter 78: Lead and Articles thereof					
Vats, Reservoirs and drums	40	30	25	20	15
Other articles of Lead	40	30	25	20	15
Chapter 79: Zinc and Articles thereof					
Other Articles thereof	40	30	25	20	15
Chapter 80: Tin and Articles thereof					
Vats, reservoirs, drums	40	30	25	20	15
Household articles	40	30	25	20	15
Other articles of tin	40	30	25	20	15
Chapter 83: Miscellaneous articles of base metals					
Suitable for buildings	40	30	25	20	15
Hat racks, hat pegs and brackets	40	30	25	20	15
Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliances					
Automatic goods vending machines	40	30	25	20	15
Chapter 87: Vehicle other than Railway or tramway rolling stock, and parts and accessories thereof					
Other trailers and semi-trailers	40	30	25	20	15
Wheelbarrows	11	30	25	20	15
Chapter 96: Miscellaneous manufactured articles					
Combs, hairslides and hairpins	40	30	25	20	15

Summary of Protective rates (per cent)

Description of goods	Pre TRP -1997	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Chapter 2: Meat and Edible meat offal					
Crocodile meat, other meat and edible offal	40	40	35	30	25
Chapter 3: Fish and crustaceans					
Fish and crustaceans	55	40	35	30	25
Chapter 4: Dairy produce, Birds eggs, Natural honey, Edible products of animal origin					
Natural Honey	55	40	35	30	25
Chapter 5: Products of animal origin					
Feathers, bones ivory, shell coral etc.	40	40	35	30	25
Chapter 6: Live trees and other plants					
Cut flowers and flower buds	55	40	35	30	25
Foliage, branches and other parts of plants	55	40	35	30	25
Chapter 7: Edible vegetable and certain roots and tubers					
Vegetables, frozen	55	40	35	30	25
Vegetables, provisionally preserved	55	40	35	30	25
Dried vegetables	55	40	35	30	25
Dried leguminous vegetables	55	40	35	30	25
Chapter 8: Edible fruits, nuts and peel					
Fruits & nuts except cashew nuts, bananas, pineapples, avacados, guavas, mangoes, melons, apples, pears, quinces, citrus fruits & their peels	55,40	40	35	30	25
Chapter 9: Coffee, tea, mate and spices					
Coffee	55	40	35	30	25
Tea and mate	55	40	35	30	25
Chillies	55	40	35	30	25
Vanilla	55	40	35	30	25
Gardamons	55	40	35	30	25
Ginger	55	40	35	30	25
Chapter 12: Oil seeds & oegainous fruits, miscellaneous grains, seeds & fruits, industrial/medicinal plants; straw and fodder					
Ground nuts (peanuts)	40	40	35	30	25
Copra	40	40	35	30	25
Chapter 16: Preparations of meat, fish & other seafood					
Sausages	40	40	35	30	25
Other prepared or preserved meats, extracts and seafood	55,40,11	40	35	30	25
Crustaceans, molluscs & other acquatic invertebrates, prepared or preserved	55	40	35	30	25
Chapter 17: Sugars and sugar confectionary					
Sugar confectionary, not containing cocoa	55	40	35	30	25
Chapter 18: Cocoa & cocoa preparations					
Other blocks, slabs or bars	40	40	35	30	25
Chocolate confectionery	40	40	35	30	25
Chapter 19: Preparations of cereals, flour, starch/ milk; Pastry products					
Pasta	40	40	30	20	15
Instant noodles	40	40	35	30	25
Prepared foods obtained swelling & roasting of cereal & cereal products	40	40	35	30	25
Bread, pastry, cakes, biscuits & other bakers ware	40	40	35	30	25
Chapter 20: Preparations of vegetable , fruits, nuts & other parts of plants					
Preparations of vegetables, fruits, nuts etc.	55,40	40	35	30	25
Chapter 21: Miscellaneous edible preparations					
Extracts, essences & concentrates of coffee, tea or mate	55	40	35	30	25
Ice cream	40	40	35	30	25
Sweets, gums and the like	55	40	35	30	25
Cordials	55	40	35	30	25

Chapter 34: Soap, Organic surface active agents, washing preparation, lubricating preparation, artificial waxes, prepared waxes, polishing/scouring preparations, candles and similar articles, modelling pastes, dental waxes & dental preparation with a basis of plaster

Soap	55, 40	40	35	30	25
Preparations put up for retail sale	40	40	35	30	25
Synthetic detergent in powder form	40	40	35	30	25
Synthetic detergent in liquid form	40	40	35	30	25
Liquid bleaches	40	40	35	30	25
Other	40	40	35	30	25
Scouring pastes and powders	40	40	35	30	25
Candles and tapers	55	40	35	30	25

Chapter 38: Miscellaneous chemical products

Disinfectants	40	40	35	30	25
Disinfectants & Other room deodorisers for retail sale	55	40	35	30	25

Chapter 39: Plastic and Articles thereof

Shopping bags	55	40	35	30	25
Statuettes	55	40	35	30	25

Chapter 41: Raw Hides, Skins & Leather

Raw hides of crocodile	55	40	35	30	25
Leather of crocodile	55	40	35	30	25

Chapter 42: Articles of leather, saddlery & Harness; Travel goods, Handbags & similar containers, Articles of animal gut

Articles of leather	55, 40	40	35	30	25
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Chapter 44: Wood and articles of wood; wood charcoal

Profile shapes	55	40	35	30	25
Wooden frames	40	40	35	30	25
Packing cases, boxes, crates and drums	40	40	35	30	25
Pallets, box pallets, and other load boards	40	40	35	30	25
Builders' joinery and carpentry of wood	100, 75, 55	40	35	30	25
Statuettes and Other	55	40	35	30	25
Ornaments	40	40	35	30	25

Chapter 46: Manufactures of straw, Esparto/ of other plaiting materials; Basket ware & wickerware

Plaits and basketwork	40	40	35	30	25
Baskets for use in pearl industry	11	40	35	30	25

Chapter 48: Paper & paperboard; articles of paper pulp; of paper/ of paperboard

Toilet paper	55	40	35	30	25
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Chapter 49: Printed books, Newspapers, Pictures & other products of the printing industry, Manuscripts, Type scripts and plans

Illustrated post cards & printed cards, calendars	40	40	35	30	25
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Chapter 61: Articles of Apparel & Clothing accessories, Knitted/ crocheted

Overcoats and jackets	40	40	35	30	25
Jackets and blazers	40	40	35	30	25
Trouser, overalls and shorts	40	40	35	30	25
Women's suits, ensembles, jackets & dress	40	40	35	30	25
Night-shirts and pyjamas	40	40	35	30	25
shirts and blouses	40	40	35	30	25
T-shirts, singlets and other vests	40	40	35	30	25
Jerseys (football)	40	40	35	30	25
Track suits	40	40	35	30	25
Other garments	40	40	35	30	25
Shawls, scarves, and veils	40	40	35	30	25
Ties, bow ties and cravats	40	40	35	30	25

Chapter 62: Articles of Apparel and Clothing Accessories, Not Knitted or Crocheted

Jackets and blazers	40	40	35	30	25
Trouser, overalls and shorts	40	40	35	30	25
Women's suits, ensembles, jackets and dresses	40	40	35	30	25
shirts and blouses	40	40	35	30	25
Other, men's or boy's	40	40	35	30	25
Other, women's or girls	40	40	35	30	25
Other garments, men's or boy's	40	40	35	30	25
Other garments, women's/girls	40	40	35	30	25
Shawls, scarves, and veils	40	40	35	30	25
Ties, bow ties and cravats	40	40	35	30	25

Chapter 53: Other made up articles; sets, worn clothing & worn textiles; rags

Curtains	40	40	35	30	25
Sails	40	40	35	30	25
Dress patterns	40	40	35	30	25
Flags and banners	40	40	35	30	25
Loose covers for cars	40	40	35	30	25
Cushion covers	40	40	35	30	25
Other made up articles	40	40	35	30	25

Chapter 64: Footwear, Gaiters & the like, Parts of such articles

Footwear with outer soles of leather & Uppers which consist of leather strips	40	40	35	30	25
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Chapter 68: Articles of Stone, Plaster, Cement, Asbestos, Mica or Similar material

Panels, boards, tiles and blocks of vegetable fibre or straw with cement, plaster or other mineral binders	75	40	35	30	25
Pipes	40	40	35	30	25
Prefabricated structural components for building or civil engineering	40	40	35	30	25
Statuettes and ornaments	55	40	35	30	25

Chapter 69: Ceramic Products

Statuettes	55	40	35	30	25
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Chapter 70: Glass and Glassware

Framed mirrors	40	40	35	30	25
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Chapter 73: Articles of Iron and Steel

Angles, shapes and sections	55	40	35	30	25
Structures and part of structures	55	40	35	30	25
Cooking appliances for solid fuel	40	40	35	30	25

Chapter 83: Miscellaneous articles of base metals

Office or desk equipment	40	40	35	30	25
Bells, gongs and statuettes	55, 40	40	35	30	25
Crown corks	55	40	35	30	25
Sign and name plates	40	40	35	30	25

Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliances

Furniture for refrigerating or freezing equipment	55	40	35	30	25
Furniture, bases and covers for sewing machines	55	40	35	30	25

Chapter 94: Furniture, bedding, mattresses, mattress supports, cushions and similar stuffed furnishings, lamps & lighting fittings, illuminated signs and name signs plates; prefabricated buildings

Seats	55	40	35	30	25
Other furniture	55	40	35	30	25
Mattress supports	55, 40	40	35	30	25

Chapter 96: Miscellaneous manufactured articles

Worked ivory, bone, shell, coral and other animal carving material	55	40	35	30	25
Worked vegetable or mineral carving	55	40	35	30	25
Lighters	55	40	35	30	25
Smoking pipes	55, 40	40	35	30	25
Scent sprays and similar toilet sprays	55, 40	40	35	30	25

Summary of Prohibitive rates (per cent).

