

### **Tonga: 2010 Article IV Consultation—Staff Report, Staff Supplement, and Public Information Notice on the Executive Board Discussion**

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2010 Article IV consultation with Tonga, the following documents have been released and are included in this package:

- The staff report for the 2010 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on March 30, 2010, with the officials of Tonga on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on April 21, 2010. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A supplement on the joint IMF/World Bank debt sustainability analysis.
- A Public Information Notice.

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**International Monetary Fund  
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INTERNATIONAL MONETARY FUND

TONGA

**Staff Report for the 2010 Article IV Consultation**

Prepared by the Staff Representatives for the 2010 Article IV Consultation with Tonga

Approved by Nigel Chalk and Tom Dorsey

April 21, 2010

**Mission.** A staff team consisting of P. N'Diaye (Head), N. Porter (APD), and H. Lin (FIN), visited Nuku'alofa from March 17–30. Ms. Vongpradhip and Mr. Phan (both OED) and Messrs. Faletau, Liu, and Tora (Asian Development Bank) joined the mission.

**Counterparts.** The mission met with Minister of Finance Matoto, National Reserve Bank of Tonga Governor Mafi, other senior officials, and private sector representatives.

**Previous Fund recommendations.** The staff and the authorities have shared comprehensive views in the past about policy priorities. During the 2009 consultation, Executive Directors have stressed the importance of fiscal consolidation and supportive monetary policy. But the authorities have followed more moderate steps, primarily owing to capacity constraints. Shortcomings were mainly in the area of fiscal policy, where staff recommended improving revenue enforcement, especially at customs, and cautioned against taking on a second loan from China EXIM bank.

**Outreach.** The mission held a press conference, and met with civil society representatives, students at the University of the South Pacific (Tonga), and donor representatives.

**Recent developments.** Tonga has been hit hard by the global crisis with declines in tourism, remittances, and exports. At the same time, in large part due to worsening credit quality, banks have cut back on lending. Reserves are at comfortable levels despite a widening current account deficit. Inflation has eased.

**Focus.** Discussions centered on the near-term policy stance, the scope for improving policy frameworks to bolster growth, and incentives for private sector development.

**Exchange rate.** Basket peg with monthly adjustment band of up to 5 percent.

**Exchange system.** Tonga accepted the obligations of Article VIII, Sections 2, 3, and 4. The authorities have removed the exchange restriction in the form of a tax certification requirement applied to various current international transactions.

**Statistics.** Data quality, coverage, and timeliness are hampered by several deficiencies, including capacity constraints, which complicate effective surveillance.

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## EXECUTIVE SUMMARY

Tonga has been hit hard by the global crisis with declines in tourism, remittances, and exports. At the same time, in large part due to worsening credit quality, bank balance sheets have weakened. This, in turn, has restrained the availability of credit despite the central bank's efforts to stimulate demand. Compounding these downward pressures, part of the Tongan archipelago was hit by a tsunami on September 29, 2009 causing loss of life and significant material damage.

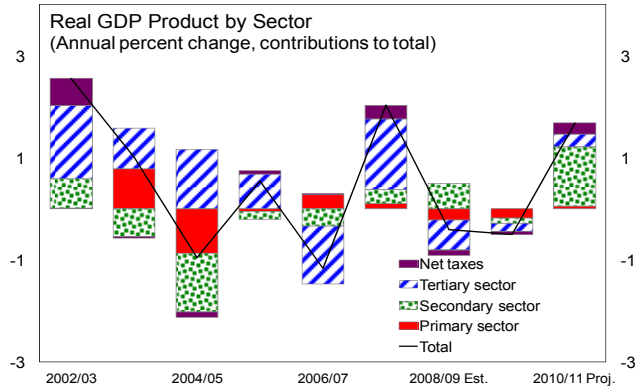
Activity is expected to bottom out in the coming months as capital spending plans are implemented and financial conditions ease. Going forward, Tonga's high debt and the apparent ineffectiveness of the monetary transmission mechanism constrain the authorities' ability to support growth. Discussions focused on two broad areas: the short-term policy stance and how best to support longer-term growth and safeguard external stability. Key policy advice included:

- Move the near-term fiscal stance toward a more neutral position.
- At the same time, establish a comprehensive medium-term fiscal strategy aimed at achieving primary surpluses of around 1 percent of GDP, and avoid new borrowing. This would put the fiscal position on a more sustainable path, reduce Tonga's vulnerability, and lay the foundations for higher growth.
- Once the recovery in trading partners is firmly established, perhaps by later this year, begin withdrawing monetary stimulus. However, if inflation risks or downward pressures on reserves materialize, monetary stimulus may need to be withdrawn on a more accelerated timetable. The authorities regarded the risks to reserves and likelihood of substantial inflation in coming months as relatively small and vowed to maintain their current monetary stance.
- Use the full range of monetary policy instruments at the NRBT's disposal and the flexibility afforded by the existing exchange rate arrangement to contain inflation and maintain an adequate level of international reserves. The authorities indicated they would favor higher reserve requirements and direct limits on credit growth, if the monetary stimulus needed to be withdrawn.
- Improve fiscal and debt management, revenue administration, and banking supervision.
- Strengthen the institutional framework for secured lending to enhance access to finance by households and small enterprises.

