Technical Assistance Consultant's Report

Project Number: 43045-032
June 2013

Cook Islands: Macroeconomic Assessment

(Financed by the Technical Assistance Special Fund under the Pacific Economic Management – Enhanced Economic Management (Subproject 2) Technical Assistance Project).

Prepared by Savenaca Narube and Chris Lightfoot

Individual Consultants

For the Ministry of Finance and Economic Management
Government of the Cook Islands

Asian Development Bank

Cook Islands

Macroeconomic Assessment

Final Report

June 2013

Table of Contents

Abbreviations and Acronyms

ADB	Asian Development Bank
ANZ	Australia and New Zealand Bank
APRA	Australian Prudential Regulation Authority
BCI	Bank of the Cook Islands
BTIB	Business Trade and Investment Board
CINSF	Cook Islands National Superannuation Fund
COLA	Cost of Living Adjustment
DSA	Debt Sustainability Analysis
FIU	Financial Intelligent Unit
FRR	Fiscal Responsibility Ratios
FSC	Financial services Commission
GDP	Gross Domestic Product
HIES	Household Expenditure and Income survey
IMF	International Monetary Fund
MFEM	Ministry of Finance and Economic Management
NPL	non-performing loans
ODA	Official Development Assistance
PEFA	Public Expenditure and Finance Analysis
POBOC	Payments on Behalf of the Crown
PRC	Peoples' Republic of China
RMB	Chinese foreign currency
SDR	Special Drawing Rights
VAT	Value Added tax

I. BACKGROUND

1. The Cook Islands is currently not a member of the International Monetary Fund (IMF) or the World Bank. As such, the Government cannot benefit from the monitoring and associated provision of policy advice provided by these bodies which are intended to identify and address weaknesses that could lead to financial or economic instability in member countries. With no recourse to this sort of scrutiny, in late 2012, the Cook Islands approached the Asian Development Bank (ADB) to undertake a macroeconomic assessment of the country, with particular reference to economic growth and fiscal and debt sustainability.

2. ADB economists and consultants visited the Cook Islands in late December 2012 and again in early January 2013 to conduct the review. The team met with the Financial Secretary, the staff of the Budget and Economic Policy Division of the Ministry of Finance and Economic Management (MFEM) and the Heads of Ministry and staff of the Office of the Prime Minister, Internal Affairs, Public Service Commission, Ministry of Tourism, Financial Services Commission (FSC), the Cook Islands National Superannuation Fund (CINSF) and the commercial banks (Westpac and Bank of the Cook Islands (BCI)). ADB expresses its appreciation to the Financial Secretary, the Senior Economist, James Webb and staff of MFEM for the arrangements made for the visit and assistance provided during the course of the mission.

Table 1: Snapshot of the Economy
(NZ$ - 2013)

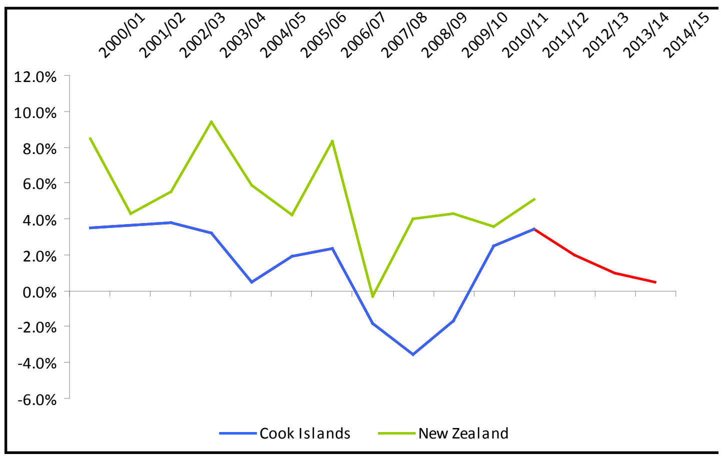
Resident Population (number - 2011)	14,974
Total Visitor Arrivals (number)	120,832
GDP/Capita	$26,898
Exports ($'000)	$4,133
Government ($'000)	
Operating Revenues includes ODA	$159,228
Operating Expenditures (includes POBOC)	$112,509
Capital Expenditure	$59,180
Net Lending Requirement ($'000)	$8,878

II. SUMMARY OF FINDINGS

3. **The Cook Islands economy can be characterised as small, open, narrowly based but relatively affluent.** The Cook Islands is a self-governing country in free association with New Zealand. Its nationals are New Zealand citizens and as such, have open access to work and residency in New Zealand (and under various reciprocal entry agreements—to Australia). This provides Cook Islanders with a far greater degree of economic security than that enjoyed by most other Pacific Islanders. It has, however, had a pervasive influence on the structure of the Cook Islands economy. Depopulation is a particular issue, while the opportunity to live and work overseas means that the reservation price of labour and the nation's international terms of trade are high relative to the resources available to the economy. One obvious outcome of this is the increasing use of foreign workers, including other Pacific Islanders in the tourism sector.

4. **While the medium term outlook for the Cook Islands is positive, the economy is vulnerable to external shocks.** There has been considerable volatility in Gross Domestic Product (GDP) growth since 2007. This volatility is almost entirely due to external factors that are outside the control of the Cook Island's Government. During the period immediately preceding the onset of the global economic crisis in September 2008, the Cook Islands economy was seriously affected by the rapidly rising cost of imports—particularly petroleum prices. The sharp fall in commodity prices that followed the onset of the global crisis mitigated some of these pressures on the economy. However the number of tourist arrivals also dropped sharply, causing the economy to contract. By the end of 2009, tourism arrivals were back on trend and by 2011 the economy had returned to positive real growth. Real GDP increased by 5.3% in FY2012 and is projected to fall to 4.1% in FY2013 with the completion of construction activity—for example, the Avatui Port Development.

Figure 1: GDP Growth
(year-on-year)



Source: Cook Island Authorities

5. **The main risks to sustained growth are a slowdown in the New Zealand and Australian economies affecting tourism in the Cook Islands.** There are signs that the Australian economy is slowing, with the flow-on effects of the slow-down in the Chinese economy. The New Zealand economy is currently emerging from its slowest recovery from a downturn in 80 years, and is expected to grow by 2.1% in 2013 and only slightly better at 2.6% in the following year. The biggest risk to the outlook is a slowing Australian economy, hurting New Zealand exports. Exports to Australia—which account for about a fifth of New Zealand's exports—were down 4.5% in the past year. Many of New Zealand's

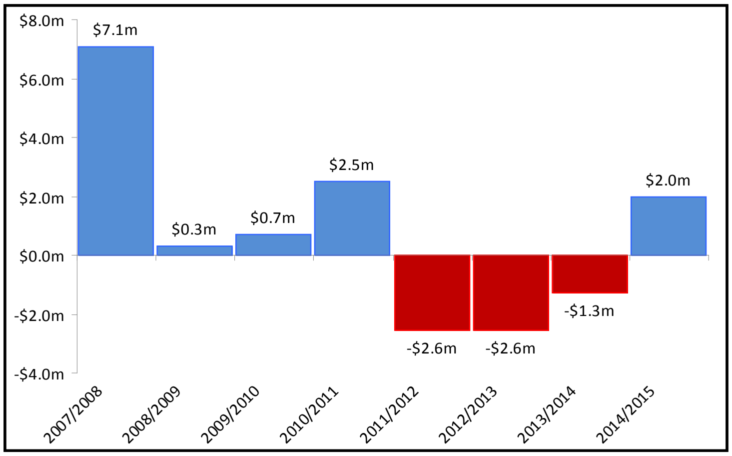
exports go to "non-mining" Australian states, so the slowdown in exports is less about the knock-on impact of the Chinese demand for minerals, and more about a slower domestic economy in Australia. A slowdown in New Zealand and Australia, both source markets for the tourism sector in the Cook Islands could affect growth prospects in the near-term.

6. **The leading economic sector of the Cook Islands is tourism supporting at least 60% of economic activity in the country.** Tourist arrivals have increased at a rate of over 4% per annum since 2000. Arrivals from New Zealand have grown by almost 11% per annum, some additional growth has come from Australia, while the North America and Europe markets have contracted by almost 8% per annum. In 2012, tourists are estimated to have spent in excess of NZ$200m in the Cook Islands; this is well over double the nominal amount spent in 2000. Part of the growth from New Zealand and Australia has been in the shoulder and off-seasons, however there are growing concerns that the Cook Islands tourism infrastructure is approaching capacity. Rarotonga reached capacity during the peak seasons of 2011 and 2012. If the capacity constraints are not addressed, the tourism industry may not be able to sustain the continued growth of the economy.

7. **Since the collapse of the pearl industry in 2000/2001, real exports have contributed little to the overall economy.** The prospects for further development of non-tourist based industries are limited. Agricultural land is in short supply, access to land for agricultural purposes is constrained by land legislation and customary usage, markets are remote, phyto-sanitary regulations in importing countries are strict and the cost of labour is high. This combination of constraints is a serious impediment to growth of this sector. The main non-tourism income is licence fees from foreign fishing fleets, but this income is subject to extreme volatility as fleets relocate in pursuit of pelagic fish stocks. The development of the domestic fishing industry faces a similar mix of constraints to those facing agriculture. Efforts are being made to revive the pearl industry and, provided the world-wide production of pearls is moderated, prices may eventually return to financially viable levels thereby allowing the Cook Islands industry to recover.

8. **Despite fiscal discipline over operating expenditures and revenues, the operating budget is projected to slip into deficit.** The FY2013 fiscal outcome is expected to be a deficit of $2.6m, with the budget projected to remain in deficit until FY2014—when a small surplus is forecast. A principal cause of the deficit is the high and increasing cost of under-writing the long haul access routes from Sydney and Los Angeles operated by Air New Zealand. Other proposed expenditures including the proposed increase in aged pension payments, possible Cost of Living Adjustments (COLA) to public sector wages , and the commitment to a revenue neutral tax reform, could exacerbate the current tight fiscal situation should they go ahead. Thus the Government's target of returning the budget to surplus in FY2015 could be hard to achieve.

Figure 2: Government Net Operating Surplus/Deficit



Source: Cook Island authorities

9. **Government debt levels are currently well within sustainable limits.** Net debt levels are estimated to be 22.3% of GDP, well below the 40% of GDP that the IMF considers as a sustainable level of foreign debt for small developing countries. Issues that require to be monitored are the potential impact of sustained fiscal deficits, the exchange rate risk on external debt, and the importance of maintaining borrowing space to improve the country's resilience to natural disasters. It is noted that throughout the 1990s and into the early years of the current millennium the Cook Islands economy struggled to service very high debt levels. The current trends in expenditure and borrowing run the risk of returning the economy to a heavily indebted state.

10. **In the absence of audited accounts it is difficult to predict the outcome of current and future budgets.** The most recent audited accounts are for FY2008. Finalised but unaudited accounts are available for FY2009 and FY2010. The absence of recent audited accounts undermines the credibility of the budget.

11. **The Cook Islands economy is increasingly reliant on foreign workers.** Cook Islanders have unrestricted access to New Zealand and Australia. Consequently the reservation price of labour in the Cook Islands is largely determined by the labour markets in New Zealand and Australia. This translates into a substantial outmigration of working age Cook Islanders. Resident labour force participation rates are well above historical averages due to an influx of foreign workers rather than an increase in the number of Cook Islanders in local employment.

12. **Limits on the availability and quality of economic data seriously constrain the development of timely and proactive economic and financial policies.** There is inadequate data available to monitor the balance of payments. In particular, data on current transfers and private sector investment are either incomplete or non-existent. In addition, labour force data are either not collected or, when collected are not compiled. The GDP estimates appear to be compiled on an ad hoc basis from VAT returns. Coverage is incomplete and methods used inconsistent between estimates. Reconciling the various current estimates against past reports is difficult and time consuming. Improving the coordination of data collection, economic analysis and forecasting should be prioritised by Government

III. ECONOMY

A. Economic Conditions

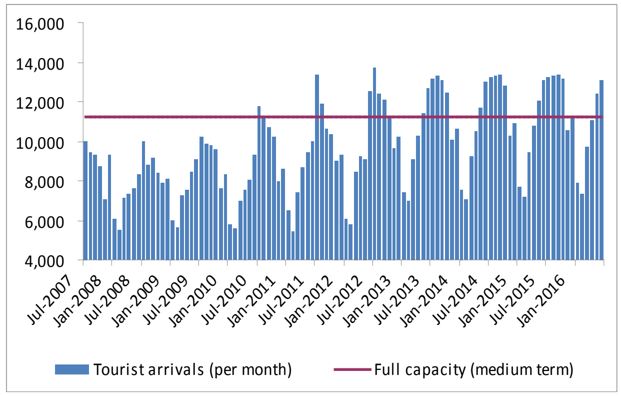
13. **The Cook Islands economy has registered positive growth during the past two years.** The economy has recovered from the setback caused by the global economic crisis and the preceding escalation in commodity prices. This recovery has been driven by strong growth in tourism. Economic growth was marginally positive in FY2011 when GDP increased by 0.8%. In FY2012, GDP increased by 5.3%. The growth rate is expected to slow to 4.1% in FY2013 and continue to be positive through the coming two years. The private sector has expressed positive sentiments on the state of the economy.