Description of goods	Pre TRP -1997	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Chapter 7: Edible vegetable and certain roots and tubers					
Vegetables except potato seed, vegetables frozen, provisionally preserved, dried or leguminous	75	55	50	45	40
Chapter 8: Edible fruits, nuts and peel					
Cashew nuts	55	55	50	45	40
Bananas	55	55	50	45	40
Pineapples	55	55	50	45	40
Avocados	55	55	50	45	40
Guavas, mangoes and mangosteens	55	55	50	45	40
Citrus fruits	55	55	50	45	40
Melons	55	55	50	45	40
Fresh fruit	55	55	50	45	40
Chapter 13: Lac, Gums, resins & other vegetable saps & extracts					
Vegetable saps and extracts of opium	55	55	50	45	40
Chapter 44: Wood and articles of wood; wood charcoal					
Veneer sheets and sheets for plywood	100	55	50	45	40
Chapter 71: Natural/ cultured pearls, precious semi-precious stones; precious metals, metal clad with precious , metal ,imitation jewels					
Articles of jewellery	55	55	50	45	40
Goldsmiths' or silversmiths' wares	55	55	50	45	40
Other articles of precious metal	55	55	50	45	40
Articles of natural or cultured pearls	55	55	50	45	40
Chapter 82: Tools, Implements, Cutlery, spoons & Forks, of base metals					
Knives of spring type opening	55	55	50	45	40
Chapter 94: Furniture, bedding, mattresses, mattress supports, cushions and similar stuffed furnisings, lamps & lighting fittings, illuminated signs and name signs plates; prefabricated buildings					
Prefabricated buildings	75	55	50	45	40

Summary of exceptional items

Description of goods	Pre TRP -1997	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Chapter 16: Preparations of meat, fish & other seafood					
Mackerel	90	70	50	20	15
Chapter 17: Sugars and sugar confectionary					
Cane/ beet sugar chemically pure sucrose	85	82	76	70	70
Icing Sugar	85	0	0	70	40
Chapter 44: Wood and articles of wood; wood charcoal					
Plywood, veneered panels & laminated wood	100	95	85	75	40
Chapter 25: Salt; Sulphur; Earths & stone and Plastering materials					
Salt in containers /bags of 25kg or less	11, 5	0	0	40/20	15

Summary of non advalorem items

Description of goods	Pre TRP -1997	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Chapter 2: Meat and Edible meat offal					
Meat & edible offal of poultry (fowls, turkeys, ducks & geese)	K3.50/Kg	K3.15/kg	K2.90/kg	K2.60/kg	K2.20/kg
Chapter 4: Dairy produce, Birds eggs, Natural honey, Edible products of animal origin					
Birds' eggs in shell, fresh/preserved or cooked	K2.00/doz.	K1.80	K1.50	K1.30	K1.00
Chapter 22: Beverages, spirits & vinegar					
Natural/Artificial mineral, waters & aerated water	55	0.50/ltr From 1/07/99 to 31/5/01	0.45/ltr From 1/6/01 to 30/11/01	0.45/ltr From 1/12/01 to 30/11/02	0.40/ltr From 1/12/02
Beer made from malt	125	K70.0/lal	K70.0/lal	K60.0/lal	K60.0/lal
Beer concentrates	K6.25/kg	K.6.25/kg	K.6.25/kg	K.6.25/kg	K.6.25/kg
Other fermented beverages	K1.00	K70.0/lal	K70.0/lal	K60.0/lal	K60.0/lal
Spirits, liquors and other spirituous beverages	55	K70.0/lal	K70.0/lal	K60.0/lal	K60.0/lal
Mixed drinks containing any alcohol not for medicinal purposes	0	K70.0/lal	K70.0/lal	K60.0/lal	K60.0/lal
Chapter 23: Residues & wastes from the food industry: Prepared animal fodder					
Stock feed in bags of 50kg or less		K64.0/ ton	K64.0/ton	K64.0/ton	K64.0/ton
Stock feed in bags of 50kg or more		K60.0/ ton	K60.0/ ton	K60.0/ ton	K60.0/ ton
Chapter 24: Tobacco & manufactured tobacco substitutes					
Tobacco, not stemmed/stripped	K0.40/kg	K0.40/kg	K0.40/kg	K0.40/kg	K0.40/kg
Tobacco, partly or wholly stemmed/stripped	K3.65/kg	K0.40/kg	K0.40/kg	K0.40/kg	K0.40/kg
Tobacco refuse	K3.65/kg - 125	K3.65/kg	K3.65/kg	K3.65/kg	K3.65/kg
		From 1/07/99 to 31/5/01	From 1/6/01 to 30/11/01	From 1/12/01 to 30/11/02	From 1/12/02
Cigars, cheroots, cigarillos containing tobacco	125	K60.0/kg	K60.0/kg	K50.0/kg	K45.0/kg
Cigarettes containing tobacco	125	K90/1000kg	K90.0/1000kg	K80.0/1000kg	K65.0/1000kg
Other manufactured tobacco	125	K60.0/kg	K60.0/kg	K50.0/kg	K45.0/kg
Chapter 36: Explosives' Pyrotechnic products, matches, pyrotechnic Alloys, Certain combustible preparations					
Matches	5t/box	5t	4.5t	4t	3.5t

Summary of Duty Free Items

Description of goods	Pre TRP -1997	TRP starts 1999 - 2000	2001 to 2002	2003 to 2005	2006
Chapter 1: live animals					
Live animals	11	0	0	0	0
Pure-bred breeding horses, mares and colts for racing	40	0	0	0	0
Live poultry, ducks, geese, turkeys and guinea fowls	K3.50/Kg	0	0	0	0
Cats and dogs	40	0	0	0	0
Birds	40	0	0	0	0
Chapter 2: Meat and Edible meat offal					
Boneless	reduced rate	0	0	0	0
Meat of bovine animals, fresh or chilled or frozen	11	0	0	0	0
Meat of sheep or goats, fresh, chilled or frozen	11	0	0	0	0
Meat of horses, asses, mules or hinnies, fresh, chilled or frozen	40,11	0	0	0	0
Meat and edible offal of poultry	11	0	0	0	0
Chapter 3: Fish and crustaceans					
Bait	11	0	0	0	0
Chapter 4: Dairy produce, Birds eggs, Natural honey, Edible products of animal origin					
Dairy produce	11	0	0	0	0
Cream	40	0	0	0	0
Yoghurt	40	0	0	0	0
Chapter 5: Products of animal origin					
Human Hair	40	0	0	0	0
Pigs, "hogs" or boards' bristles and hair	50	0	0	0	0
Horse Hair	11	0	0	0	0
Guts, bladders and stomachs of animals	11	0	0	0	0
Animal products not elsewhere specified	11	0	0	0	0
Chapter 6: Live trees and other plants					
Bulbs, tubers and other live plants	11	0	0	0	0
Chapter 7: Edible vegetable and certain roots and tubers					
Potato seed for sowing	11	0	0	0	0
Chapter 8: Edible fruits, nuts and peel					
Apples, pears and quinces	11,40	0	0	0	0
Peel	11	0	0	0	0
Chapter 10: Cereals					
Cereals (wheat, maize, rice etc)	11	0	0	0	0
Chapter 11: Products for the milling industry					
Maize (corn) flour	11	0	0	0	0
Cereal groats, meal, pellets and cereal grains	11	0	0	0	0
Malt and starches	40,11	0	0	0	0
Wheat gluten		0	0	0	0
Chapter 12: Oil seeds & oleaginous fruits, miscellaneous grains, seeds & fruits, industrial/medicinal plants; straw and fodder					
Oil seeds and oleaginous fruits except peanuts, copra, palm nuts	11	0	0	0	0
Chapter 13: Lac, Gums, resins & other vegetable saps & extracts					
Lac/vegetable saps & extracts except vegetable saps and extracts of opium	11	0	0	0	0
Vegetable saps and extracts of liquorice	55	0	0	0	0
Chapter 14: Vegetable plating materials; vegetable products not elsewhere specified/included					
Vegetable materials not elsewhere specified	40,11	0	0	0	0
Chapter 15: Animal/ vegetable fat & oils & their cleavage products: prepared edible fats; animal vegetable waxes					
Animal or vegetable fats and oil	40,11	0	0	0	0
except oil from soya bean, ground nuts, palm oil, copra, palm kernel, babasu, animal or vegetable fat, canned dripping bottled for retail					
Chapter 16: Preparations of meat, fish & other seafood					
Extracts & juices of meat, fish or crustaceans	11	0	0	0	0
Sardines	11	0	0	0	0
Pike	8	0	0	0	0