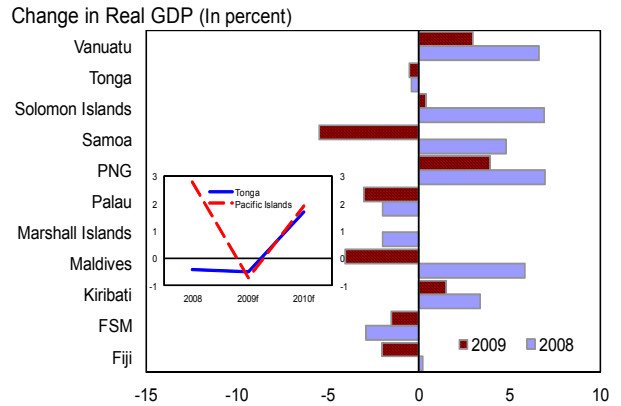
Figure 1. Tonga: Economic Developments

The past 18 months has been difficult for Tonga, but the economy is on a path to recovery, albeit slowly.

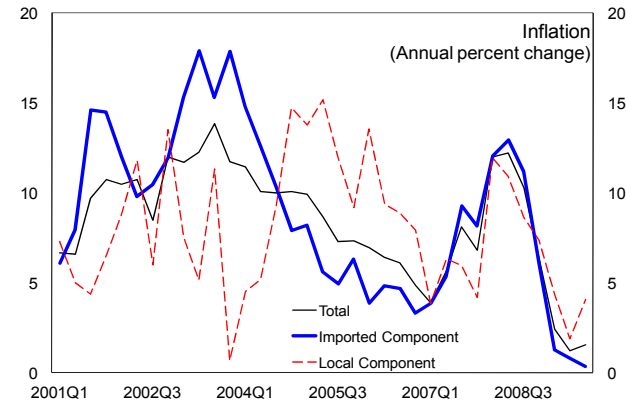
Growth is projected to recover, buoyed by increased construction activity, tourism, and remittances,...



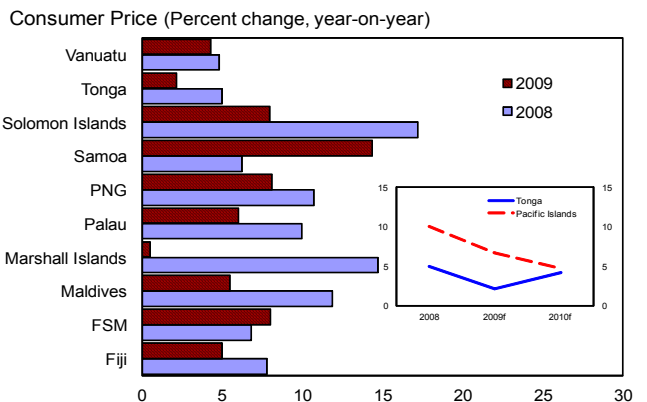
...bringing Tonga's near-term economic performance in line with regional comparators.



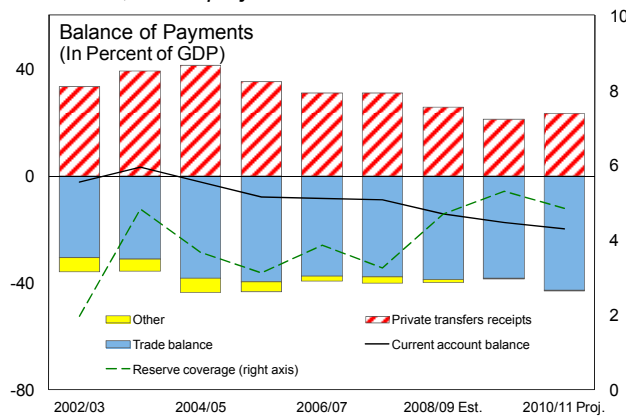
Lower fuel and other commodity prices as well as weak domestic demand have lowered inflation ...



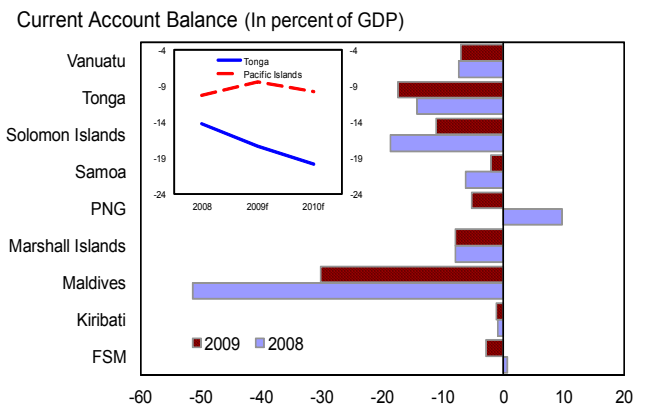
...to below the average of other Pacific islands.