14. **The economy closely tracks the economic cycle in New Zealand.** New Zealand is the Cook Islands' major economic partner providing over 80% of commodity imports and 60% of tourist arrivals. Inflation in the Cook Islands follows movements in New Zealand prices, interest rates in the two countries are closely aligned and the number of tourist arrivals reflects the state of the New Zealand economy. Given these circumstances macro indicators for the New Zealand economy, which indicated growth of 2.1% in 2013 and 2.6% in 2014, provide a useful guide to the prospects for the Cook Islands economy.

15. **The Cook Islands does not implement an independent monetary policy.** The use of the New Zealand dollar as its currency effectively eliminates the use of monetary policy as an instrument of macroeconomic management in the Cook Islands. A key benefit of this arrangement is that it avoids the need to maintain an adequate level of foreign reserves to protect the domestic currency. The close linkage between the Cook Islands and the New Zealand economy also offsets the potential risk of disparate terms of trade movements undermining the Cook Islands economy.

16. **Policy formulation lacks an appropriate evidence base.** Estimates of the importance of the tourism industry to the Cook Islands economy have ranged between 60% and 90% of GDP. While the mission believes that the 90% estimate considerably overstates the sector's importance there is no doubt that tourism is the leading sector and dominates economic activity. An accurate estimate of the contribution of tourism—based, for example, on the United Nations World Tourism Organization (UNWTO Tourism satellite account recommended methodological framework—would strengthen tourism policy.

Figure 3: Tourist Capacity
(2012 levels)

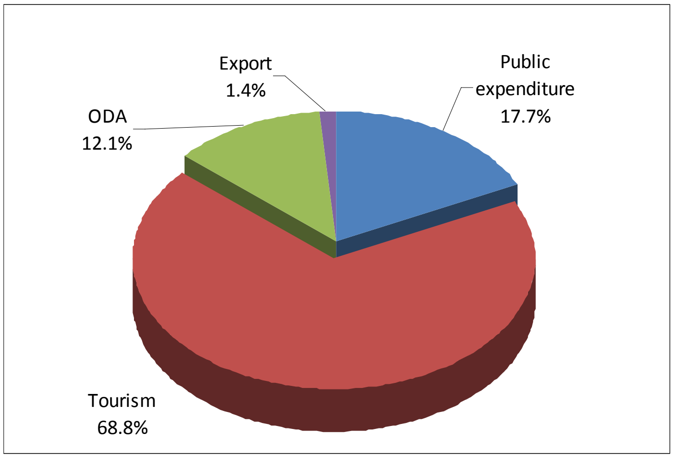


Source: Cook Island authorities

17. **Tourist accommodation is approaching capacity**. For the past two years tourist accommodation has been fully booked during peak periods. Tourist arrival statistics indicate that the numbers of arrivals in the shoulder and off-seasons are increasing. While this spread of arrivals is improving the utilization of existing accommodation, if the forecast levels of growth are to be achieved, it will be necessary to consider the means through which tourist accommodation can be expanded, for example, through increasing the number of hotel rooms or increasing home stay availability. Alternatively, accommodation providers could introduce seasonal tariffs, increasing tariff rates in the peak periods and reducing rates in low season—bearing in mind that any increase in rates risks diverting tourists to other holiday destinations. New tourism infrastructure development would have to take into account competing demand for scarce resources and sustainability issues with respect to water supply and sanitation on the islands. An assessment of private sector plans for increasing capacity is necessary to understand the nature and extent of the accommodation constraint and the government's policy response, if any.

18. **The contribution of agriculture and fisheries to the economy is under-valued.** The primary industry sectors are important for household consumption; in addition they substitute for some imports and contribute to export income. The exclusion of household production from GDP estimates means that the contribution of the primary industry sectors to the economy is substantially under-valued. In reported GDP data the sectors are each estimated to contribute less than 1.5% to the monetary economy which, a priori is very low. There is an urgent need to better understand the value of this sector through quantifying the growth of the sector over time, considering what has underpinned the growth, and looking ahead to the opportunities and the risks for the sector's future growth and contribution to GDP. Currently efforts are being made to diversify the economy through the revival of the pearl industry, the introduction of new crops and the elimination of production/marketing constraints but without the broader understanding of the sector that would provide the lessons for policy makers in encouraging the sector's growth in the future. Capacity constraints and land tenure issues are obvious challenges that will require to be addressed.

Figure 4: GDP Shares
(2011/2012)



Source: Cook Island authorities

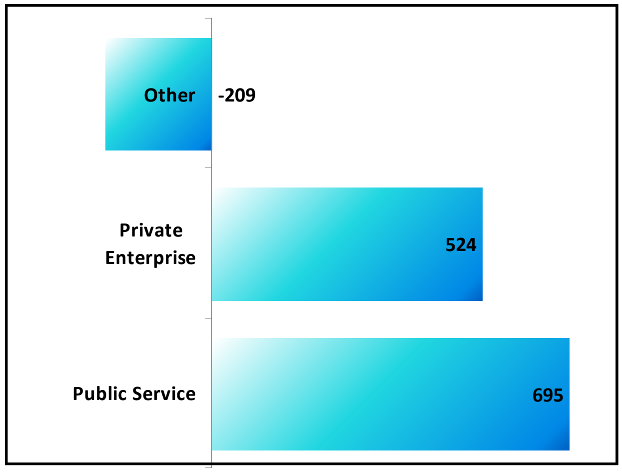
B. Economic Outlook

19. **The economy is expected to grow over the next two years, albeit at a slower rate than in the previous two years.** Current estimates, are that real growth will fall to 1.4 % in FY2014 (from 4.1% in 2013) due to a 24.8% reduction in capital investment associated with the completion of construction activity. Although a strong performance of the tourism sector will be critical to achieving growth targets, the challenge will be to develop a broader economic base to reduce the country's reliance on tourism. Diversification of the economy is needed to build resilience to external shocks.

C. Employment and Investment

20. **The workforce participation rate is over 70%.**[1] The 2011 census showed that the employed population totalled 6,938. Slightly over 8% of the currently active workforce indicated that they were unemployed. The relatively high participation rate is believed to reflect the combination of the out-migration of working age adults and the high participation rate of foreign workers. Aside from the periodic censuses, there is no systematic collection and analysis of labour market data. Other indicators could be used to show trends in the labour market. These include contributors to the Cook Island's Superannuation Fund (CINSF) and the addition of question(s) on workforce VAT returns.

Figure 5: Growth in Labour Force
(2001 to 2011)



Source: 2001 & 2011 Cook Island Census

21. **Over 40% of employed Cook Islanders work for the public sector.** Public sector employment has become increasingly important for resident Cook Islanders. Over the past decade, most of the growth in the size of the workforce has been in public sector employment—which has increased from 30% of the workforce in 2001, to 40% of the workforce in 2011. At the same time foreign workers have become increasingly important in the non-public sector, now accounting for over 37% of the non-public sector workforce. Given the reservation price of local labour, it seems likely that this trend will continue. Foreign workers fill the gap between demand and supply of labour at the prevailing wage level. While some Cook Islanders may be unemployed, that may be because they choose not to work in some sectors. Foreign workers may also provide skills that are not otherwise available. Their labour has a positive impact on growth but can give rise to issues of which the government should be cognizant—including disputes arising over contractual conditions and the living and working conditions of foreign workers vis-a-vis those of Cook Islanders.

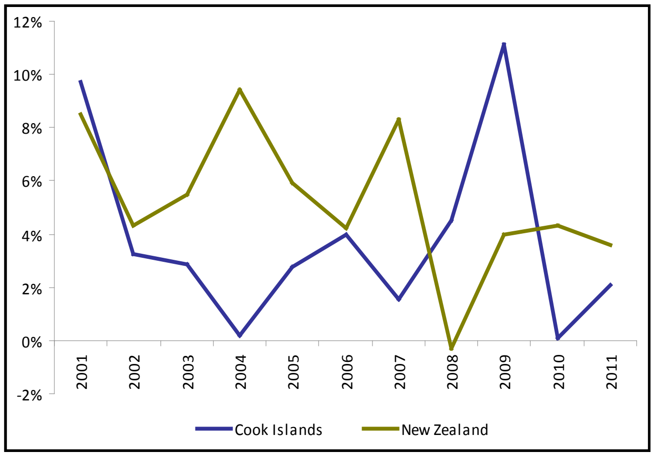
22. **Additional private sector investment may be needed to support broad based growth.** Incentives for private sector investment are available, but although private sector investment data are available from the Business Trade and Investment Board (BTIB), they have yet to be compiled or analysed. The Mission is therefore unable to comment on the extent of private sector investment required to meet desired growth rates and or whether such private sector investment levels are achievable. Data on both domestic and foreign investment require to be compiled to assist in policy development and implementation.

[1] Census 2011–Summary Indicators table, p4.

23. **Public investment in infrastructure and financial reserves is increasing.** The Cook Islands Government plans to increase its investment in physical infrastructure over the next three years, with investments reaching $51 million in FY2014/15. This level of investment is considered necessary to develop and upgrade infrastructure water, power, ports and roads. Currently however very few projects have been identified for future public investment. The Government's loan amortisation fund is accumulating foreign reserves; in addition the CINSF could be expected to provide a source of domestic investment funds in the future. The role of public investment in a small country such as the Cook Islands is significant and is a major driver of economic development. The implementation capacity of government to undertake investment is however limited, and there may be scope for outsourcing investment through public/private partnerships.

24. **The current headline inflation rate has stayed below 2% over the last 2 years.** The use of the New Zealand dollar as the country's currency and the fact that the bulk of imports are from New Zealand, links inflation in the Cook Island to price movements in New Zealand. The flow on effect of New Zealand prices is typically lagged by one period. Domestic cost factors also affect the level of inflation. The Mission does not see any factors that would result in a pronounced change in the headline inflation rate from its long run trend. In its December 2012 Monetary Policy Statement the New Zealand Reserve Bank predicted a gradual rise in the inflation rate to its upper target range of 2%. The flow on effect of price rises in New Zealand is likely to raise inflation in the Cook Islands to around 2%.

Figure 6: CPI Movements



Source: Cook Island authorities & Reserve Bank of New Zealand

IV. FISCAL POLICY

A. Fiscal Balance

Table 2: Fiscal Responsibility Ratios

Type	Benchmark	2011/12 *Supp. Budget*	2012/13 *Budget*	2013/14 *Estimate*	2014/15 *Estimate*
Fiscal Envelope Ratio					
Tax Revenue to GDP	25.0%	23.1%	22.0%	21.4%	21.5%
Expenditure Control Ratios					
Personnel to Total Revenue	40.0%	40.6%	38.3%	36.7%	35.5%
Operating Balance	$0.0m	-$2.6m	-$2.6m	-$1.3m	$2.0m
Prudential Ratios					
Debt Servicing to Total Revenue	5.0%	3.5%	4.0%	4.6%	4.6%
Budget Overall Deficit as % of GDP	+/-2%	-2.7%	-3.0%	-2.7%	-1.7%
Net Debt to GDP ratio[1]	35.0%	15.1%	20.8%	19.6%	18.4%

[1] Gross outstanding balance less loan repayment reserve

Source: Cook Island authorities

25. **The substantial increase in Payments on Behalf of the Crown (POBOC)[2] expenditure is undermining efforts to hold public expenditures to within reasonable bounds.** Since FY2008 the direct operating costs have risen by slightly over 9%. Over the same period revenues have risen broadly in line with growth in the economy. Despite tight fiscal management of the direct operating costs and revenues, the budget slipped into deficit in FY2012 where it threatens to remain until FY2014. This outcome is due to the rapid increase in **POBOC**, which has nearly doubled since FY2008. The rapid increase in POBOC is almost solely attributable to the increase in the cost of under-writing the Sydney and Los Angeles flights which reached $13m in FY2013. From a purely fiscal perspective, this item of expenditure is seriously undermining much of the effort invested in stabilising the Cook Islands fiscal situation.