Chapter 17: Sugars and sugar confectionary					
Icing sugar	85	0	0	0	0
Other sugars under 17.02	40	0	0	0	0
Chapter 18: Cocoa & cocoa preparations					
Other preparations in blocks weighing 2kg or more	40	0	0	0	0
Chapter 20: Preparations of vegetable , fruits, nuts & other parts of plants					
Beans, shelled	11	0	0	0	0
Fruit juice concentrates and other preparations for the manufacture of non-alcoholic beverages or cordials	11	0	0	0	0
Chapter 21: Miscellaneous edible preparations					
Yeasts	11	0	0	0	0
Prepared baking powder	11	0	0	0	0
Sauces	40	0	0	0	0
Seasonings used for manufacture & not for resale	11	0	0	0	0
Soups and broths	40	0	0	0	0
Protein concentrates	40	0	0	0	0
Flavouring powders for manufacturing	11	0	0	0	0
Concentrates & other preparations for manufacture of non-alcoholic beverages or cordials	11	0	0	0	0
Chapter 22: Beverages, spirits & vinegar					
Flavored milk	11	0	0	0	0
Wine, vermouth and other wine	11	0	0	0	0
Undenatured ethyl alcohol by volume of 80% or higher	11	0	0	0	0
Concentrates & alcoholic preparations of a used for manufacture of beverages	40	0	0	0	0
Vinegar and substitutes for vinegar	11	0	0	0	0
Chapter 23: Residues & wastes from the food industry: Prepared animal fodder					
Residues and waste from food industries except dog/cat food & other preparations used in animal feeding	11	0	0	0	0
Acorns and horse-chestnuts	40	0	0	0	0
Chapter 24: Tobacco & manufactured tobacco substitutes					
Manufactured tobacco, for the production of cigarettes	11	0	0	0	0
Chapter 25: Salt; Sulphur; Earths & stone and Plastering materials					
Salt packed in containers /bags of 25kg or more, sulphur, earths, stones & plastering materials	11, 5	0	0	0	0
Chapter 26: Ores, Slag and Ash					
Ores, slag and ash (all tariff items in chapter 26 are regarded as duty free inputs)	11	0	0	0	0
Chapter 27: Mineral fuels, mineral oils & products of their distillation; Bituminous substances, Mineral waxes					
Coal					
Lignite	11	0	0	0	0
Oils and other products of the distillation of high temperature coal	11	0	0	0	0
Pitch and pitch coke	11	0	0	0	0
Gasoline	11	0	0	0	0
Diesel	Excise duty	0	0	0	0
Aviation Gasoline	Excise duty	0	0	0	0
Jet-AI	Excise duty	0	0	0	0
Kerosene	Excise duty	0	0	0	0
Fuel oil, heavy	0	0	0	0	0
Other	Excise duty	0	0	0	0
Lubricating oils	K0.07/lt	0	0	0	0
Gas Oils	40	0	0	0	0
Other fuel oils	K0.01/lt	0	0	0	0
Other heavy oils	Excise duty	0	0	0	0
Petroleum gases, jelly, coke, bitumen and other	K0.07/lt	0	0	0	0
	40, 11	0	0	0	0
Chapter 28: Inorganic chemicals, Organic/ inorganic compound of precious metals, of rare earth materials, of radio active elements/isotopes					
Inorganic Chemicals	5	0	0	0	0
Chapter 29 Organic Chemicals					
Organic Chemicals	5	0	0	0	0
Vitamins	0	0	0	0	0
Hormones	0	0	0	0	0
Glycosides	5	0	0	0	0
Vegetable alkaloids	5	0	0	0	0
Other organic compounds	5	0	0	0	0
Antibiotics	0	0	0	0	0

Chapter 17: Sugars and sugar confectionary

Icing sugar	85	0	0	0	0
Other sugars under 17.02	40	0	0	0	0

Chapter 18: Cocoa & cocoa preparations

Other preparations in blocks weighing 2kg or more	40	0	0	0	0
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Chapter 20: Preparations of vegetable, fruits, nuts & other parts of plants

Beans, shelled	11	0	0	0	0
Fruit juice concentrates and other preparations for the manufacture of non-alcoholic beverages or cordials	11	0	0	0	0

Chapter 21: Miscellaneous edible preparations

Yeasts	11	0	0	0	0
Prepared baking powder	11	0	0	0	0
Sauces	40	0	0	0	0
Seasonings used for manufacture & not for resale	11	0	0	0	0
Soups and broths	40	0	0	0	0
Protein concentrates	40	0	0	0	0
Flavouring powders for manufacturing	11	0	0	0	0
Concentrates & other preparations for manufacture of non-alcoholic beverages or cordials	11	0	0	0	0

Chapter 22: Beverages, spirits & vinegar

Flavored milk	11	0	0	0	0
Wine, vermouth and other wine	11	0	0	0	0
Undenatured ethyl alcohol by volume of 80% or higher	11	0	0	0	0
Concentrates & alcoholic preparations of a used for manufacture of beverages	40	0	0	0	0
Vinegar and substitutes for vinegar	11	0	0	0	0

Chapter 23: Residues & wastes from the food industry: Prepared animal fodder

Residues and waste from food industries except dog/cat food & other preparations used in animal feeding	11	0	0	0	0
Acorns and horse-chestnuts	40	0	0	0	0

Chapter 24: Tobacco & manufactured tobacco substitutes

Manufactured tobacco, for the production of cigarettes	11	0	0	0	0
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Chapter 25: Salt; Sulphur; Earths & stone and Plastering materials

Salt packed in containers /bags of 25kg or more, sulphur, earths, stones & plastering materials	11, 5	0	0	0	0
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Chapter 26: Ores, Slag and Ash

Ores, slag and ash (all tariff items in chapter 26 are regarded as duty free inputs)	11	0	0	0	0
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Chapter 27: Mineral fuels, mineral oils & products of their distillation; Bituminous substances, Mineral waxes

Coal					
Lignite	11	0	0	0	0
Oils and other products of the distillation of high temperature coal	11	0	0	0	0
Pitch and pitch coke	11	0	0	0	0
Gasoline	11	0	0	0	0
Diesel	Excise duty	0	0	0	0
Aviation Gasoline	Excise duty	0	0	0	0
Jet-AI	Excise duty	0	0	0	0
Kerosene	Excise duty	0	0	0	0
Fuel oil, heavy	0	0	0	0	0
Other	Excise duty	0	0	0	0
Lubricating oils	K0.07/lt	0	0	0	0
Gas Oils	40	0	0	0	0
Other fuel oils	K0.01/lt	0	0	0	0
Other heavy oils	Excise duty	0	0	0	0
Petroleum gases, jelly, coke, bitumen and other	K0.07/lt	0	0	0	0
	40, 11	0	0	0	0

Chapter 28: Inorganic chemicals, Organic/ inorganic compound of precious metals, of rare earth materials, of radio active elements/isotopes

Inorganic Chemicals	5	0	0	0	0
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Chapter 29 Organic Chemicals

Organic Chemicals	5	0	0	0	0
Vitamins	0	0	0	0	0
Hormones	0	0	0	0	0
Glycosides	5	0	0	0	0
Vegetable alkaloids	5	0	0	0	0
Other organic compounds	5	0	0	0	0
Antibiotics	0	0	0	0	0

Chapter 30: Pharmaceutical products

Pharmaceutical products (chapter 30 zero rate for VAT purposes)	0	0	0	0	0
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Chapter 31: Fertilizers

Fertilizers	5	0	0	0	0
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Chapter 32: Tanning/ dyeing extracts, tanning & their derivatives; Dyes, Pigments & other colouring matters, paints & vanishes, putty and other mastics, inks

Tanning Extracts and coloring matter	11	0	0	0	0
Prepared driers	11	0	0	0	0
Pigments of a kind used in the manufacture of paint	40	0	0	0	0
Artists' colours	11	0	0	0	0
Glaziers' putty	11	0	0	0	0
Printing ink	11	0	0	0	0

Chapter 33: Essential oils and resinoids; Perfumery, cosmetics/ Toilet preparation

Essential oils	11	0	0	0	0
Mixtures of odoriferous substances	11	0	0	0	0
Perfumes	55	0	0	0	0
Preparations for oral or dental hygiene	40	0	0	0	0
Odoriferous preparations used during religious rite	11	0	0	0	0

Chapter 34: Soap, Organic surface active agents, washing preparation, lubricating preparation, artificial waxes, prepared waxes, polishing/scouring preparations, candles and similar articles, modelling pastes, dental waxes & dental preparation with a basis of plaster

Organic Surface Active Agents	11	0	0	0	0
Lubricating preparations	40, 11	0	0	0	0
Artificial Waxes	11	0	0	0	0
Polishes and creams	40	0	0	0	0
Modelling pastes	40, 11	0	0	0	0

Chapter 35: Albuminoidal substances; Modified starches, Glues, Enzymes

Albumins, glues and enzymes	11	0	0	0	0
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Chapter 36: Explosives' Pyrotechnic products, matches, pyrotechnic Alloys, Certain combustible preparations

Explosives, fireworks, signaling flares	11	0	0	0	0
Ferro-cerium and other pyrophoric alloys	55, 40	0	0	0	0

Chapter 37: Photographic or cinematographic goods

Photographic plates	55	0	0	0	0
Plates for X-ray	0	0	0	0	0
Aerial photograph	11	0	0	0	0
Microfilm	11	0	0	0	0
Photographic films in rolls	55	0	0	0	0
Films for X-ray	0	0	0	0	0
Photographic paper, paperboard, textiles & plates	11	0	0	0	0
Cinematograph film	K0.02/mt	0	0	0	0
Chemical preparations for photographic use	11	0	0	0	0

Chapter 38: Miscellaneous chemical products

Miscellaneous Chemical Products	11	0	0	0	0
Anti-knock preparations	40	0	0	0	0
Hydraulic brake fluids	40	0	0	0	0
Ink removers, stencil correctors & correcting fluids	40	0	0	0	0