26. **The cost of underwriting flights has resulted in a deficit in the operating balance, which may breach the MFEM Act.** The underwriting of the Sydney and Los Angeles flights, is the principal cause of the anticipated FY2012 and FY2013 fiscal deficits. This expenditure needs to be contained otherwise, funding of the proposed increase in aged pensions, plus probable COLA wage rises for public servants, will further exacerbate the fiscal deficit. Urgent action is needed to rein in the costs of underwriting the flights if the projected FY2015 return to surplus on operating balance is to be achieved. A rigorous and

[2] The use of Payments on Behalf of the Crown (POBOC) in the budget is an unusual feature of the Cook Islands public financial management system. It is derived from the New Zealand public financial management system where POBOCs are used to account for unappropriated expenditure. In Cook Islands practice POBOC have been extended to include many items that would normally be included in expenditure appropriations.

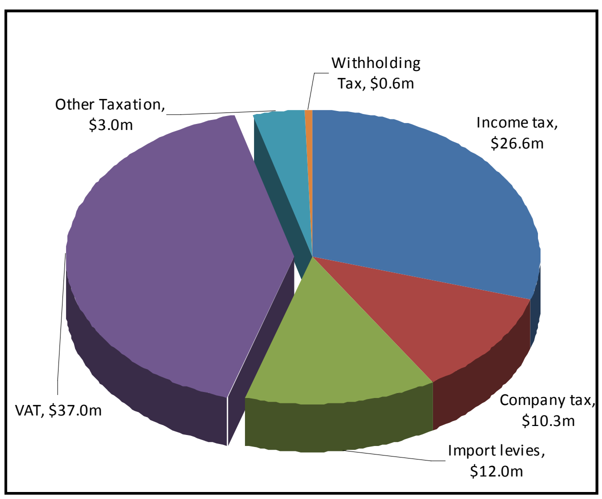
evidence based review of the Los Angeles route needs to be undertaken before the underwriting is renewed.

27. **Public funding for the tourism sector currently exceeds 18% of total Government expenditure**. Support for the tourism sector includes underwriting of the Sydney and Los Angeles routes, direct budgetary funding of the Tourism Corporation and Official Development Assistance (ODA) support for tourism. Given the fiscal deficit, the level of support being provided to the sector and the impact and merit of that support warrants careful review to better understand the economic effect of the public subsidies. The review should consider options—for example, encouraging tourism providers to introduce seasonal tariffs to encourage tourism in the off-peak season—to reduce the need for subsidising the industry.

28. **Government projections indicate that the overall fiscal balance is expected to return to surplus in FY2015.** The projected improvement in the fiscal position is expected despite uncertainty over the level of ODA in the coming years. The Government expects that increasing tax collections and the drawdown of a NZ$32m loan will offset the reduction in ODA if it eventuates. This seems optimistic but in practice, the drop in ODA may not eventuate and it is likely that in the on-going forward programming the level of grants will be sustained at around trend levels. The capacity of the economy to generate substantial additional tax revenue will, however, depend upon the continued growth of the tourism industry. This issue is discussed elsewhere in the report.

29. **There is scope, albeit limited, for tax increases.** There is some scope for increasing taxes without breaching the Fiscal Responsibility Ratio (FRR) threshold of 25% of tax revenue to GDP. It may also be possible to shift the burden of tax towards tourists, through increases in departure taxes and VAT. Although it should be noted that this is a risky strategy as Cook Islands departure taxes are already high by international standards. The Government is currently reviewing the tax structure. The Mission notes that the major objective of this review is to redistribute the tax burden, while ensuring that aggregate tax collections do not increase. The Mission acknowledges that a revenue neutral redistribution of the tax burden may be warranted but the Mission also considers that the primary focus of fiscal reform should be directed to controlling escalating expenditures.

Figure 7: Source of Taxes
(2011/2012)



Source: Cook Island authorities

30. **Analysis of fiscal performance is being compromised by compliance issues.** The public finances have not been audited since the FY2008 financial year. The accounts for FY2009 and FY2010 have been

finalised but have yet to be audited. The accounts for subsequent years have not been finalised. In both the FY2009 and FY2010 years, expenditure exceeded revenues by a substantially greater margin than was projected in the budgets. The Public Expenditure and Finance Assessment (PEFA)[3] analysis commented that the credibility of the budget was low due to on-going delays in finalising public accounts for the years FY2010, FY2011 and FY2012. Implementation of the PEFA Road Map will help address compliance issues. Concerted efforts need to be maintained to achieve the agenda outlined in the Road Map.

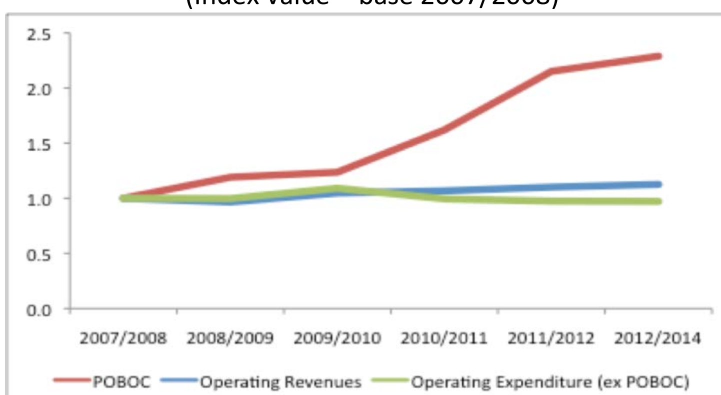
B. Official Development Assistance

31. **ODA provides a substantial contribution to the economy, it accounts for around 11% of GDP and over 25% of total Government expenditure.** Total ODA received has increased at an average annual rate of nearly 10% since FY2008 and this rate is scheduled to continue for at least another year. The budget nets out ODA in the year of expected disbursement. While this treatment is neutral on the overall budget estimates it usually overestimates the actual expenditure and hence the impact of Government expenditure on the economy.

C. Risks to Fiscal Stability

32. **The major risk to fiscal stability is the persistent and pronounced increase in POBOC expenditures.** As Figure 8 shows, increases in non POBOC expenditures have been held to moderate levels. The sharp increase in POBOC expenditure since FY2010 is principally due to the increasing cost of underwriting the Sydney and Los Angeles flights. The cost of underwriting these flights has increased sharply from $5 million a few years ago to a projected $13 million in FY2013 year. The budget projections assume that the current level of underwriting will continue into the future. This projection is problematic for two reasons. Firstly, the current level of underwriting has already pushed the budget into deficit. If this level of support continues, the accumulating deficit will put pressure on other expenditures and likely force the Government into increased foreign borrowings. Secondly, projecting the funding of the underwriting at the same level into the future is unrealistic given the uncertainty about fuel prices and the recent increasing trend of those prices. An urgent review of the underwriting is needed before 2015 (when the underwriting is due to end) to determine the financial and economic cost benefit to the Cook Islands of continuing with the subsidy. The review should take into account,

Figure 8: POBOC & Operating Expenditures, Operating Revenues
(Index value – base 2007/2008)



Source: Cook Island authorities

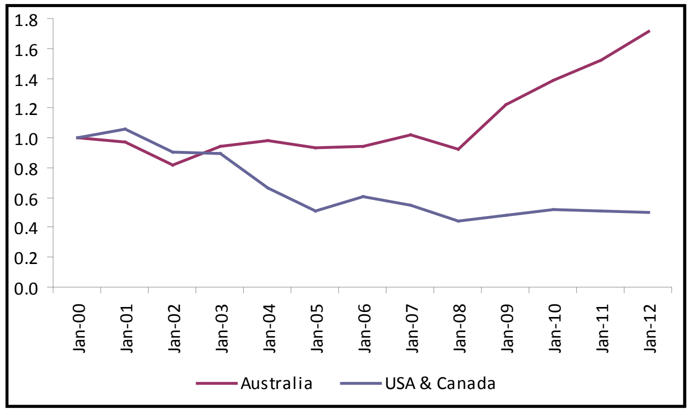
[3] Cook Islands – PEFA Public Financial Performance Report, August 2011.

among other things, the declining trend in tourism arrivals from the US and Europe, the high cost of marketing in the US and the tourism industry's capacity to accommodate additional visitors.

33. **The index value in Figure 9 shows that arrivals from North America have been stagnant since early 2005—throughout the period of the underwriting**. The Sydney market has been growing strongly since early 2008—this growth commenced before the extension of the underwriting to include the Sydney route. At the very least the underwriting of the Los Angeles flight should be reviewed well before 2015, when it is scheduled to end. If the issue is not urgently addressed, there is a risk that the underwriting will be rolled-over without a thorough analysis of its fiscal and economic implications. A review should take into account, amongst other things, the declining trend in tourism arrivals from the US and Europe, the high cost of marketing in the US and the tourism industry's capacity to accommodate additional visitors.

Figure 9: Tourist Arrivals from Australia & North America

(Index value – 2001 base)



Source: Cook Island authorities

34. **Another risk to fiscal stability is the Government's commitment to double the aged pension for 70 year and older resident Cook Islanders.** In the following comments the Mission has limited itself to the issue of affordability. The Mission acknowledges there are equity issues that need to be considered, including the widening gap between the payments to aged pensioners and the payments to other welfare recipients, but these issues are best addressed elsewhere. The tight fiscal situation was highlighted earlier in this report. According to a recent study into the cost of social welfare in the Cook Islands[4] as at 3 June 2012, there were 1,674 recipients of the aged pension. Of these 670 were over the age of 70. If the proposed increased pension rates had been in place then, the marginal additional cost of the aged pension would have been $3.2m per annum. The Mission understands that the welfare payments system is to be formally reviewed and that this review will consider the affordability issue. This is important in light of increasing life expectancy which could increase the burden in future. Targeting of welfare benefits—including means testing—could scale up support for those who need it most while reducing the associated fiscal burden.

35. **Mounting pressure to increase wages is a further risk to the fiscal position.** Since 2010, when Cabinet adopted the Fiscal Responsibility Ratios, the ratio of personnel costs to total revenue has exceeded the 40% threshold. The current budget projects the ratio to fall below the threshold in 2012/2013 and remain below into the future. This projection assumes however that wage rates will not

[4] McTaggart, G. (2013) Prognosis of Social Welfare Spending in the Cook Islands Over the Next Ten Years, "ADB-JFPR Social Protection of the Vulnerable in the South Pacific". p6

increase. If cost of living adjustments are applied, wages will rise. In that circumstance bringing the personnel costs to revenue ratio below the threshold will require either fewer public employees or increased revenues or both.

D. Debt Sustainability

36. **The debt position of the Cook Islands Government remains comfortable.** Debt is currently at 22.3% of GDP, well below the government's own threshold of 35% and the 40% of GDP that the IMF considers a sustainable level of foreign debt for small developing countries. Projections indicate that foreign debt levels will remain moderate into the foreseeable future. The Mission urges Government to stay committed to managing the rate of growth in debt by containing the budget deficit to within 2% of GDP, as required by the FRR. Most of the existing loans are from the ADB, although recently the Peoples' Republic of China (PRC) has agreed to provide two large loans. All of the existing loans are on concessional terms. At present there are no further loans in the pipeline. The concessional terms have kept the loan servicing cost low. The FRR set the debt servicing to revenue (less grants) ratio at a conservative 5%. Projections show that this ratio may be exceeded in the near future. The Mission considers the 5% ratio too conservative and inconsistent with the debt to GDP ratio. A more reasonable and consistent ratio of debt servicing to GDP would be 10%. It is suggested that the threshold for the ratio of debt servicing to GDP be increased to 10%.

37. **Analysis of debt sustainability using the IMF DSA Template shows that the Cook Islands can comfortably service existing debt.** The results of the debt sustainability analysis are shown in Appendix 3. Figure 1 in the Appendix shows the impact of alternative scenarios on the serviceability of public and publically guaranteed debt. Even under the "Most Extreme" shock, where exports (including services) are assumed to deviate from historical norms by one standard deviation, all the debt ratios remain below the distress threshold. It is noted that the Mission adjusted the standard DSA analysis to incorporate a 2.2 % per annum revaluation of the RMB against the New Zealand dollar. Even with this adjustment the debt levels remain within comfortable bounds. Of the three scenarios shown in Figure 2 the "Most extreme shock" shows a persistently worsening situation. The assumption used to calculate this shock is that GDP growth deviates from historical levels by one standard deviation. In this model that deviation would require a persistent devaluation in the New Zealand dollar against the US dollar of 30 % per annum—an unlikely occurrence.

38. **The reporting of the debt stock excludes contingent liabilities.** In most cases the Government is the borrower and on-lends to state owned enterprises (SOEs), hence SOE debt is recorded in the Government's stock of domestic debt. While foreign exchange risks are notionally borne by the SOEs the Government is ultimately responsible if an SOE defaults on its repayment obligations. The extent of this risk depends upon the financial solvency of the SOEs and movements in the exchange rate of the currency(s) in which the loans are denominated. A cursory examination of the financial soundness of SOE's suggests that this risk may be minimal into the foreseeable future. However, a clear assessment of the government's contingent liabilities should be recorded and analysed in its debt computation.

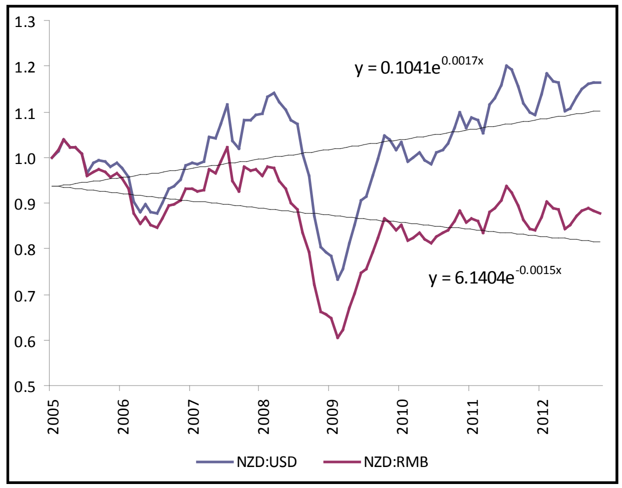
39. **The economy is vulnerable to natural disasters.** By far the largest part of the economy is located on Rarotonga and Aitutaki, both are small and relatively close together. If a natural disaster such

as a tsunami or cyclone were to strike Rarotonga and/or Aitutaki it could wreak considerable havoc on the economy. While neighbouring countries would no doubt provide support and assistance, the major cost of rebuilding infrastructure would have to be funded by the Cook Islands. The Mission suggests that the Government maintains some borrowing space below the fiscal responsibility threshold to cover the possible need for reconstruction loans.

E. Debt Management

40. **Foreign debt inevitably carries with it exchange rate risks.** Nearly all of the Cook Island's imports and the vast majority of its exports (including services) are denominated in NZ dollars. At the same time virtually all of the public foreign debt is denominated in Special Drawing Rights (SDR), US dollars or Chinese RMB. The economy has no natural hedge against changes in the exchange rate between the NZ dollar, the US dollar and Chinese RMB. Some debt has been converted from SDR to US dollars and this appears rational as no debt is serviced in SDRs. The exchange rate risk on the US dollar denominated debt may be quite small. But should the US dollar depreciate, the real cost of servicing the US dollar denominated debt will be reduced. The chart shows that the US dollar has depreciated against the NZ dollar at a rate of 2.0% per annum since January 2005. The RMB however, is very likely to appreciate against the NZ dollar in the foreseeable future. Since January 2005, when the Chinese Government commenced a gradual revaluation of the RMB, the currency has appreciated against the NZ dollar at a rate of 1.6% per annum. Over the 20 year life of the existing loans this rate of revaluation would increase the real cost of servicing the existing RMB loans by nearly 18%. While the current exposure to exchange rate risks is not unmanageable, the Government should be very cautious about taking on additional RMB debt. The real cost of RMB denominated debt is highly likely to increase so any further exposure to RMB denominated debt entails significant risks.

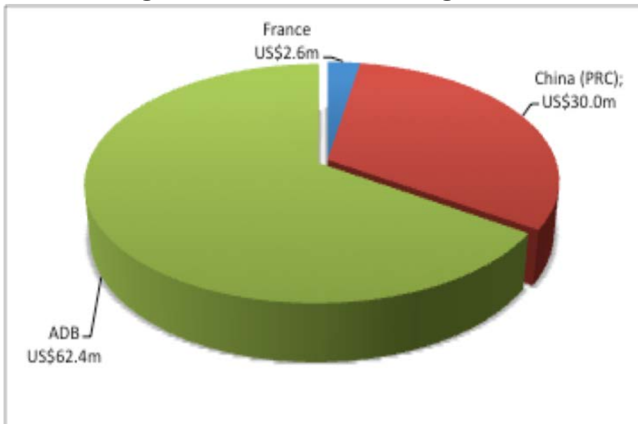
Figure 10: Exchange Rate Movements
(Index values – Jan 2005 base)



Source: Reserve Bank of New Zealand

41. **The government's use of a reserve to cover all its debt obligations entails an opportunity cost.** The Government has a loan repayment reserve, which is held in New Zealand dollars. While this conservative approach provides a buffer against changes in exchange rates it entails an opportunity cost. The Mission considers that the benefits and costs of the strategy should be formally analysed. This analysis should take place as part of the development of a formal debt management strategy.

Figure 11: Sources of Foreign Loans



Source: Cook Island authorities

V. BANKING AND FINANCE

A. Financial System

42. **The financial system in the Cook Islands is dominated by foreign owned commercial banks.** The financial institutions include three commercial banks, the Cook Islands National Superannuation Fund, insurance companies and offshore banks. The three commercial banks are the Bank of the Cook Islands (BCI), the Australia and New Zealand Bank (ANZ) and Westpac. BCI is fully owned by the Government, whilst the other two are overseas subsidiaries of Australian banks. The ANZ holds the largest share of the market with 45%, followed by Westpac at 40% and the BCI at 15%. It is estimated that the combined assets of the two Australian owned banks amount to around 75% of the assets of the financial system excluding offshore banks[5]. The Cook Islands institutions as well as ANZ and Westpac are supervised by the Financial Supervisory Commission[6]. The FSC supervision uses both on site and off site analysis. FSC does not regulate interest rates nor does it impose restrictions on lending activities.

43. **The CINSF was established by the CINSF Act in 2000 to provide superannuation for retirees.** Employers and employees are each required to contribute 4% of gross wages to the Fund. CINSF management estimate that 80% of employees working in the Cook Islands are contributing to the Fund. Currently 100% of the Fund is invested overseas. The Fund is managed by a professional fund management company. Contributions to the CINSF are increasing the national savings rate. It is expected that the growing contributions to the CINSF will allow it to evolve into a key participant in the domestic financial market.

44. **Banking statistics are inadequate and need to be improved as soon as possible.** The three commercial banks provide quarterly returns to the Statistics Department of the MFEM. These are limited to data on aggregate deposits and loans. It has been agreed that after March 2013 all banking

---

[5] The Offshore Banking activities provide confidential offshore banking for foreigners. The Cook Islands derives benefits through payments for services. The assets and liabilities of the sector do not appear in the Cook Islands balance of payments statements.

[6] The Financial Intelligence Unit is responsible for overseeing the operations of the offshore banks. The FIU was recently integrated into the FSC.

statistics will be collected by the FSC, which will then provide relevant information to MFEM. The banking statistics could be a reliable and timely source of balance of payment data, as well as good indicators of economic activity. Every effort should be made to collect these through the FSC. A list of statistics to collect is in Appendix 2.

B. Financial Soundness

45. **The financial sector of the Cook Islands is generally sound albeit with a high level of non-performing loans (NPL).** The recent Banking Review[7] showed that, since 2007, NPL have risen from below 4% to more than 16% of the commercial banks total loan portfolio. This level of NPL is markedly higher than the 3% or less that is generally considered to be a sustainable level of NPL. The recent rise is due to a sharp expansion of commercial banks' lending in 2008 and 2009. In retrospect it is clear that many of the borrowers were never able to service their loans. If appropriate prudential ratios had been in place the level of lending may have been moderated. The high level of NPL has increased the commercial banks cost of managing their loan portfolio. This may be partly responsible for the relatively high lending rates in the Cook Islands. The commercial banks have since tightened their portfolio management. The tighter lending policy is reflected in a slowdown in the number of new loans and a widening of the interest rate spread. The commercial banks estimate that it will take up to two years to return the NPL to a more acceptable level.

46. **The high cost of intermediation in a small underdeveloped market is another key challenge for the industry.** The Banking Review estimates the return on capital of the commercial banks in the Cooks Islands at an average of 10% per annum. This is much lower than the return on capital in many other countries in the Pacific, where it typically ranges from 20% to 35% per annum. The underdeveloped financial infrastructure and the small market are contributing factors to the relatively low return on capital. Efforts should continue to be made to improve the efficiency of financial intermediation in the Cook Islands.

47. **The efforts of commercial banks to reduce NPLs are thwarted by the lack of supporting legislation.** As highlighted by the Banking Review, liquidating collateral held on NPL is expensive and time consuming. This is largely due to the absence of a bankruptcy law and the constraints of current land legislation. The Government has not yet formally responded to the recommendations in the Banking Review. The review recommended the establishment of a Task Force, such a task force should fast track the development of the enabling legislations. This will help foster the evolution of a modern financial infrastructure, which will in turn improve the efficiency of intermediation and help reduce interest rate spreads.

48. **Banking legislation should include provisions to adequately protect local depositors across the banking sector.** The global financial crisis demonstrated that even large and well managed banking institutions are vulnerable to the vagaries of the international financial market. The prime responsibility of the financial supervisor is to protect domestic depositors. This usually entails onsite and offsite supervision. The Mission could not form a view on the adequacy and effectiveness of the supervision of financial institutions in the Cook Islands. Both ANZ and Westpac are however, subsidiaries of triple A

[7] Knowles, Sam (2012) Cook Islands Banking Review.

rated commercial banks in Australia. In addition, both banks are supervised by the Australian Prudential Regulation Authority (APRA). This level of credit rating and supervision provides adequate comfort in regard to the safety of deposits. The depositors in the Government owned BCI do not enjoy the same level of security.

49. **Local deposits should be insulated from the risks of commercial banks' having to repay offshore borrowing.** The Banking Review estimates that the financial gap between local deposits and offshore borrowing amounts to $25 million. The increase in the loan-to-deposit ratio to over 120% in 2009 is evidence of an increasing level of risk. In the event of a default, ownership of domestic assets may be transferred to non-residents to repay the financial sector's offshore borrowings. This risk should be noted and if necessary addressed in the appropriate legislation. The FSC may consider establishing a prescribed prudential limit on overseas exposure of commercial banks.

50. **More information could be made available on the operations of the offshore centre.** The Mission was unable to obtain statistics on the offshore financial centre. The supervision of the centre is the responsibility of the Financial Intelligence Unit (FIU), which has recently been integrated into the FSC. Some data on inward transfers of offshore banks were obtained from the Business Trade and Investment Board (BTIB). The recent PEFA report suggested that the offshore centre contributed 8% to the Cook Islands GDP[8], but in the absence of robust data and rigorous reporting this is difficult to verify.

C. Operation of the Commercial Banks

51. **Financial data that are currently collected are inadequate to allow the measurement and tracking of important economic indicators.** Data that are currently available on commercial banks' operations are limited to the value of aggregated deposits and lending. Information available from the CINSF is not disseminated or used. The Mission has made suggestions on additional information that should be collected from commercial banks (Attachment 1).

52. **The uninhibited outward flow of capital can cause volatility in deposits which in turn may result in liquidity pressures in the banking system and lead to higher interest rates and lower lending.** The degree of monetisation of the Cook Islands is relatively low - the ratio of broad money to nominal GDP was 54% in 2011. This low level of monetisation is due to the absence of a capital market and financial instruments. Total deposits rose sharply in 2008 and 2009 expanding by over 50% in one year alone. This rapid rise was driven by term deposits which nearly doubled within those two years. The unprecedented increase originated from offshore sources, as evidenced by the loan to deposit ratio rising to over 120%. While deposits have since declined somewhat, they are still relatively high at 64% above the 2001 level. The Mission was advised that FSC had no prescribed prudential ratios. The appropriate prudential ratios should be prescribed.

53. **The large increase in lending in 2009 was mirrored by a decline in the quality of loans; improved supervision is needed to avoid a repeat of this occurrence.** On the back of the large and quick build up in deposits, commercial bank lending rose sharply in 2008 and 2009. Over 86% of bank lending was for personal services. The lending to this sector rose by 23% in 2008 and 2009. The

[8] PEFA Report op cit, p2.

deterioration in quality of loans manifested itself after 2009 as evidenced by the sharp increase in NPL. Prescribed prudential loan ratios may need to be considered to moderate lending and protect asset quality.

54. **Lending interest rates in the Cook Islands are higher than those prevailing in New Zealand.** The Banking Review identified possible causes of the higher interest rate which included offshore funding, scale and country risks. The Review also identified issues that could promote a more efficient intermediation process and help narrow the interest rate differentials between New Zealand and the Cook Islands (see below). The Review indicated that the level and the spread of interest rates in the Cook Islands are not out of line with those in the other countries in the Pacific. The Mission is of the view that the dissemination of public information on the relative position of the Cook Islands compared to other Pacific Island countries would help the public's understanding of this topical issue.