Chapter 39: Plastic and Articles thereof

Plastics in primary form	11	0	0	0	0
Silicon oils and greases for use as lubricants	40	0	0	0	0
Cellulose and its chemical derivatives	40	0	0	0	0
Waste, parings and scrap	40	0	0	0	0
Monofilament	40, 11	0	0	0	0
Artificial guts	11	0	0	0	0
Fittings	11	0	0	0	0
Floor coverings	40	0	0	0	0
Self adhesive plates, sheets, film foil & strip	40	0	0	0	0
Other plates, sheets, film, foil and strip	40, 11	0	0	0	0
Of polymers of propylene, not printed	11	0	0	0	0
Of vulcanised fibre, not printed	40	0	0	0	0
Of cellulose acetate, not printed	40	0	0	0	0
Of other cellulose derivatives, not printed	40	0	0	0	0
Sanitary ware	11	0	0	0	0
Boxes, cases and crates	11	0	0	0	0
Barrier bags for vacuum packing	11	0	0	0	0
Spools, cops and bobbins	11	0	0	0	0
Stoppers and other closures	11	0	0	0	0
Vats & other containers of a capacity of 300 ltrs or less	40	0	0	0	0
Builders' ware	40, 11	0	0	0	0
Other articles	40, 11	0	0	0	0

Chapter 40: Rubber and Articles thereof

Rubber and rubber articles	11	0	0	0	0
Tyres used on invalid carriages	0	0	0	0	0
Inner tubes used on invalid carriages	0	0	0	0	0
Sheath contraceptives	0	0	0	0	0
Surgical gloves	0	0	0	0	0
Other gloves	40	0	0	0	0
Other articles of vulcanised rubber	40, 11	0	0	0	0

Chapter 41: Raw Hides, Skins & Leather

Raw hides, skins and leather	11	0	0	0	0
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Chapter 42: Articles of leather, saddlery & Harness; Travel goods, Handbags & similar containers, Articles of animal gut

Saddlery and harness	11	0	0	0	0
Articles of leather used in machinery or mechanical appliances	11	0	0	0	0

Chapter 43: Furskins and artificial fur: Manufacture thereof

Raw furskins	11	0	0	0	0
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Chapter 44: Wood and articles of wood; wood charcoal

Densified wood	55	0	0	0	0
Other articles of wood (wooden sticks - ice cream)	40	0	0	0	0

Chapter 45: Cork and Articles of Cork

Cork and articles of cork	40	0	0	0	0
Floats for use in fishing nets	11	0	0	0	0

Chapter 47: Pulp of wood/ other Cellulose material, waste & scrap of paper/ paper board

Pulp and waste and scrap	40	0	0	0	0
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Chapter 48: Paper & paperboard; articles of paper pulp; of paper/ of paperboard

Newsprint	11	0	0	0	0
Uncoated paper and paperboard	11	0	0	0	0
Sack kraft paper	11	0	0	0	0
Other kraft paper	11	0	0	0	0
Carbon paper and self-copy paper in rolls	40, 11	0	0	0	0
Paper & paperboard used for writing, printing or other graphic pur	40, 11	0	0	0	0
Other	40	0	0	0	0
Light-weight coated paper, other	11	0	0	0	0
Kraft paper and paperboard and other paper and paperboard	40	0	0	0	0
Tarred, bituminised or asphalted paper & paperboard	11	0	0	0	0
Gummed or adhesive paper and paperboard and coated paper	40, 11	0	0	0	0
Paper, not printed	40	0	0	0	0
Bleached, not printed	40	0	0	0	0
Filter blocks, slabs and plates	11	0	0	0	0
Cigarette paper	40, 11	0	0	0	0
Other	40	0	0	0	0
Other	40	0	0	0	0
Duplicator stencils	40	0	0	0	0
Other paper	40	0	0	0	0
Envelopes, plain	40	0	0	0	0
Sanitary towels, tampons & napkins for babies	40	0	0	0	0
Sacks and bags	11	0	0	0	0
Other packaging containers	11	0	0	0	0
Other labels	40	0	0	0	0
Bobbins, spools and cops	11	0	0	0	0
Self-adhesive, not printed	40	0	0	0	0
Filter paper and paperboard	40	0	0	0	0
Sausage casings	40	0	0	0	0

Chapter 49: Printed books, Newspapers, Pictures & other products of the printing industry, Manuscripts,**Type scripts and plans**

Printed books, brochures and leaflets	0	0	0	0	0
Newspapers, journals and periodicals	0, 40, 11	0	0	0	0
Maps and atlases	0	0	0	0	0
Architectural drawings	0	0	0	0	0
Unused postage, cheque forms, banknotes, stock, share or bond certificates	0	0	0	0	0
Transfers (decalcomanias)	40	0	0	0	0
UNICEF Christmas cards	0	0	0	0	0
Anatomical, botanical & instrumental charts & diagrams	0	0	0	0	0

Chapter 50: Silk					
Silk	11	0	0	0	0
Chapter 51: Wool, fine/coarse					
Wool and woven fabric	11	0	0	0	0
Chapter 52: Cotton					
Cotton	11	0	0	0	0
Chapter 53: Other vegetable textile fibres; Paper Yarn and Woven Fabrics of Paper Yarn					
Other vegetable textile fibres	11	0	0	0	0
Chapter 54: Man-made Filaments					
Man-made Filaments	11	0	0	0	0
Chapter 55: Man-made Staple Fibres					
Man-made Staple Fibres	11	0	0	0	0
Chapter 56: Wadding, Felt & non-woven special yarns, Twine, Cordage, Ropes and cables and articles thereof					
Wadding of textile materials	11	0	0	0	0
Sanitary towels, tampons & napkin for babies	40	0	0	0	0
Felt	11	0	0	0	0
Rubber thread and cord	11	0	0	0	0
Metallised yarn	40	0	0	0	0
Gimped yarn and strip	11	0	0	0	0
Twine	11	0	0	0	0
Made-up fishing nets	40	0	0	0	0
Other netting	11	0	0	0	0
Other knotted netting	40	0	0	0	0
Chapter 58: Special woven fabrics, Tufted textiles fabrics, Lace, Tapestries, Trimmings, Embroidery					
Woven pile fabrics and chenille fabrics	11	0	0	0	0
Terry towelling and terry fabrics	11	0	0	0	0
Gauze	11	0	0	0	0
Tulles and other net fabrics	11	0	0	0	0
Woven fabrics and labels	11	0	0	0	0
Float or sinking cord for fishing	11	0	0	0	0
Woven fabric of metal thread	40	0	0	0	0
Chapter 59: Impregnated, Coated, Covered/ laminated textile fabrics, Textile Articles suitable for industrial use					
Textile fabrics impregnated or coated	11	0	0	0	0
Linoleum	40	0	0	0	0
Adhesive tape	40	0	0	0	0
Other	40, 11	0	0	0	0
Textile fabrics and products	11	0	0	0	0
Chapter 60: Knitted or crocheted fabrics					
Knitted or crocheted fabrics	11	0	0	0	0
Chapter 61: Articles of Apparel & Clothing accessories, Knitted/ crocheted					
Clothing, knitted or crocheted	40	0	0	0	0
Chapter 62: Articles of Apparel and Clothing Accessories, Not Knitted or Crocheted					
Clothing, not knitted or crocheted	40, 11	0	0	0	0
Chapter 63: Other made up articles; sets, worn clothing & worn textiles; rags					
Mosquito nets	11	0	0	0	0
Sacks and bags of jute, cotton, polythelyne	11	0	0	0	0
Tarpaulins and tents	11	0	0	0	0
Flood-Cloths, dish-cloths, etc.	11	0	0	0	0
Life-jackets and life-belts	11	0	0	0	0
Face-masks for protection	11	0	0	0	0
Worn clothing and rags	40, 11	0	0	0	0
Chapter 64: Footwear, Gaiters & the like, Parts of such articles					
Footwear	40, 11	0	0	0	0
Other footwear, protected metal toe-cap	11	0	0	0	0
Chapter 65: Headgear and Parts Thereof					
Safety headgear	11	0	0	0	0

Chapter 67: Prepared feathers and down and articles of feather or down; artificial flowers; articles of human hair

Human hair for use in making wigs	40	0	0	0	0
Wigs, false beards, eyebrows and eyelashes	40	0	0	0	0
Wigs used in courts of law	11	0	0	0	0

Chapter 68: Articles of Stone, Plaster, Cement, Asbestos, Mica or Similar material

Article of stone	11	0	0	0	0
Article of asphalt	11	0	0	0	0
Articles of plaster	11	0	0	0	0
Articles of cement	11	0	0	0	0
Articles of asbestos-cement	11	0	0	0	0
Friction material (brake linings and pads)	40, 11	0	0	0	0
Worked mica	40	0	0	0	0
Articles of stone	11	0	0	0	0
Other articles	55, 40	0	0	0	0

Chapter 69: Ceramic Products

Bricks, blocks and tiles	11	0	0	0	0
Refractory bricks, blocks and tiles	11	0	0	0	0
Building bricks & roofing tiles 7 construction goods	11	0	0	0	0
Glazed & unglazed ceramic flags, tiles & mosaic cubes	11	0	0	0	0
Ceramic wares for laboratory	40, 11	0	0	0	0
Sinks, wash basins, bidets & other sanitary fixtures	11	0	0	0	0