55. **The lack of variability in commercial banks interest rate may signal a lack of competition in financial markets in the Cook Islands.** Interest rates on term deposits and loan interest rates in the Cook Islands have remained largely unchanged for many years. The most recent data on interest rates are for 2011 and these show that interest rates on housing loans range between 9.0% and 9.95%. These rates have not changed since early 2009. The interest rates on secured personal loans have also shown very little movement typically being between 15.8% and 16.5%. In the longer term interest rate movements tend to follow trends in the New Zealand financial market, albeit with less inter-temporal variation.

D. Financial Statistics

56. **Limited availability of timely and reliable statistics inhibits policy development in the Cook Islands.** One serious shortcoming is the paucity of statistics on the balance of payments. While bank transfer information can provide some data on remittances, there are currently no sources of information on private sector debt servicing and other transfers. The FSC is the central collection agency for banking statistics. The Commission is currently reviewing its data requirements. This presents an opportunity for the MFEM to review the data it requires from financial institutions and to have these data included in the revised FSC reporting requirements.

E. Banking Review

57. **The limited focus of the Banking Review provides valuable guidance but more needs to be done.** Despite its broad remit the Banking Review focused tightly on how to reduce lending interest rates. The principal findings of the Review were to: (a) review existing legislation and introduce new legislation to improve the efficiency of intermediation; (b) establish a credit bureau to improve borrower information and reduce risks; and (c) establish a Task Force to help implement the findings of the review. The Mission is of the view that the report should be used to assist in formulating the terms of reference for a thorough review on financial infrastructure, efficiency, financial literacy and the quality and accessibility of banking services. The Mission believes that Donor assistance can be sought for this task.

VI. EXTERNAL BALANCE

A. External Financial Stability

58. **There is no apparent immediate risk to the external financial stability of the Cook Islands.** The surpluses in the services account more than offset the deficits in the trade account. The current account surplus of 40% of GDP reflects the low level of investment in the Cook Islands. There are, however, serious gaps in the current account data presented in the budget statement. Private transfers, particularly remittances are not included. Official transfers are also absent. The Net Foreign Assets of Cook Islands are underestimated since the portfolio holdings of the CINSF are not included. Based on the data provided, the Mission has compiled a current account statement with data from various sources (Appendix Table 2). This data could be used to initiate the compilation of a full and reliable data set on the balance of payments.

59. **Improved banking statistics are required for the computation of the balance of payments.** The balance on remittances is not clear. The Mission was informed that expatriate Cook Islanders abroad do not remit substantial amounts of money to the Cook Islands. Whereas the outward flow of remittances is increasing as the number of foreign workers increase. This combination of low inflows and high outflows suggests that net remittances may be negative, but there is, as yet, insufficient data to underpin these assumptions. Similarly, data on investment flows are not available. The corporate ownership structure of the Cook Islands indicate that locals hold shares in the larger hotels, while smaller boutique enterprises are generally foreign owned. This may mean that net investment income is in deficit. While official flows are captured, there is virtually no information on private capital flows. Private foreign debt position is also unknown. Improved banking statistics together with information from the Business Trade and Investment Board would strengthen balance of payments information, which in turn is an essential input into policy development and implementation. The Mission notes that while the MFEM Act requires the MFEM to table balance of payments data in Parliament, this is not happening.

60. **The advantages from using the New Zealand dollar outweigh the limits placed on monetary policy options.** The use of the New Zealand dollar as the local currency complicates the collection of balance of payments data. It also limits the macro-economic tools available to manage the economy. The cost of these complications are however more than offset by the advantages gained. The liberalized exchange regime combined with the use of the New Zealand dollar means that the Cook Islands does not have to face the challenge of maintaining adequate foreign exchange reserves. The economy is also insulated against the volatile movements in exchange rates that often bedevil small narrowly based economies. The close linkages between the Cook Islands economy and the New Zealand economy, particularly the free flow of labour, mean that the Cook Island economy inevitably tracks movements in the New Zealand economy. Consequently, changes in the Cook Islands international terms of trade virtually mirror changes in the New Zealand terms of trade. While addressing the demand and supply for foreign currency is a major preoccupation in other small economies, in the Cook Islands this issue is addressed through commercial banks borrowing foreign exchange in the global market or seeking the support from their Head Offices.

VII. DATA REQUIREMENTS

61. **Limits on available economic data are a critical impediment to better decision making in the Cook Islands.** While some data are not collected at all, many are available in different agencies but are not collated and therefore may not be available to assist policy development. The Mission is of the view that resources should be gainfully invested in collecting the required statistics. The collection of banking data recommended above will allow a credible balance of payments account to be prepared. It is now eight years since the Statistics Department of MFEM undertook a Household Expenditure and Income Survey (HIES). A contemporary HIES would provide important information on income, wages, spending patterns and household production. The survey should enable gaps in the computation of historical GDP to be filled. For example, there is substantial activity in household production which is not captured in the current computation of GDP. Donor support could be obtained to support the implementation of a HIES. The Mission was advised that labour market information is submitted to the Ministry for Internal Affairs but that it does not appear to be compiled or reported. Rather than persist with the existing reporting system, it may be possible to "piggy-back" collection on income tax or VAT returns by adding a relevant questions to those returns.

62. **Economic analysis and forecasting should be better coordinated.** The Mission spent considerable time attempting to reconcile data from separate models and data series. It appears to the Mission that the current processes are ad hoc and individualised. The uncoordinated compilation and projection of economic indicators by individuals is not only inefficient, it also poses considerable risks. Data sets multiply, become increasingly inconsistent and are often "lost". Best practice is to manage this task through a small team that has the over-riding responsibility for the models used to analyse and forecast financial and economic data. The team should be able to draw upon information and support from the budget and policy, statistics, revenue and aid management divisions of MFEM. This would improve the reliability and consistency of data, which would in turn improve policy analysis and development.

VIII.

IX.

X.

XI. APPENDIX 1: STATISTICAL TABLES

Appendix Table 1: Economic Indicators

	2009/10	2010/11	2011/12	2012/13	2013/14
	Actual	*Actual*	*Estimate*	*Proj*	*Proj*
Economic Activity					
Nominal GDP ($m)	351.1	361.4	387.5	418.1	436.3
Percentage change (YOY)	3.5%	2.9%	7.2%	7.9%	4.4%
Real GDP (at Constant 2006 Prices, $m)	269.3	271.5	285.9	299.9	304.0
Percentage change (YOY)	-1.7%	0.8%	5.3%	4.9%	1.4%
Inflation					
Consumer Price Index (base Dec. 2006 = 100)	118.2	120.7	124.3	128.0	131.8
Percentage change (YOY)	0.1%	2.1%	3.0%	3.0%	3.0%
Construction/Capital Investment					
Commercial Building Approvals ($m)	3.3	1.9	2.9	3.0	3.1
Residential Building Approvals ($m)	8.5	9.5	7.8	7.8	8.0
Public Works ($m) includes Dev Partners	50.3	39.3	57.2	61.1	59.1
Productive Sector Indicators					
Visitor Arrivals	99.0	108.4	116.1	127.4	132.3
Percentage change (YOY)	-45.9%	9.5%	7.1%	9.8%	3.9%
Estimated Visitor Expenditures ($m)	154.6	174.3	192.3	214.9	228.8
Pearl Exports ($m)	1.7	1.6	0.6	0.5	0.5
Fish Exports ($m)	2.7	3.1	3.1	2.6	2.7
External Sector					
Merchandise Trade Balance ($m)	-102.0	-107.7	-102.7	-109.5	-114.3
Services Trade Balance ($m)	253.4	251.9	274.6	292.9	307.3
Exchange Rate (USD/NZD - daily average)	0.72	0.76	0.80	0.81	0.81
Financial Sector (at end of financial year)					
Net Government Credit Position ($m)	88.7	75.3	88.3	71.1	77.6
Private and Public Enterprise Deposits ($m)	221.6	192.0	204.2	214.5	223.0
Private and Public Enterprise Loans ($m)	288.7	281.9	299.9	314.9	327.5

Source: Minstry of Finance and Economic Management; New Zealand Reserve Bank Statistics

Appendix Table 2: Current Account

	2007	2008	2009	2010	2011	2012	2013	2014
Trade balance	**-137.1**	**-147.9**	**-108.1**	**-104.6**	**-98.5**	**-101.3**	**-104.6**	**-107.4**
Exports ($m)	7.7	5.9	4.4	7.2	7.2	7.5	8.5	9.6
Imports ($m)	144.7	153.8	112.5	111.8	105.7	108.7	113.1	117.0
Service balance ($m)	**186.0**	**179.7**	**195.8**	**219.2**	**213.6**	**226.2**	**236.9**	**247.5**
Services receipt ($m)	261.5	261.4	263.7	292.8	292.4	308.5	321.4	333.8
Travel ($m)	164.6	164.9	166.5	194.3	192.0	206.2	217.1	227.5
Others ($m)	96.9	96.5	97.2	98.5	100.4	102.3	104.3	106.3
Services payments ($m)	75.5	81.7	67.9	73.6	78.8	82.3	84.5	86.3
Investment income (net) ($m)[1]	**na**	**na**	**na**	**na**	**na**	**0.0**	**0.0**	**0.0**
Current transfers (net) ($m)	**24.6**	**15.7**	**24.4**	**28.4**	**38.3**	**40.2**	**35.6**	**17.6**
Official ($m)	29.7	21.2	30.2	34.6	44.9	47.7	43.9	26.3
Private ($m)[1]	-5.2	-5.5	-5.8	-6.2	-6.7	-7.5	-8.2	-8.7
Current account balance ($m)	**73.4**	**47.5**	**112.2**	**143.1**	**153.3**	**165.2**	**167.9**	**157.6**
(in percent of GDP)	23.7%	14.3%	32.5%	40.2%	41.0%	41.0%	39.3%	35.5%
Change in Net Foreign Assets ($m)	na	-14.6	125.7	-67.4	11.0	na	na	na
Nominal GDP ($m)[3]	310.1	332.1	345.1	356.3	374.4	402.8	427.2	443.9
Exchange rate (USD:NZD) (average daily rate)	0.74	0.77	0.73	0.72	0.79	0.81	0.84	0.84

Source: Ministry of Finance and Economic Management; Banking Survey; Industry; Reserve Bank of New Zealand Statistics; Consultant's estimates

[1] *Assume 0 after 2011. Maybe negative given expected investment income flows*

[2] *Data on remittances not collected - estimate of foreign worker remittances.*

[3] *Calendar year estimate*

Appendix Table 3: Fiscal Indicators

	2011/12 *Estimate*	2012/13 *Proj*	2013/14 *Proj*	2014/15 *Proj*
Statement of Financial Performance				
Taxation Underlying Revenue ($m)	89.6	92.0	93.5	97.1
Social Contributions ($m)	0.1	0.1	0.1	0.1
Other Underlying Revenue ($m)	19.0	19.1	20.8	21.3
Total Operating Underlying Revenue ($m)	**108.7**	**111.2**	**114.4**	**118.5**
Total Underlying Revenue Percentage of GDP	23.1%	22.0%	21.4%	21.5%
Tax Underlying Revenue Percentage of GDP	28.1%	26.6%	26.2%	26.2%
Personnel ($m)	**44.1**	**42.5**	**42.0**	**42.0**
Percentage of Total Underlying Revenue	40.6%	38.3%	36.7%	35.5%
Provision for New Policy ($m)	-	-	-	0.6
Total Operating Underlying Expenditure ($m)	**111.3**	**113.3**	**115.6**	**116.5**
Percentage of GDP	28.7%	27.1%	26.5%	25.8%
Percentage of Operating Underlying Revenue	102.3%	101.9%	101.0%	98.3%
Reappropriation of Previous Years Funds for Capital ($m)	-	3.1	-	-
Underlying Operating Balance ($m)	**-2.6**	**1.0**	**-1.2**	**2.0**
Percentage of GDP	-0.7%	0.2%	-0.3%	0.4%
Non Operating Balance ($m)	-7.8	-10.0	-10.5	-9.8
Underlying Overall Surplus/(Deficit) ($m)	**-10.4**	**-9.0**	**-11.7**	**-7.8**
Percentage of GDP	-2.7%	-2.2%	-2.7%	-1.7%
Statement of Financial Position ($m)				
Assets ($m)	374.1	380.4	388.7	420.7
Liabilities ($m)	126.3	107.3	113.1	141.4
Crown Balance ($m)	247.8	273.1	275.6	279.3
Percentage of GDP	64.0%	65.3%	63.2%	61.8%
Statement of Borrowings ($m)				
Gross Debt end of FY ($m)	107.3	89.0	94.2	122.5
Percentage of GDP	27.7%	21.3%	21.6%	27.1%
Net Crown Debt, end of FY ($m)	88.3	71.1	77.6	106.9
Percentage of GDP	22.8%	17.0%	17.8%	23.7%
Loan Repayment Reserves Held ($m)	19.1	17.8	16.6	15.6
Development Partner Support ($m)				
Grants ($m)	44.9	47.5	43.9	26.3
Percentage of GDP	11.6%	11.4%	10.1%	5.8%
Net Debt Servicing[1] ($m)	2.4	3.2	4.0	4.2
Percentage of Total Underlying Revenue	2.2%	2.9%	3.5%	3.5%
Memo item: Nominal GDP ($m)	**387.4**	**418.1**	**436.3**	**451.6**

Source: Minstry of Finance and Economic Management

[1] *Net Debt Servicing is net of drawdowns of loan reserves used to service SOE debt payments*

Appendix Table 4: Budget Position

	2011/12 *Estimate*	2012/13 *Budget*	2013/14 *Forecast*	2014/15 *Forecast*
Statement of Financial Performance ($m)				
Income Tax	26.6	26.8	27.1	28.0
Company Tax	10.3	10.4	10.9	11.3
Import Levies	12.0	13.0	13.6	14.1
Value Added Tax	37.0	37.4	37.3	39.2
Withholding Tax	0.6	0.9	1.0	1.0
Other Tax	3.0	3.6	3.6	3.6
Total Taxation Revenue ($m)	**89.6**	**92.0**	**93.5**	**97.2**
Total Operating Revenue including ODA ($m)	**153.7**	**158.7**	**158.2**	**144.7**
Output/POBC/Other Expenditure ($m)	**111.3**	**113.7**	**115.6**	**116.5**
Net Operating Balance ($m)	**-2.6**	**-2.6**	**-1.3**	**2.0**
Cash Transactions in non Financial Assets ($m)	**18.2**	**-0.7**	**8.7**	**8.4**
Net Borrowing Requirement ($m)	**-7.8**	**7.5**	**9.4**	**16.0**
Statement of Financial Position ($m)				
Assets	374.1	380.4	388.7	420.7
Liabilities	126.3	107.9	113.1	141.4
Net Crown Balance	247.8	272.5	275.6	279.3
Statement of Borrowings ($m)				
Crown Debt, end of FY	107.3	89.0	94.2	122.5
Net Crown Debt, end of FY	88.3	71.1	77.6	107.1
as % of GDP	22.8%	17.0%	17.8%	23.7%
Loan Repayment Reserves Held	19.1	17.8	16.6	15.4

Source: Minstry of Finance and Economic Management

Appendix Table 5: Social Indicators
(2006 & 2011 Censuses)

	Total ('000)	Males ('000)	Females ('000)
Total Population (2011 Census)	17,794	8,815	8,979
Resident Population	14,974	7,490	7,484
Born overseas	3,879	1,950	1,929
Population Density (number of people/Km^2)	63		
Rarotonga	195		
Median Age (in years)	29	30	28
Age Dependency Ratio	72%		
Urban Population (Rarotonga)	13,095	6,460	6,635
Fertility (2006 Census)			
Crude Birth Rate (CBR), 2001-2006 (per 1000)	19.1		
Total Fertility Rate (TFR), 2006			2.5
Teenage Fertility Rate, 2006 (per 1000)			62.0
Mean Age at Childbearing, 2006			28.4
Mortality (2006 Census)			
Life Expectancy at Birth, 2001-2006	72.8	69.5	76.2
Infant Mortality Rate (IMR), (per 1000)	14.0	19.0	9.0
Labour Force (2011 Census)			
Employed Population	6,938	3,708	3,230
Paid Workers	6,815	3,632	3,183
Unpaid Family Workers	123	76	47
Unemployed	616	331	285
Labour Force Participation Rate	71%	77%	65%
Employment-Population Ratio	64%	69%	59%
Gross Average Annual Income from all Sources	15,028	16,848	13,243
Non-Labour Force (2011 Census)			
Students	733	359	374
Retired	1,101	578	523
Home Duties	1,254	294	960
Education (2011 Census)			
School Enrollment Rates of 5-15 years (2006 Census)	97.4%	96.4%	98.5%
Proportion of Population aged 15+			
Trade and Business Certificate	2.7%	4.5%	1.1%
Professional and Higher Certificate	0.3%	0.5%	0.1%
Teachers & Members of Professional Societies	0.6%	0.2%	0.9%
Tertiary Qualification	4.8%	5.0%	4.6%

Source: 2011 & 2006 Censuses

Appendix Table 6: Banking Survey
(2007-2011)

	2007	2008	2009	2010	2011
Net Foreign Assets	**12.7**	**5.2**	**132.0**	**64.4**	**73.9**
Government[1]	13.2	20.4	21.5	21.3	19.8
CINSF	17.1	21.2	31.5	41.0	50.2
Commercial banks	-17.7	-36.3	79.0	2.1	4.0
Net Domestic Assets	**134.5**	**216.9**	**113.7**	**142.7**	**135.3**
Net domestic credit	102.0	143.5	274.9	249.7	245.2
Government (net)	-60.9	-47.3	67.5	64.0	64.7
Non financial public enterprise	0.5	0.9	10.0	1.0	1.0
Private sector	162.3	189.9	197.3	184.6	179.5
Other items (net)	32.5	73.4	-161.1	-106.9	-109.9
Money Supply					
Narrow money (M1)	**28.3**	**31.5**	**33.3**	**49.1**	**48.4**
Currency in circulation	0.1	0.1	0.1	0.1	0.1
Demand deposits	28.1	31.4	33.2	49.0	48.3
Quasi money (M2)	**105.6**	**170.3**	**190.9**	**136.7**	**141.1**
Savings deposits	35.1	51.4	69.5	35.5	36.2
Term deposits	70.5	118.9	121.4	101.2	104.9
Broad money (M3 = M1 + M2)	**133.9**	**201.8**	**224.3**	**185.9**	**189.5**
Loans by commercial banks	**164.3**	**191.6**	**198.6**	**186.0**	**179.7**
Finance and business	10.4	22.5	17.7	14.9	11.4
Public Administration	2.0	1.6	1.3	1.4	0.2
Personal services	133.0	148.4	163.5	157.5	155.4
Others	19.0	19.1	16.2	12.3	12.7
Memorandum items					
Private sector credit	162.3	189.9	197.3	184.6	179.5
Total deposits	133.8	201.6	224.1	185.7	189.3
Nominal GDP	310.1	332.1	346.0	347.6	369.8
M3/GDP ratio	43.2	60.8	64.8	53.5	51.2
M1/GDP ratio	9.1	9.5	9.6	14.1	13.1
Loans to deposit ratio	122.8	95.0	88.6	100.1	94.9
Change in NFA		-7.4	126.8	-67.6	9.5

Source: Ministry of Finance and Economic Management; Banking Survey: Consultant Estimates

[1] *Government Loan Repayment Reserve*

Appendix Table 7: Financial Soundness Indicators

(2006-2012)[1]

	2007	2008	2009	2010	2011
Loans to deposits ratio	84.3%	84.3%	82.5%	88.1%	74.1%
Capital adequacy ratio	59.8%	57.4%	58.3%	32.6%	32.8%
Return on assets	2.2%	0.7%	2.8%	1.5%	1.4%
Non-performing loans ratio[3]	2.3%	2.0%	6.9%	8.1%	10.3%
Net interest margins	2.7%	2.9%	4.4%	3.6%	3.8%
Liquid assets to short-term liabilities	56.7%	71.5%	79.2%	77.0%	73.7%
Bank provisions to non-performing loans[3]	96.1%	145.9%	32.2%	29.6%	42.6%

Source: FSC - Commercial banks in Cook Islands

[1] *for commercial banks*

[2] *2012 data are as of end of December*

[3] *three-months overdue and longer*

XII.

XIII. APPENDIX 2: SUGGESTED BANKING STATISTICS

FSC should be asked to request the following banking statistics from commercial banks:

Items	Information Requested	Supporting data and comments
Deposits	Demand	Interest rate
	Savings	Interest rate
	Term by original maturity	Interest rate on each maturity
	Non- resident deposit	
Lending	New loans during the period	According to sectors with interest rate
	Lending by sector	Sector classification could be according to national accounts
Interest rate	Weighted average lending rate of total loans	
	Weighted average rate for key sectors like housing	
Monetary survey	Currency in circulation	Commercial banks could fill in a monetary survey form
	Government deposits	
	Loans to Government	
	Loans to non- financial public enterprises	
	Loans to the private sector	
Foreign exchange settlements	Remittances inward	
	Remittances outward	
	Export receipts	By major exports
	Import payment	By import classification
	Loan repayment—interest	
	Loan repayment—principal	
	Services payment	
	Services receipts	
	Investment income received	
	Investment income paid	
	Credit card payment/withdrawals	
	ATM withdrawals of foreign cards	
Currency	Currency outward	
	Currency inward	
Assets and Liabilities	Foreign assets	Deposit held abroad
		Other assets
	Foreign liabilities	Borrowing from abroad
		Other liabilities

XIV. APPENDIX 3: DEBT SUSTAINABILITY ANALYSIS[9]

The Cook Islands can comfortably service its current level of public debt and has a low risk of debt distress.

A. Introduction

1. **At the end of the 2011/2012 financial year the Cook Islands public debt was NZ$77.4m.** Existing commitments will add a further NZ$27.2m in FY2013, thereby increasing total debt to NZ$104.6m.

2. **The majority of the Cook Islands public debt was borrowed from the ADB on concessional term.** With one exception where the loan was denominated in NZD, the ADB loans were denominated in either US dollars or SDR. Much of the SDR debt has now been renominated in US dollars. The People's Republic of China has recently provided two substantial loans to the Cook Islands. These loans are denominated in RMB and are also on concessional terms. There are no additional borrowings in the pipeline.

B. Background

3. **The Cook Islands economy is closely tied to the New Zealand economy.** Most of the imports, nearly all of the exports and most of the tourist arrivals are from New Zealand. In addition the Cook Islanders right to live and work in New Zealand (and as consequence Australia) underwrites the domestic labour market. While the domestic economy can be characterised as small, open and narrowly based, the relationship with New Zealand adds a dimension that provides Cook Islanders with far greater economic security than that enjoyed by most other Pacific Island economies.

4. **The Cook Islands uses the New Zealand dollar for its currency.** The use of the NZ dollar as its currency means that the Cook Islands do not need a central bank. This limits the capacity to use monetary policy to influence the economy. However the cost of this limitation is more than offset by the benefits derived from avoiding the need to manage foreign reserves, exchange rates and other monetary issues.

5. **In some circumstances using a foreign currency can cause significant economic problems.** The close linkage between the Cook Islands and New Zealand insulate the Cook Islands economy against most of the risk entailed in using a foreign currency. In particular the international terms of trade of both countries follow similar trends. If this was not the case the Cook Islands would have to resort to difficult fiscal measures to adjust to changes in the country's terms of trade.

[9] This analysis was carried out by Chris Lightfoot. The data used in this analysis was supplied by the Cook Islands authorities and information collected independently by the consultants.

C. Debt Sustainability

Appendix Table 8: Debt Sustainability Ratios

Type	Benchmark	2011/12 *Supp. Budget*	2012/13 *Budget*	2013/14 *Estimate*	2014/15 *Estimate*
GDP (Nominal - NZ$m)		$387.5m	$418.1m	$436.3m	$451.6m
Debt Oustanding (NZ$m)		$77.4m	$104.6m	$102.0m	$98.3m
Loan Reserve (NZ$m)		$19.1m	$17.8m	$16.6m	$15.4m
Net Debt (NZ$m)		$58.4m	$86.8m	$85.4m	$82.9m
Debt Servicing (NZ$m)		$3.8m	$4.4m	$5.3m	$5.4m
Prudential Ratios					
Debt Servicing to Total Revenue	5.0%	3.5%	4.0%	4.6%	4.6%
Net Debt to GDP ratio[1]	35.0%	15.1%	20.8%	19.6%	18.4%

[1] Gross outstanding balance less loan repayment reserve

6. **The "Net Debt to GDP" ratio is well within the Fiscal Responsibility Ratio of 35%.** This in turn is less than the indicative debt sustainability ratio of 40% that is used as a benchmark in the IMF DSA model.

7. **The "Debt Servicing to Total Revenue" ratio is only slightly below the FRR 5% threshold and in future years it is expected to exceed that threshold.** The ratio however, is very conservative and is out of line with the "Net Debt to GDP" ratio. It would be reasonable to increase this FRR ratio to 10%. At 10% of revenue the total debt servicing requirement would amount to less than 2% of GDP, this would still be a comfortable level of debt.