Chapter 70: Glass and Glassware

Scrap glass and glass in balls	11	0	0	0	0
Cast glass and rolled glass	11	0	0	0	0
Drawn and blown glass	11	0	0	0	0
Float glass	11	0	0	0	0
Safety glass	11	0	0	0	0
Rear-view mirror	11	0	0	0	0
Carboys, bottle, flasks & other containers of glass	11	0	0	0	0
Glass envelopes for electric lamps	40	0	0	0	0
Signalling glassware	11	0	0	0	0
Clock or watch glasses	40, 11	0	0	0	0
Paving blocks, slabs and tiles	40, 12	0	0	0	0
Laboratory glassware	11	0	0	0	0
Glass beads, imitation pearls	40	0	0	0	0
Glass microspheres	11	0	0	0	0
Glass fibres and articles thereof	11	0	0	0	0
Other articles of glass	40, 11	0	0	0	0

Chapter 71: Natural/ cultured pearls, precious semi-precious stones; precious metals, metal clad with precious metal, imitations

Natural or cultured pearls	55	0	0	0	0
Diamonds, unsorted	55	0	0	0	0
Diamonds, industrial	11	0	0	0	0
Diamonds. Non-industrial	55	0	0	0	0
Precious and semi-precious stones	55	0	0	0	0
Synthetic/ reconstructed precious/ semi-precious stones	55	0	0	0	0
Dust & powder of natural/ synthetic precious or semi precious stones		0	0	0	0
Silver, powder	55	0	0	0	0
Silver, unwrought	55	0	0	0	0
Silver, semi-manufactured	55	0	0	0	0
Base metals clad with silver	55	0	0	0	0
Gold, powder	55	0	0	0	0
Gold, unwrought	55	0	0	0	0
Gold, semi-manufactured	55	0	0	0	0
Gold, monetary	Free	0	0	0	0
Base metals or silver clad with gold	55	0	0	0	0
Platinum unwrought or in powder form	55	0	0	0	0
Other Platinum	55	0	0	0	0
Palladium, rhodium or iridium unwrought or in powder form	55	0	0	0	0
Base metals, silver or gold, clad with platinum	55	0	0	0	0
Waste & scrap of precious metal/ of metal clad with precious met	55	0	0	0	0
Imitation jewelry	11	0	0	0	0
Coin	Free	0	0	0	0

Chapter 72: Iron and Steel

Iron and steel	5	0	0	0	0
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Chapter 73: Articles of Iron and Steel

Sheet piling	11	0	0	0	0
Star picket	55	0	0	0	0
Rails, tubes, pipes and fittings	11	0	0	0	0
Cans which are to be closed by soldering or crimping	11	0	0	0	0
Incomplete or unassembled cans	11	0	0	0	0
Containers for compressed or liquefied gas	11	0	0	0	0
Stranded wire, ropes, cables, plaited band & slings	11	0	0	0	0
Expanded metal	11	0	0	0	0
Chain, anchors and grapnel	11	0	0	0	0
Screws, bolts and nuts	11	0	0	0	0
Sewing needles	11	0	0	0	0
Springs and leaves for springs	11	0	0	0	0
Stoves, ranges, grates and cookers	11	0	0	0	0
Radiators	11	0	0	0	0
Handles and knobs	11	0	0	0	0
Sanitary ware	11	0	0	0	0
Other cast articles	40, 11	0	0	0	0

Chapter 74: Copper and Articles Thereof

Copper and articles thereof	11	0	0	0	0
Cooking or heating apparatus	40	0	0	0	0
Sanitary ware	11	0	0	0	0
Other articles of copper	40	0	0	0	0
Containers for compressed or liquefied gas	11	0	0	0	0
Electroplating anodes	11	0	0	0	0

Chapter 75: Nickels and Articles thereof

Nickel and Articles thereof	11	0	0	0	0
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Chapter 76: Aluminium and Articles thereof

Aluminium and Articles thereof	5	0	0	0	0
Sanitary ware	11	0	0	0	0
Other articles	5	0	0	0	0

Chapter 78: Lead and Articles thereof

Lead and Articles thereof	11	0	0	0	0
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Chapter 79: Zinc and Articles thereof

Zinc and articles thereof	11	0	0	0	0
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Chapter 80: Tin and Articles thereof

Tin and articles of tin	11	0	0	0	0
Collapsible tubes	11	0	0	0	0
Electroplating anodes	11	0	0	0	0

Chapter 81: Other base metals, cermet, articles thereof

Other base metals	11	0	0	0	0
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Chapter 82: Tools, Implements, Cutlery, spoons & Forks, of base metals

Hand tools, saws, files, rasps, spanners & wrenches	11	0	0	0	0
Knives & cutting blades for machines or mechanical appliances	11	0	0	0	0
Plates & sticks	11	0	0	0	0
Hand operated mechanical appliances (coffee grinders)	11	0	0	0	0
Knives	11	0	0	0	0
Razors & razor blades	11	0	0	0	0
Other articles of cutlery, manicure/pedicure	11	0	0	0	0
Kitchen or tableware	11	0	0	0	0

Chapter 83: Miscellaneous articles of base metals

Padlocks & Locks	11	0	0	0	0
Automatic door closers	40	0	0	0	0
Mountings & Fittings	11	0	0	0	0
Fittings or loose leaf binders	40	0	0	0	0
Armoured or reinforced sales	40	0	0	0	0
Flexible tubing	11	0	0	0	0
Clasps, buckles and frames	40,11	0	0	0	0
Other stoppers, caps and lids	11	0	0	0	0
Wire, rods, tubes, plates & electrodes	11	0	0	0	0

Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliances

Machinery and mechanical appliances	11,5	0	0	0	0
Air-conditioning machines	40,11	0	0	0	0
Drying machines of a capacity not exceeding 10kg	40	0	0	0	0

Chapter 85: Electrical machinery & equipment, sound recorders & reproducers, television image & sound

Electric Motors and generators, transformers & electromagnets	5	0	0	0	0
Primary cells and batteries	40	0	0	0	0
Electric accumulators	11	0	0	0	0
Lead acid for piston engines	40	0	0	0	0
Electro mechanical tools	11	0	0	0	0
Domestic appliances	40, 11	0	0	0	0
Shavers and hair clippers	11	0	0	0	0
Electric ignition or starting equipment	11	0	0	0	0
Electric lighting /signalling equipment	11	0	0	0	0
Portable electric lamps	40, 11	0	0	0	0
Industry, laboratory electric furnaces & ovens	11	0	0	0	0
Electric laser or other light	11	0	0	0	0
Electric water and space heaters	11	0	0	0	0
Hair dressing & hand drying apparatus	55, 11	0	0	0	0
Electric smoothing irons	11	0	0	0	0
Microwave ovens	40	0	0	0	0
Other ovens, cookers, grillers and roasters	11	0	0	0	0
Other electrothermic appliances	11	0	0	0	0
Electric heating resistors	11	0	0	0	0
Parts	40	0	0	0	0
Electric apparatus for telephony	11	0	0	0	0
Microphones and amplifiers	11	0	0	0	0
Turntables & cassette player	11	0	0	0	0
Magnetic tape recorder	11	0	0	0	0
Dictating machines	11	0	0	0	0
Telephone answering machines	11	0	0	0	0
Video recording instrument	11	0	0	0	0
Parts	40, 11	0	0	0	0
Records, Tapes and discs	55, 11	0	0	0	0
Transmission apparatus	11	0	0	0	0
Still image video cameras	11	0	0	0	0
Radar apparatus	11	0	0	0	0
Reception apparatus for radio-telephony	11	0	0	0	0
Pocket size cassette players	11	0	0	0	0
Television receivers	11	0	0	0	0
Parts	11	0	0	0	0
Signalling apparatus	11	0	0	0	0
Capacitors, resistors, switches, tubes, diodes, transistors, circuits	11	0	0	0	0

Chapter 86: Railway or tramway locomotives, rolling stock and parts thereof; Railway or tramway track fixtures & fittings: mechanical traffic signalling equipment of all kinds

Railway or tramway locomotives	11	0	0	0	0
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Chapter 87: Vehicle other than Railway or tramway rolling stock, and parts & accessories thereof

Tractors	11	0	0	0	0
Public Transport type passenger motor vehicle	40, 11	0	0	0	0
Motor cars for the transport of persons	75, 55	0	0	0	0
Ambulances, prison vans and hearses	Free	0	0	0	0
Security vans	11	0	0	0	0
Ambulances, prison vans & hearses (diesel)	Free	0	0	0	0
Security vans(diesel)	11	0	0	0	0
Motor vehicles for the transport of goods	11	0	0	0	0
Special purpose motor vehicles	11	0	0	0	0
Fire fighting vehicles	Free	0	0	0	0
Chassis fitted with engines	11	0	0	0	0
Bodies	55, 40	0	0	0	0
Parts and Accessories	11	0	0	0	0
Works trucks	11	0	0	0	0
Tanks and armoured fighting vehicles	Free	0	0	0	0
Motorcycles	55, 11	0	0	0	0
Bicycles	11	0	0	0	0
Invalid carriages	Free	0	0	0	0
Parts and Accessories	11	0	0	0	0
Trailers and semi-trailers	11	0	0	0	0

Chapter 88: Aircraft, Spacecraft and parts thereof

Aircraft and parts	11	0	0	0	0
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Chapter 89: Ships, Boats and Floating structures

Cruise ships, ferry-boats, cargo ships, barges & fishing vessels	11	0	0	0	0
Yachts and other vessels for pleasure	40, 11	0	0	0	0
Dinghies	11	0	0	0	0
Other vessels and floating structures	11	0	0	0	0

Chapter 90: Optical, Photographic, Cinematographic, Measuring, Checking, Precision Medical or surgical instruments, clocks, watches, musical instruments

Instruments	11, Free	0	0	0	0
Objective lenses for cameras, projectors or photographic enlarger	55	0	0	0	0
Sunglasses	40	0	0	0	0
Binoculars	40	0	0	0	0
Scuba diving equipment	40	0	0	0	0