8. **All of the Cook Islands public debt is on concessional terms.** The loans are relatively long term and the interest rates are all around 2% per annum. If the Cook Islands raised funds on the open market the cost of servicing the new debt would be substantially higher. This would reduce the level of debt that could be sustained.

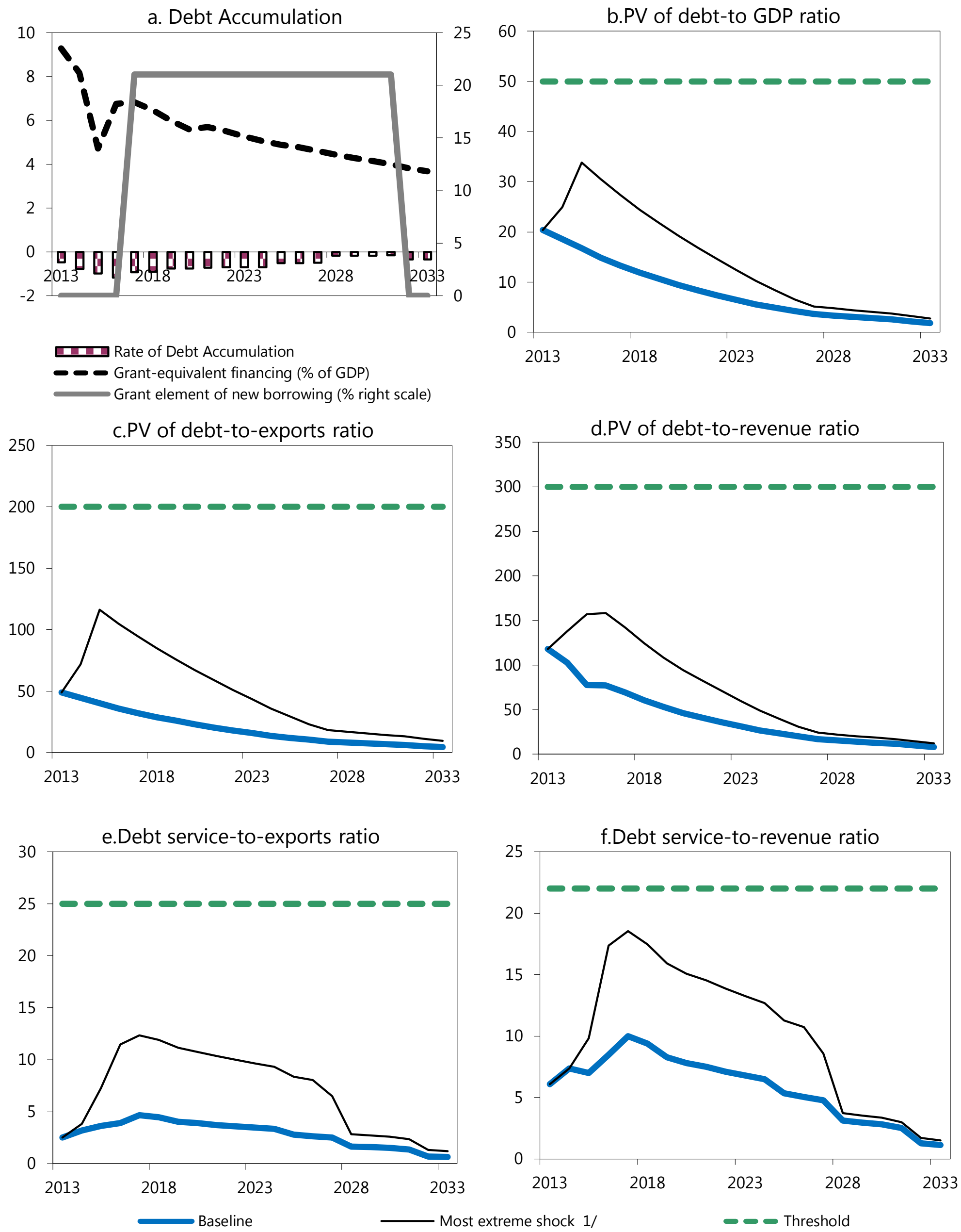
D. IMF Debt Sustainability Model Analysis

9. **The following charts and tables are derived from the IMF DSA model.** The data input into the model was derived from Cook Island official sources and data collected by the consultants.

10. **The base model is denominated in US dollars without any provision for a persistent change in the exchange rate between the US dollar and other currencies.** This is a weakness of the model. It is a particular problem when a substantial proportion of the foreign debt is denominated in a currency other than the US dollar – as in the Cook Islands where a substantial proportion of foreign debt is denominated in Chinese RMB. This issue has been addressed by including an algorithm that allows for a persistent revaluation of the RMB.

11. The following charts and tables are presented for completeness. As discussed above the consultant has reservations as to some of the details shown.

Appendix Figure 1: Indicators of Public External Debt under Alternative Scenario
(2012/13-2032/33[1 & 2])



Sources: Ministry of Finance and Economic Management; consultant estimates and projections; IMF Article IV DSA Template.

[1] The most extreme stress test is the test that yields the highest ratio in 2022/23. In each of the figures the most extreme stress test corresponds to an exports shock.

[2] The above panel of charts does not include the "Historical" scenario that is usually shown in an IMF Article IV analysis. The IMF Article IV DSA Template uses simple moving averages to calculate the "Historical" scenario. Due to the substantial volatility of the USD during 2008/2009 using a simple moving average of previous outcome seriously distorts the results; hence the "Historical" scenario is not shown.

Appendix Figure 2: External Debt Sustainability Framework, Baseline Scenario (2012/13 – 2033/34)

	Actual			Historical [6/]	Standard [6/]	Projections									
				Average	Deviation							2013-2018			2019-203
	2010	2011	2012			2013	2014	2015	2016	2017	2018	Average	2023	2033	Average
External debt (nominal) 1/	**41.2**	**43.7**	**42.9**			**47.8**	**45.7**	**43.7**	**41.7**	**39.7**	**37.5**		**28.8**	**20.9**	
of which: public and publicly guaranteed (PPG)	21.2	23.7	22.9			27.8	25.7	23.7	21.7	19.7	17.5		8.8	0.9	
Change in external debt	3.5	2.4	-0.8			4.9	-2.1	-2.0	-2.0	-2.0	-2.2		-1.5	-0.2	
Identified net debt-creating flows	-77.2	-71.7	-72.5			-70.4	-66.3	-65.9	-65.8	-65.3	-64.6		-62.6	-59.4	
Non-interest current account deficit	**-75.5**	**-66.4**	**-72.8**	**-77.2**	**16.0**	**-68.1**	**-67.6**	**-67.6**	**-67.2**	**-66.7**	**-65.9**		**-64.1**	**-61.0**	-63.2
Deficit in balance of goods and services	-12.7	-8.0	-16.5			-15.7	-15.9	-16.2	-16.5	-16.6	-16.7		-17.8	-19.6	
Exports	43.8	36.9	44.4			41.6	41.5	41.6	41.6	41.3	41.0		40.8	40.2	
Imports	31.1	28.9	27.9			25.9	25.6	25.4	25.1	24.7	24.3		23.0	20.6	
Net current transfers (negative = inflow)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
of which: official	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other current account flows (negative = net inflow)	-62.8	-58.4	-56.3			-52.4	-51.7	-51.3	-50.8	-50.1	-49.2		-46.3	-41.3	
Net FDI (negative = inflow)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**	**0.0**	0.0
Endogenous debt dynamics 2/	**-1.7**	**-5.3**	**0.2**			**-2.4**	**1.3**	**1.6**	**1.5**	**1.4**	**1.3**		**1.5**	**1.5**	
Contribution from nominal interest rate	2.2	2.2	2.2			2.4	2.4	2.5	2.4	2.4	2.4		2.1	2.0	
Contribution from real GDP growth	-2.7	-6.3	-0.8			-4.7	-1.1	-0.8	-1.0	-1.1	-1.1		-0.7	-0.5	
Contribution from price and exchange rate changes	-1.2	-1.3	-1.1			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**80.7**	**74.1**	**71.8**			**75.3**	**64.2**	**63.9**	**63.7**	**63.3**	**62.4**		**61.1**	**59.2**	
of which: exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	43.5			40.4	38.5	36.7	34.8	33.3	31.9		26.5	21.8	
In percent of exports	...	...	98.1			97.0	92.8	88.2	83.8	80.5	77.6		64.9	54.2	
PV of PPG external debt	**...**	**...**	**23.5**			**20.4**	**18.5**	**16.7**	**14.8**	**13.3**	**11.9**		**6.5**	**1.8**	
In percent of exports	**...**	**...**	**53.0**			**49.0**	**44.6**	**40.2**	**35.7**	**32.2**	**28.9**		**15.8**	**4.5**	
In percent of government revenues	**...**	**...**	**125.2**			**117.9**	**102.7**	**77.7**	**77.1**	**69.1**	**60.5**		**31.0**	**8.1**	
Debt service-to-exports ratio (in percent)	**7.0**	**8.4**	**7.3**			**7.3**	**8.0**	**8.4**	**8.7**	**9.5**	**9.4**		**8.4**	**5.6**	
PPG debt service-to-exports ratio (in percent)	**2.5**	**3.0**	**2.8**			**2.5**	**3.2**	**3.6**	**3.9**	**4.6**	**4.5**		**3.5**	**0.6**	
PPG debt service-to-revenue ratio (in percent)	**4.6**	**5.7**	**6.6**			**6.1**	**7.4**	**7.0**	**8.5**	**10.0**	**9.4**		**6.8**	**1.1**	
Total gross financing need (Millions of U.S. dollars)	-175.3	-187.6	-215.5			-222.3	-228.1	-234.7	-241.5	-247.8	-255.5		-298.9	-413.2	
Non-interest current account deficit that stabilizes debt ratio	-79.0	-68.8	-72.0			-73.0	-65.5	-65.6	-65.2	-64.7	-63.7		-62.6	-60.7	
Key macroeconomic assumptions															
Real GDP growth (in percent)	7.9	18.6	2.0	8.8	14.3	12.2	2.4	1.9	2.3	2.6	2.9	4.0	2.3	2.3	2.3
GDP deflator in US dollar terms (change in percent)	3.2	3.2	2.6	6.5	16.9	-1.7	1.3	1.3	1.3	1.3	1.3	0.8	1.3	1.3	1.3
Effective interest rate (percent) 5/	6.4	6.6	5.2	5.3	1.8	6.2	5.3	5.5	5.8	6.1	6.2	5.8	7.3	9.8	8.1
Growth of exports of G&S (US dollar terms, in percent)	38.0	3.0	25.8	30.7	36.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Growth of imports of G&S (US dollar terms, in percent)	-3.7	13.4	1.0	9.3	25.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	0.0	0.0	0.0	0.0	21.0	21.0	7.0	21.0	0.0	18.2
Government revenues (excluding grants, in percent of GDP)	23.7	19.2	18.8			17.3	18.0	21.5	19.2	19.2	19.6		20.8	22.3	21.3
Aid flows (in Millions of US dollars) 7/	14.8	22.9	28.8			31.8	29.0	17.3	25.7	26.7	26.3		25.6	25.9	
of which: Grants	14.8	22.9	28.8			31.8	29.0	17.3	25.7	26.7	26.3		25.6	25.9	
of which: Concessional loans	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			9.3	8.2	4.7	6.8	6.8	6.5		5.3	3.7	4.8
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			100.0	100.0	100.0	100.0	96.3	96.2		95.8	100.0	96.2
Memorandum items:															
Nominal GDP (Millions of US dollars)	242.1	296.2	310.0			341.8	354.8	366.3	379.7	395.0	411.9		492.4	703.8	
Nominal dollar GDP growth	11.4	22.3	4.6			10.3	3.8	3.3	3.6	4.0	4.3	4.9	3.6	3.6	3.6
PV of PPG external debt (in Millions of US dollars)			71.2			69.7	67.1	63.6	59.3	55.8	52.3		36.4	16.7	
(PVt-PVt-1)/GDPt-1 (in percent)						-0.5	-0.8	-1.0	-1.2	-0.9	-0.9	-0.9	-0.7	-0.3	-0.5
Gross workers' remittances (Millions of US dollars)	-4.1	-4.7	-5.3			-6.2	-6.7	-7.0	-7.3	-7.6	-7.9		-9.4	-13.5	
PV of PPG external debt (in percent of GDP + remittances)	...	...	23.9			20.8	18.9	17.0	15.1	13.6	12.1		6.6	1.8	
PV of PPG external debt (in percent of exports + remittances)	...	...	55.1			51.2	46.7	42.1	37.4	33.7	30.3		16.6	4.7	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.9			2.6	3.4	3.8	4.1	4.9	4.7		3.6	0.7	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