Chapter 91: Clocks and watches and parts thereof

Clocks and watches	11	0	0	0	0
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Chapter 92: Musical instruments; parts and accessories of such articles

Musical instruments	11	0	0	0	0
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Chapter 93: Arms and ammunition, parts and accessories thereof

Arms and ammunition	55	0	0	0	0
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Chapter 94: Furniture, bedding, mattresses, mattress supports, cushions and similar stuffed furnishings, lamps & lighting fittings, illuminated signs & name signs plates; prefabricated buildings

Seats used for aircraft	11	0	0	0	0
Seats used for motorvehicles	55	0	0	0	0
Swivel seats with variable height adjustment	55	0	0	0	0
Medical, surgical, dental or veterinary furniture	55, 11	0	0	0	0
Lamps and lighting fittings	11	0	0	0	0

Chapter 95: Toys, games and sports requisites; parts and accessories thereof

Dolls and Toys	40	0	0	0	0
Articles of funfair, table or parlour games	40, 55	0	0	0	0
Poker machines	150	0	0	0	0
Other games, coin or disc operated	55	0	0	0	0
Casino or parlour games tables	55	0	0	0	0
Festive, carnival or other entertainment articles	40	0	0	0	0
Articles and equipment for gymnastics and sports	40	0	0	0	0
Fishing equipment	11	0	0	0	0
Roundabout, swings, shooting galleries and other fairground amu:	40	0	0	0	0

Chapter 96: Miscellaneous manufactured articles

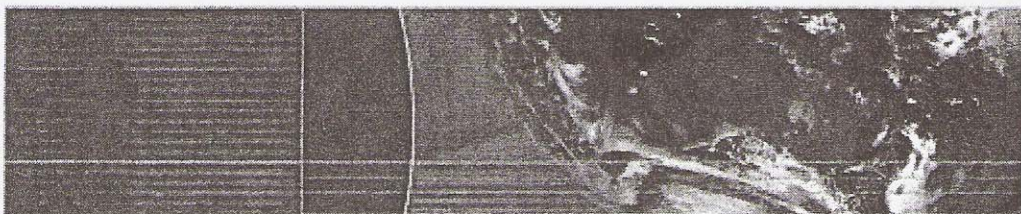
Brooms and brushes	40, 11	0	0	0	0
Hand sieves and hand riddles	40	0	0	0	0
Travel sets for personal toilet, sewing or shoe or cloths cleaning	40	0	0	0	0
Buttons and slide fasteners	11	0	0	0	0
Pens and pencils	40	0	0	0	0
Slates and boards, stamps	40	0	0	0	0
Typewriter ribbons and ink	11	0	0	0	0
Vacuum flasks and other vacuum vessels	40	0	0	0	0
Tailors dummies	40	0	0	0	0

Chapter 97: Work of art, Collectors pieces and antiques

Work of Art and collections	11, Free	0	0	0	0
Electroplating enodes	11	0	0	0	0

APPENDIX 2: ABARE report

Effective rates of protection in Papua New Guinea



ABARE report for the
Department of Treasury
Papua New Guinea

Theo Levantis, Lindsay Fairhead, Allan Hansard & Vivek Tulpule

September 2003

Levantis, T., Fairhead, L., Hansard, A. & Tulpule, V. 2003, *Effective rates of protection in Papua New Guinea*, ABARE Report for the Department of Treasury, Papua New Guinea, September, Canberra.

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ABARE is a professionally independent government economic research agency.

Background

The calculation of the effective rates of protection across all industries in Papua New Guinea have been identified as an essential element of the Tariff Review currently being undertaken by the Government of Papua New Guinea. In 1999 Papua New Guinea undertook a comprehensive tax and tariff reform program. The thrust of the program was an introduction of a VAT to replace the existing consumption tax mechanisms which comprised provincial sales taxes and tariffs on imports. All tariffs at 12.5 per cent or less were abolished, whilst tariffs designed to protect local industries were generally retained but reduced. A process of continued reductions in the tariffs retained was set in place with the final scheduled reduction occurring in 2006.

ABARE has been commissioned to assist the review process by calculating the effective rates of protection for the years 1998, 2001, 2003 and 2006.

The importance of understanding the effective rate of protection is that it provides a deeper understanding of the implications of the tariff regime across the broad spectrum of industries. It does so by measuring the *effective* protection an industry receives relative to its value added.

Using PNGGEM, ABARE's general equilibrium model of the Papua New Guinea economy, the effective rates of protection across the spectrum of Papua New Guinea's industries are calculated for 1998, 2001, 2003 and 2006. This is done in accordance with projected changes in the economy and with the implementation of scheduled tariff reductions.

Methodology

Explanation of the effective rate of protection

The extent to which an industry may be protected by tariffs on competing imports may not constitute a true measure of the level of protection the industry actually receives. Tariffs paid on imported intermediate input purchases will act to offset the level of protection for an industry by increasing its cost base. In a sense, this could be thought of as giving with one hand and taking out with the other. The true *effective* level of protection that an industry receives must take into account the extent to which tariffs are embedded into the cost of purchased inputs.

This broader concept of industry protection is the basis for the measure of effective rate of protection developed by Corden (1966). Corden (1966) defines the effective rate of protection as the percentage variation in an industry's value added that is attributable to the tariff system. The concept of effective rate of protection, its limitations and the extensive literature on the topic is well summarised in Ethier (1977).

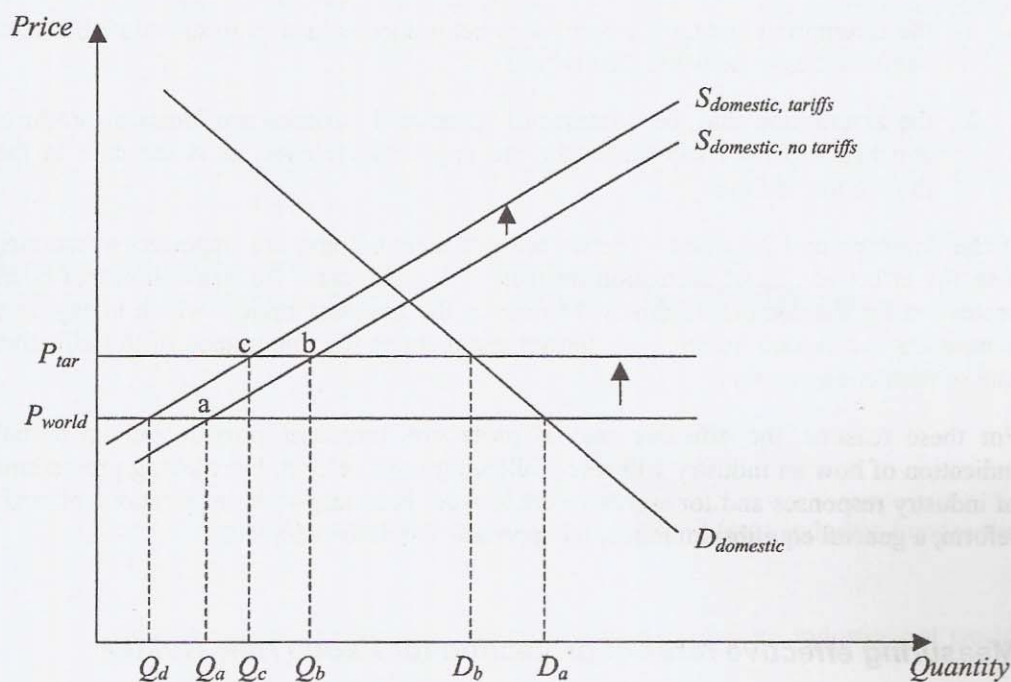
An important aspect of the effective rate of protection measurement is that it identifies the possibility that some industries could in fact be subject to a *negative* effective rate of protection because of high tariff outlays embedded in the cost structure. This would undermine their competitiveness in world markets.

The idea of effective rate of protection is conceptualised in figure 1. Figure 1 depicts a market for a representative import competing commodity. If the country is free of tariffs, then the supply curve for the domestic industry in this market is represented by $S_{\text{domestic, no tariffs}}$ and the supply price will correspond to the world price of the competing import, P_{world} . Domestic output is then Q_a and domestic demand D_a with the difference between the two made up by imports.

Now suppose a tariff on competing imports is introduced, leading to an increase in the domestic price of imports to P_{tar} . The domestic industry would then be able to sell its commodities at this higher price and in response, the domestic industry would move up its supply curve from point a to point b in figure 1 so that its volume of output would increase from Q_a to Q_b . However, if the new tariff is introduced in conjunction with a broad application of tariffs across a range of commodities, prices will be raised on intermediate inputs leading to an increase in production costs¹. This is illustrated in figure 1 as a shift up in the domestic supply curve to $S_{\text{domestic, tariffs}}$, causing a movement to point c . The rise in output under tariff protection is therefore moderated by this secondary effect to Q_c .

¹ An industry may substitute away from the protected commodities, but assuming industries always minimise costs, the cost of production will not be less than the cost under free trade.

Figure 1 – The first and second round effects of a tariff regime



In the event that the industry were not to get tariff protection, the tariff scheme would still raise the cost of production and cause a shift up in the supply curve to $S_{domestic, tariffs}$. However, the price received for output would continue to be the world price P_{world} , and so output would fall to Q_d . This occurs because the industry would now face a negative effective rate of protection.

Corden's (1966) concept of the effective rate of protection measures the impact of a tariff regime on an industry's size as measured by value added, ignoring any induced substitution and reallocation affects of tariff reform. A positive effective rate of protection suggests that removing all tariffs would lead to a short run decline in the size of an industry. Conversely a negative effective rate of protection indicates that moving to a zero-tariff regime would increase the size of an industry in the short run.

However, the matrix of industry effective rate of protection levels is not a comprehensive indicator of how the tariff regime may be distorting resource allocation. This is the case because of:

1. the assumption that tariff reform does not induce industries to substitute between commodities or between factors; and
2. the assumption that the domestically produced varieties are identical products and hence perfect substitutes for the imported varieties, as is the case in the illustration of figure 1.

If the domestic and imported varieties are not identical and are imperfect substitutes then the effective rate of protection measure will exaggerate the implications of tariff protection for the domestic industry. Moreover, the first assumption, which in any case contradicts the second assumption, further exaggerates the importance of the effective rate of protection measure.

For these reasons, the effective rate of protection measures provide only a partial indication of how an industry will react following tariff reform. For making predictions of industry responses and for assessing the broader economy-wide implications of tariff reform, a general equilibrium modeling approach should be adopted.

Measuring effective rates of protection for Papua New Guinea

The effective rate of protection is measured as the percentage variation in value added under the tariff regime compared with a regime of zero tariffs.

Specifically, the effective rate of protection applicable to commodity i produced by industry j is defined as;

$$ERP_{ij} = \frac{t_i - \sum_k S_{kij} \cdot t_k}{1 - \sum_k S_{kij}} \quad (1)$$

where;

ERP_{ij} = The effective rate of protection for commodity i produced by industry j

t_i = The ad valorem tariff rate applied to imports competing with commodity i produced by industry j

t_k = The ad valorem tariff rate applied to imports of commodity k used as an intermediate input by industry j

S_{kij} = The share of the value of intermediate input purchases of commodity k out of the total value of output of commodity i produced by industry j at world prices.

This expression allows for a range of commodities i produced by each industry j to account for the existence of multi-product industries as specified in ABARE's input-output tables for Papua New Guinea.

The expression of equation (1) is derived from the general definition of effective rate of protection — the percentage change in value added due to the tariff regime;

$$ERP_{ij} = \frac{v_{ij}^t - v_{ij}^w}{v_{ij}^w} \quad (2)$$

where:

v_{ij}^t = The value added per unit of output of commodity i from industry j under the tariff regime

v_{ij}^w = The value added per unit of output of commodity i from industry j at world prices.

Value added per unit of output is simply the value of one unit of output (the price) less the cost of intermediate inputs to produce that one unit;

$$v_{ij}^t = p_i(1 + t_i) - \sum_k a_{kij} \cdot p_k(1 + t_k) \quad (3)$$

$$v_{ij}^w = p_i - \sum_k a_{kij} \cdot p_k \quad (4)$$

where:

p_i = The world price for commodity i

p_k = The world price for intermediate input k

a_{kij} = The amount of intermediate input k required to produce one unit of commodity i

Equation (2) may be developed by substituting equations (3) and (4) in the place of v_{ij}^t and v_{ij}^w . Subtracting v_{ij}^w from v_{ij}^t in the numerator then gives;

$$ERP_{ij} = \frac{p_i t_i - \sum_k a_{kij} \cdot p_k \cdot t_k}{p_i - \sum_k a_{kij} \cdot p_k} \quad (5)$$

Dividing through by p_i gives the expression for effective rate of protection in equation (1) where;

$$S_{kij} = \frac{a_{kij} \cdot p_k}{p_i} \quad (5)$$

If we multiply through by output of commodity i from industry j (x_{ij}) then we get;

$$S_{kij} = \frac{a_{kij} \cdot x_{ij} \cdot p_k}{p_i \cdot x_{ij}} = \frac{I_{kij}}{Y_{ij}} \quad (6)$$

where;

I_{kij} = The value of intermediate input k used to produce commodity i in industry j at world prices

Y_{ij} = The value of output of commodity i from industry j at world prices.

Data constraints mean the values of intermediate inputs are only available on an industry-wide basis. This affects the calculation of S_{kij} for multi-commodity industries only. To get around this constraint, it is assumed that multi-commodity industries have the same input structure for each commodity:

$$S_{kij} = S_{kj} = \frac{I_{kj}}{Y_j} \quad (7)$$

Using PNGGEM to estimate effective rates of protection

The data base of PNGGEM is the base source of data used to estimate effective rates of protection for Papua New Guinea. PNGGEM is ABARE's comprehensive, economy-wide model of Papua New Guinea. PNGGEM includes a detailed input-output database for 1998.

The 1998 database is employed to calculate the effective rates of protection in 1998. The effective rates of protection for 2001, 2003 and 2006 are calculated using projected input-output data for each of those years. The projected data sets are developed using the forecasting capability of PNGGEM. This approach ensures that foreseeable structural changes in the economy, including structural changes resulting from tariff reforms, are incorporated in the data used to calculate the effective rates of protection.

The data set for 2001 was constructed with PNGGEM based on a range of known developments in the PNG economy that occurred between 1998 and 2001. To forecast the state of Papua New Guinea's economy in 2003 and 2006, a reference case or 'business as usual' simulation was constructed. The reference case represents a likely outlook for the PNG economy to 2006 in the absence of any significant policy changes or unforeseeable external shocks. Some of the key sources and assumptions in constructing the reference case are:

- the pattern of government expenditure over the period 2003-2006 is consistent with PNG Treasury forward estimates;
- the reductions to tariff rates scheduled for 2006 proceed;
- projections of output from the various mines and from the petroleum sector are consistent with those of the PNG Government (PNG Treasury, Department of Mining, Department of Petroleum);
- commodity price projections are consistent with ABARE commodity price forecasts;
- trend productivity growth rates are assumed to reflect historical trends; and
- population growth is assumed at a constant 3.1 per cent a year.

The reference case does not include the possible development of the PNG-Australia Gas Project, the Ramu Nickel Project, or a reopening of the Bougainville mine. These projects would make substantial contributions to the economy, but considerable

uncertainty remains about whether these projects will proceed over the period of analysis.

PNGGEM's database includes 38 commodity groups. Within most of these commodity groups are a range of different varieties of products and it is often the case that different varieties within a commodity group attract different rates of tariff protection. The tariff rate applied to each commodity group in PNGGEM is therefore a weighted average tariff rate. The weights are the value shares of each imported variety in the total value of imports for the commodity group.

The weighted average tariff rates for 1998 are estimated using tariff revenue and import data collected by Papua New Guinea Customs. For the years 2001, 2003 and 2006, the weighted average tariff rates are calculated by applying the various changes in the tariff schedules to the 1998 rates. In making these calculations, consideration was paid to the weighted average tariff rate calculations in the Internal Revenue Commission's White Paper on the Tariff Reform Program. The average tariff rates used to develop PNGGEM's reference case and for which the effective rate of protection calculations are based are reported in Appendix A.

Key findings and interpretations

General results

- Effective rates of protection were substantial in 1998, but had moderated considerably by 2001 (tables 1, 2 and 3). Since 2001, effective rates of protection have continued to decline, albeit at a more modest pace. These results are consistent with the process of tariff reform with the bulk of the tariff reductions implemented in 1999 as part of the tax reform program.
- Against the declining trend in effective rates of protection between 2001 and 2003, there are some sectors exhibiting fractional rises. This occurs because of the sharp declines in value added for many sectors between these years.
- Effective rates of protection are expected to continue to be significant in 2006 for a few specific commodities as a result of the continuation of relatively high tariff rates. In particular, timber products, some food products, beverages and tobacco, and fruit and vegetables are expected to continue to have high effective rates of protection.

- Industries that continue to use highly protected products intensively, for example hotels and restaurants, are expected to still face significant negative effective rates of protection in 2006.

Agriculture

- Fruit and vegetable production is one of the most highly protected sectors in Papua New Guinea based on the effective rate of protection results. However, this finding is likely to misrepresent the degree of protection the industry receives as imported fruit and vegetables can only compete with domestically produced fruit and vegetables in urban market places due to transportation and marketing constraints and urban fruit and vegetable markets represent only a small part of the total market in Papua New Guinea. Moreover, fruit and vegetable imports represent less than 1 per cent of the total value of fruit and vegetable consumption in Papua New Guinea and are generally sold as differentiated products in affluent markets. These factors mean that tariff protection has a much smaller effect on prices of domestically produced fruit and vegetables than is implied by the effective rate of protection measure
- There are no tariffs applicable to tree crops as these are export oriented industries. Moreover, there are no imports of tree crops. For this reason, tree crop industries face negative effective protection rates.
- The negative effective rates of protection for large-scale plantations prior to the 1999 reforms were significantly greater than for smallholders. This is because the farming techniques used by plantations require intermediate inputs such as machinery and fertilisers, all of which are more costly due to tariffs. In contrast, smallholders rely on traditional labor-intensive farming techniques and hence do not bear the cost of tariffs on inputs. However, following the 1999 reforms, substantial tariff reductions had virtually levelled the playing field between smallholders and plantations.
- The minimal change in effective rates of protection for tree crops produced by smallholders confirms the premise that the tax and tariff reforms of 1999 did little to benefit smallholders (for example see Levantis, 2000). Smallholders represent by far the biggest source of employment in Papua New Guinea.

Fish and forestry products

- The effective rate of protection of the domestic fishing industry has fallen since 1998, but is expected to remain significantly high in 2006.