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

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

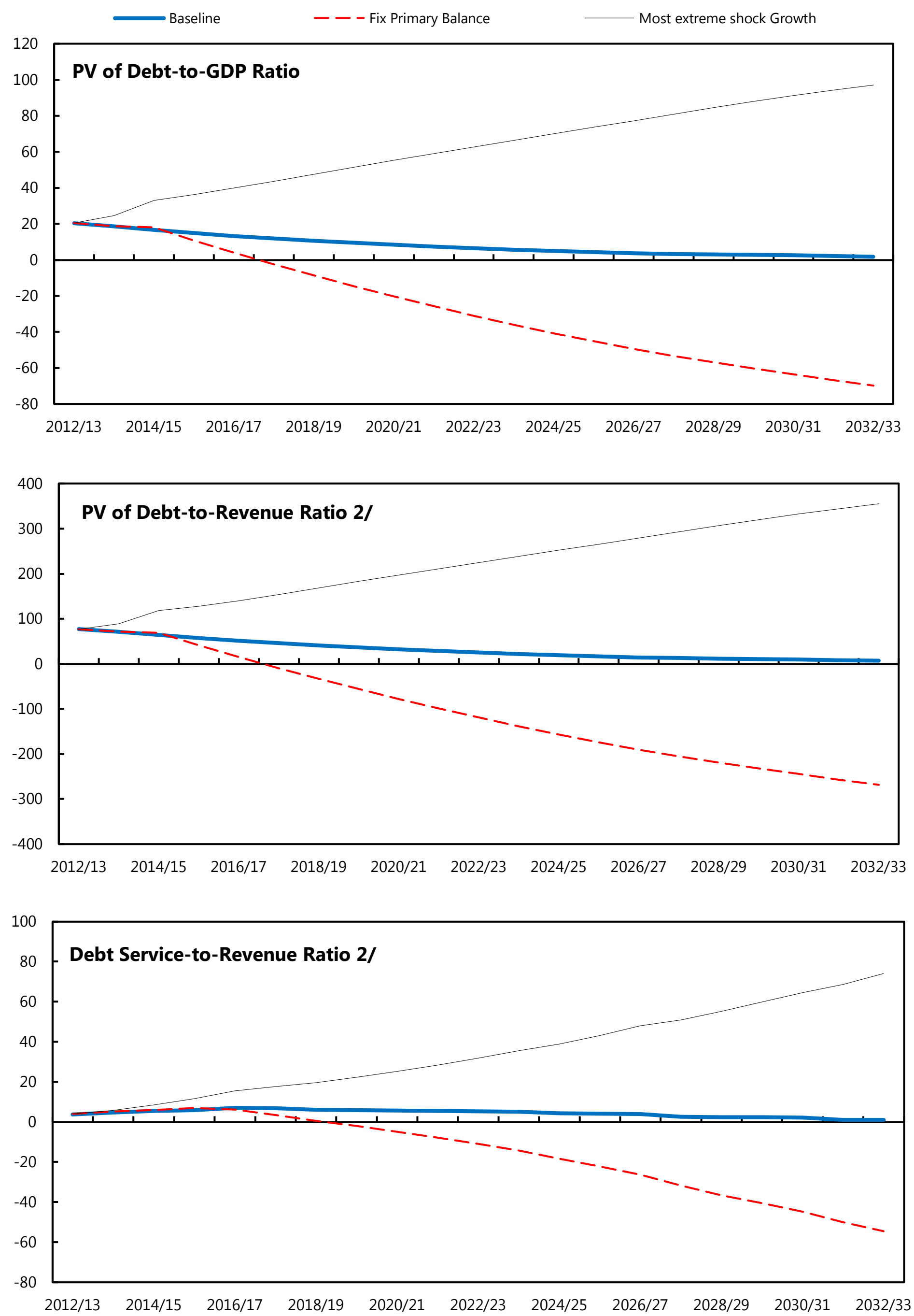
5/ Current-year interest payments divided by previous period debt stock.

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

7/ Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Appendix Figure 3: Indicators of Public Debt under Alternative Scenario
(2012/13 - 2032/33[1, 2 & 3])



Sources: Ministry of Finance and Economic Management; and consultant estimates and projections.

[1] The most extreme stress test is the test that yields the highest ratio in 2022/23. In each of the figures the most extreme stress test corresponds to an exports shock.

[3] Revenues include Official Development Assistance

[2] The above panel of charts does not include the "Historical" scenario that is usually shown in an IMF Article IV analysis. The IMF Article IV DSA Template uses simple moving averages to calculate the "Historical" scenario. Due to the substantial volatility of the USD during 2008/2009 using a simple moving average of previous outcome seriously distorts the results; hence the “Historical” scenario is not shown.

Appendix Table 9: Public Sector Debt Sustainability Framework, Baseline Scenario
(2009/10 - 2033/34)

	Actual			Average 5/	Standard Deviation 5/	Estimate	Projections								
	2009/10	2010/11	2011/12			2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2022/23	2023/24	2033/34	0
Public sector debt 1/	21.2	23.7	22.9			27.8	25.7	23.7	21.7	19.7	17.5		8.8	0.9	
of which: foreign-currency denominated	21.2	23.7	22.9			27.8	25.7	23.7	21.7	19.7	17.5		8.8	0.9	
Change in public sector debt	3.5	2.4	-0.8			4.9	-2.1	-2.0	-2.0	-2.0	-2.2		-1.5	-0.2	
Identified debt-creating flows	-0.9	-6.0	2.1			3.7	4.4	4.0	11.3	11.4	11.5		11.9	12.3	
Primary deficit	-0.4	-0.8	0.5	-13.3	14.0	0.3	-0.1	-0.8	6.4	6.4	6.4	3.1	6.6	6.7	6.6
Revenue and grants	29.9	27.0	28.1			26.6	26.2	26.2	26.0	26.0	26.0		26.0	26.0	
of which: grants	6.1	7.7	9.3			9.3	8.2	4.7	6.8	6.8	6.4		5.2	3.7	
Primary (noninterest) expenditure	29.5	26.1	28.5			26.9	26.2	25.4	32.4	32.4	32.4		32.6	32.7	
Automatic debt dynamics	-0.5	-5.2	1.7			-2.2	-1.1	-0.8	-0.7	-0.6	-0.5		-0.3	0.0	
Contribution from interest rate/growth differential	-1.6	-3.7	-0.8			-1.7	-0.6	-0.3	-0.4	-0.4	-0.4		-0.1	0.0	
of which: contribution from average real interest rate	-0.3	-0.3	-0.3			0.7	0.1	0.1	0.2	0.2	0.2		0.1	0.0	
of which: contribution from real GDP growth	-1.3	-3.3	-0.5			-2.5	-0.7	-0.5	-0.5	-0.6	-0.6		-0.2	0.0	
Contribution from real exchange rate depreciation	1.1	-1.6	2.5			-0.5	-0.5	-0.4	-0.3	-0.2	-0.1		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			5.7	5.6	5.6	5.6	5.6	5.6		5.6	5.6	
Privatization receipts (negative)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			5.7	5.6	5.6	5.6	5.6	5.6		5.6	5.6	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	4.4	8.5	-2.9			1.2	-6.5	-6.0	-13.3	-13.4	-13.7		-13.4	-12.5	
Other Sustainability Indicators															
PV of public sector debt	...	0.0	23.5			20.4	18.5	16.7	14.8	13.3	11.9		6.5	1.8	
of which: foreign-currency denominated	...	0.0	23.5			20.4	18.5	16.7	14.8	13.3	11.9		6.5	1.8	
of which: external	...	...	23.5			20.4	18.5	16.7	14.8	13.3	11.9		6.5	1.8	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	0.7	0.2	1.6			1.3	1.2	0.6	7.9	8.2	8.2		7.9	7.0	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	0.0	83.8			76.7	70.7	63.7	57.1	51.2	45.6		24.8	6.9	
PV of public sector debt-to-revenue ratio (in percent)	...	0.0	125.2			117.9	102.7	77.7	77.1	69.1	60.5		31.0	8.1	
of which: external 3/	...	...	125.2			117.9	102.7	77.7	77.1	69.1	60.5		31.0	8.1	
Debt service-to-revenue and grants ratio (in percent) 4/	3.4	3.8	4.2			3.7	4.8	5.4	5.9	7.0	6.8		5.3	0.9	
Debt service-to-revenue ratio (in percent) 4/	4.3	5.4	6.3			5.7	6.9	6.6	8.0	9.5	9.0		6.6	1.1	
Primary deficit that stabilizes the debt-to-GDP ratio	-3.9	-3.3	1.2			-4.6	2.0	1.2	8.4	8.4	8.6		8.1	7.0	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	7.9	18.6	2.0	8.8	14.3	12.2	2.4	1.9	2.3	2.6	2.9	4.0	2.3	2.3	2.3
Average nominal interest rate on forex debt (in percent)	1.4	1.3	1.1	1.1	0.3	1.9	1.6	1.9	2.1	2.3	2.2	2.0	2.2	2.6	2.2
Average real interest rate on domestic debt (in percent)	...	...	...	#DIV/0! #	#DIV/0!	...	...	...	...	...	...	#DIV/0!	...	...	#DIV/0!
Real exchange rate depreciation (in percent, + indicates depreciation)	6.6	-8.9	10.8	-0.6	12.2	-2.3	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	-10.0	-4.8	-2.9	2.4	22.1	-3.8	1.9	1.6	1.2	0.8	0.6	0.4	1.2	1.2	1.2
Growth of real primary spending (deflated by GDP deflator, in percent)	0.2	0.1	0.1	-22.4	67.3	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	0.0	0.0	0.0	0.0	21.0	21.0	7.0	21.0	0.0	...

Sources: Country authorities; and staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

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

3/ Revenues excluding grants.

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

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

Appendix Table 10: Sensitivity Analysis of Key Indicators of Public Debt
(2012/13 – 2033/34)

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2022/23	2032/33
PV of Debt-to-GDP Ratio								
Baseline	20	19	17	15	13	12	6	2
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	20	7	-6	-24	-41	-58	-128	-218
A2. Primary balance is unchanged from 2012/13	20	19	18	11	4	-2	-31	-70
A3. Permanently lower GDP growth 1/	20	20	20	20	21	22	43	154
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2013/14-2014/15	20	24	31	34	37	40	56	85
B2. Primary balance is at historical average minus one standard deviations in 2013/14-2014/15	20	19	19	17	15	14	8	3
B3. Combination of B1-B2 using one half standard deviation shocks	20	14	9	9	10	11	16	30
B4. One-time 30 percent real depreciation in 2013/14	20	27	25	22	21	19	13	7
B5. 10 percent of GDP increase in other debt-creating flows in 2013/14	20	27	25	23	21	19	13	6
PV of Debt-to-Revenue Ratio 2/								
Baseline	77	71	64	57	51	46	25	7
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	77	26	-21	-92	-159	-223	-500	-855
A2. Primary balance is unchanged from 2012/13	77	72	69	41	15	-10	-119	-269
A3. Permanently lower GDP growth 1/	77	74	74	74	77	83	154	526
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2013/14-2014/15	77	87	112	119	130	141	201	314
B2. Primary balance is at historical average minus one standard deviations in 2013/14-2014/15	77	73	71	64	58	52	30	10
B3. Combination of B1-B2 using one half standard deviation shocks	77	54	32	34	37	40	62	113
B4. One-time 30 percent real depreciation in 2013/14	77	102	94	86	79	73	51	28
B5. 10 percent of GDP increase in other debt-creating flows in 2013/14	77	104	96	88	81	75	49	22
Debt Service-to-Revenue Ratio 2/								
Baseline	4	5	5	6	7	7	5	1
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	4	5	1	-3	-8	-16	-60	-177
A2. Primary balance is unchanged from 2012/13	4	5	6	7	6	3	-11	-55
A3. Permanently lower GDP growth 1/	4	5	6	7	10	10	21	94
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2013/14-2014/15	4	6	8	11	15	16	29	65
B2. Primary balance is at historical average minus one standard deviations in 2013/14-2014/15	4	5	6	7	8	8	7	3
B3. Combination of B1-B2 using one half standard deviation shocks	4	5	4	3	5	6	8	21
B4. One-time 30 percent real depreciation in 2013/14	4	6	8	9	11	10	9	3
B5. 10 percent of GDP increase in other debt-creating flows in 2013/14	4	5	9	10	11	11	10	6

Sources: Ministry of Finance and Economic Management; and consultant estimates and projections.

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

2/ Revenues are defined inclusive of grants.