- It is notable that the fall in the effective rate of protection of fishing has been slower than the reduction in tariffs. This is partly because tariffs on fishing inputs have been reduced to near zero, improving the competitiveness of Papua New Guinea's fishing industry. For example, machinery and repairs constitute an important input to the fishing industry, and tariffs on machinery is projected to be below 0.5 per cent in 2006 compared with 9.5 per cent in 1998 (Appendix A).
- The forestry industry is an export based industry so is not subject to tariffs. This industry therefore bore a large negative effective rate of protection in 1998. However tariff reforms have resulted in the effective rate of protection falling to a negligible level by 2001.

Manufacturing

- In general terms, the manufacturing sector was highly protected in 1998. Effective rates of protection ranged from 13 to 101 per cent for the seven manufacturing industries depicted in the PNGEM database.
- Since 1998, tariff rates have fallen in all manufacturing industries, but the scheduled pace of reform varies in its impact between industries. Reforms are slowest in those industries that began with the highest levels of protection in 1998. For example timber products, soap, beverages and tobacco, and specific food products such as tinned fish and biscuits.
- It is possible that the disproportionate approach to tariff reductions could have increased the distorting effects of manufacturing tariffs, or at least offset some of the welfare gains that may otherwise have followed from tariff reductions. However effective rates of protection cannot be used to estimate these welfare implications with any degree of accuracy.

Mining

- *In 1998 the tariff regime resulted in negative effective rates of protection for this sector.* However, Papua New Guinea's program of tariff reform lowered the effective rate of protection in mining to near zero by 2003. But as part of the 1999 reform program, a mining levy was introduced to compensate the government for tariff revenues lost from the mining sector. The mining levy has since been lowered, but otherwise operates to partly offset the impact of tariff reductions on the cost base for mines in Papua New Guinea.

Services sector

- In general, services were the worst affected by the tariff structure in place prior 1999, with all service industries facing negative effective rates of protection. Tariffs are not normally imposed on services so services do not gain from a system of tariffs. Whilst negative effective rates of protection continue following the tariff reforms, these have become small for most service industries. The exceptions are the 'hotel & accommodation' and 'restaurants & fast food' industries due mainly to their significant purchases of beverages & tobacco and processed foods.

Estimates of effective rates of protection

Tables 1, 2 and 3 contain ABARE's calculations of the effective rates of protection in Papua New Guinea for 1998, 2001, 2003 and 2006. Table 1 outlines the effective rates of protection by commodity group for multi-commodity agricultural industries; table 2 gives the effective rates of protection for all industries defined in PNGGEM as single commodity industries; and in table 3 are calculations of effective rates of protection for specific varieties of commodities as requested by the Department of Treasury.

Table 1: Effective rates of protection for multi-commodity agricultural industries

	commodities (%)		
	fruit & vegetables	livestock	industry specific commodity a
1998			
traditional agriculture	53.50	20.10	na
smallholder coffee	58.93	22.06	-0.12
smallholder cocoa	55.25	20.56	-0.31
smallholder palm oil	57.86	21.62	-0.19
smallholder copra	58.92	22.12	-0.03
other smallholder tree crops	57.65	21.65	-0.01
other agriculture	na	26.01	7.27
2001			
traditional agriculture	33.50	2.10	na
smallholder coffee	37.52	2.33	-0.02
smallholder cocoa	34.71	2.13	-0.05
smallholder palm oil	36.86	2.27	-0.04
smallholder copra	37.20	2.33	-0.005
other smallholder tree crops	36.06	2.26	-0.002
other agriculture	na	2.35	2.09
2003			
traditional agriculture	29.50	1.70	na
smallholder coffee	33.49	1.91	-0.02
smallholder cocoa	30.56	1.72	-0.04
smallholder palm oil	32.60	1.85	-0.03
smallholder copra	33.15	1.91	-0.005
other smallholder tree crops	31.69	1.83	-0.001
other agriculture	na	1.95	1.95
2006			
traditional agriculture	25.5	1.3	na
smallholder coffee	29.0	1.5	-0.02
smallholder cocoa	26.5	1.3	-0.04
smallholder palm oil	28.4	1.4	-0.03
smallholder copra	28.84	1.47	-0.004
other smallholder tree crops	27.24	1.39	-0.001
other agriculture	na	1.5	1.76

a eg. coffee for coffee industry

Table 2: Effective rates of protection for all other PNGGEM industries

	1998	2001	2003	2006
	%	%	%	%
Agriculture, forestry & fishing				
large-scale coffee plantations	-4.42	-1.28	-0.94	-0.64
large-scale cocoa plantations	-1.52	-0.37	-0.17	-0.18
large-scale palm oil plantations	-4.74	-1.57	-0.57	-0.55
large-scale copra plantations	-1.30	-0.14	-0.09	-0.08
other large-scale tree crop plantations	-0.71	-0.14	-0.08	-0.06
large-scale fruit & vegetables	56.70	35.21	31.03	26.74
fishing	9.75	8.89	8.73	7.64
forest products	-7.91	-0.27	-0.19	-0.09
Manufacturing & mining				
gold mining	-2.57	-0.46	-0.28	-0.27
Ok Tedi mine	-4.06	-0.61	-0.37	-0.27
other mining	-2.63	-0.46	-0.29	-0.27
petroleum products	-2.90	-0.20	-0.14	-0.12
quarrying	-4.10	-0.64	-0.65	-0.60
timber products	67.47	30.64	27.58	24.60
processed food	49.13	11.25	10.09	7.63
beverages & tobacco	101.91	26.32	25.11	21.60
metals & engineering	44.47	4.04	3.64	2.97
machinery & repairs	13.62	1.40	1.05	0.57
chemicals & oils	38.53	4.86	4.99	4.00
other manufacturing	37.46	4.06	3.84	3.08
Services				
road transport	-3.94	-0.23	-0.19	-0.13
water transport	-6.39	-0.47	-0.46	-0.37
air transport	-14.41	-1.22	-1.21	-0.97
education	-1.73	-0.38	-0.41	-0.36
health	-3.89	-0.86	-0.98	-0.89
electricity & garbage	-1.47	-0.23	-0.19	-0.14
building & construction	-20.84	-0.94	-0.86	-0.73
commerce	-2.21	-0.17	-0.13	-0.11
hotels & accommodation	-14.48	-3.20	-2.73	-2.29
restaurants & fast food	-12.27	-3.07	-2.72	-2.42
finance & investment	-0.43	-0.17	-0.16	-0.14
other private services	-2.00	-0.24	-0.26	-0.24
security services	-0.43	-0.09	-0.09	-0.08

Table 3: Effective rates of protection for additional industries as requested

	1998	2001	2003	2006
	%	%	%	%
sugar	114.11	98.47	94.92	96.22
rice	13.65	-0.38	-0.37	-0.30
salt	16.51	-2.16	97.94	36.55
flour	86.07	51.91	47.74	36.55
tinned fish	122.05	51.91	47.74	36.55
biscuits	86.07	73.54	72.84	62.37
soap	107.27	72.38	76.73	63.82
cooking oil, bottled for retail	27.98	62.01	51.06	38.19
cooking oil, other	107.27	-0.24	-0.29	-0.25
clothing	76.90	45.56	44.66	36.57
steel products	110.04	47.27	41.75	31.91

Appendix A — Weighted average tariff rates for each commodity group, 1998, 2001, 2003 and 2006

	1998	2001	2003	2006
	%	%	%	%
fruit, vegetables and betel nut	53.5	33.5	29.5	25.5
livestock	20.1	2.1	1.7	1.3
coffee	0	0	0	0
cocoa	0	0	0	0
palm oil	0	0	0	0
copra	0	0	0	0
other tree crops	0	0	0	0
other agriculture	6.3	1.9	1.7	1.5
fishing	6.7	4.1	3.5	2.9
forestry	0	0	0	0
copper	0	0	0	0
gold	0	0	0	0
other minerals	0	0	0	0
petroleum	0	0	0	0
quarrying	0	0	0	0
timber products	43.4	22.9	19.8	16.7
processed food	24.6	6.2	5	3.8
beverages and tobacco	47.2	16.9	15	13.1
metals and engineering	14.0	2.4	2.0	1.6
machinery and repairs	9.5	1.0	0.7	0.4
chemicals and oils	14.9	2.5	2.1	1.7
other manufacturing	20.4	2.5	2.0	1.5
road transport	0	0	0	0
water transport	0	0	0	0
air transport	0	0	0	0
education	0	0	0	0
health	0	0	0	0
electricity and garbage	0	0	0	0
building and construction	0	0	0	0
commerce	0	0	0	0
hotels and accommodation	0	0	0	0
restaurants and fast food	0	0	0	0
finance and investment	0	0	0	0
other private services	0	0	0	0
security services	0	0	0	0

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APPENDIX 3: Lists of Organisations & Individuals that made submissions.

1. Manufacturers Council of PNG
2. Institute Of National Affairs (INA)
3. British American Tobacco (BAT)
4. Alele Fresh Produce Limited
5. Arnott's Biscuits (PNG) Limited
6. Atlas Steel Limited
7. Coca-Cola Amatil (PNG) Limited
8. Internal Revenue Commission
9. Jeffery Kops (consumer)
10. Aluanis Joseph Lalai (consumer)
11. K. K. Kingston Ltd
12. Kara Limited
13. Lae Biscuits Limited
14. Ramu Sugar Limited
15. Clothing, Footwears, and Textile Industry
16. Hargy Oil Palms Ltd
17. Tropic Fronds Oil Limited
18. PNG Printing Limited
19. PNG Retail and Wholesalers Association
20. Pacific Industries Limited (Rabaul)
21. South Pacific Post Limited
22. WR Carpenters Limited