The current account deficit widened owing to lower remittances, and is projected to continue to deteriorate.



The current account has worsened more than most Pacific islands.



Sources: LISC database; and Fund staff estimates.

## I. ECONOMIC DEVELOPMENTS

1. **Activity.** GDP contracted in FY2008/09 (year ending in June) as the global crisis lowered both tourist arrivals and remittances inflows (Box I), and banks contracted lending. In addition, part of the Tongan archipelago was hit by a tsunami on September 29, 2009 causing loss of life and significant material damage. As a result, Tonga's growth underperformed that of many Pacific islands.

	2006/07	2007/08	2008/09
Growth (percent)	-1.2	2.0	-0.4
Inflation (percent) <sup>1</sup>	5.6	12.2	1.2
Current Account (percent of GDP)	-8.4	-9.0	-14.3
Gross reserves (US\$ millions)	47.1	48.2	67.7
(in months of imports)	3.9	3.2	4.7
Real effective exchange rate (+ = appreciation)	-0.1	2.3	5.5

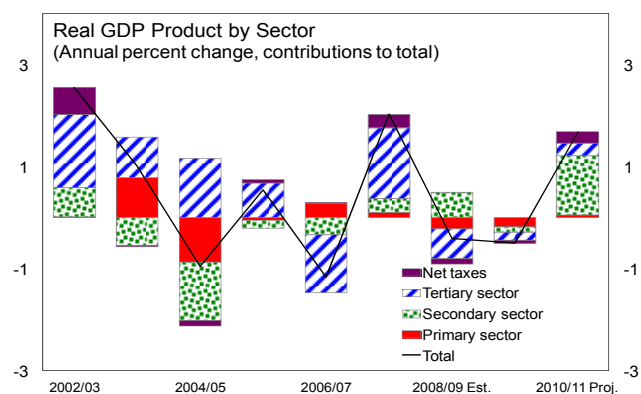
2. **Inflation.** Consumer price inflation fell to 1½ percent year-on-year in January 2010, reflecting a combination of lower global fuel and commodity prices.

3. **External position.** The current account deficit has widened somewhat due to lower remittances and exports. Reserves have risen this year as a result of the recent SDR allocation and the disbursement of donor grants and loans to reconstruct the Central Business District.

<sup>1</sup> End of fiscal year

## II. OUTLOOK AND RISKS

4. **Outlook.** Staff expects activity to fall in FY2009/10 by ½ percent given delays in the implementation of capital projects and the low domestic value added content of spending linked to the China reconstruction loan. However, the economy already appears to be bottoming out and should grow faster in the next fiscal year, driven by increased construction activity and the global recovery. Inflation will rise in the coming months—reflecting stronger domestic demand and a recent increase in electricity prices—but still end FY2009/10 at around 4 percent.



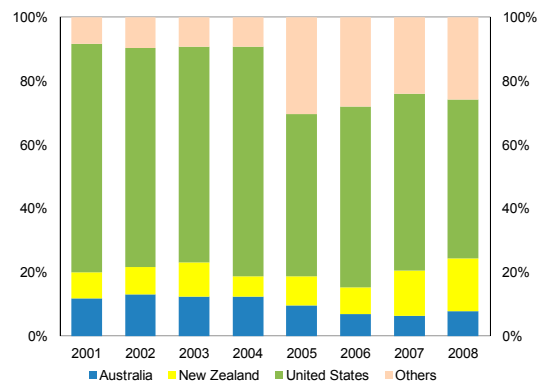
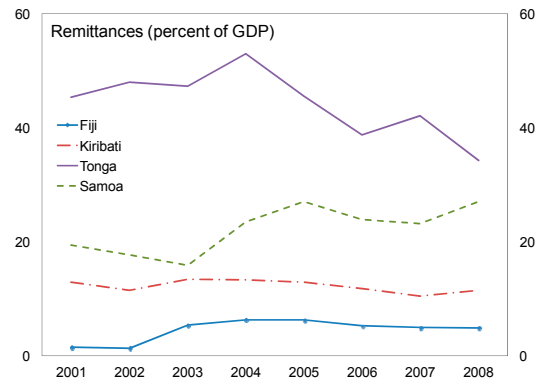
5. **Medium-term prospects.** Public infrastructure spending should provide a temporary boost to activity in FY2010/11 but once those projects wind down, it will be challenging to achieve growth even in the 1–2 percent range. Prospects are constrained by Tonga's geographic isolation, its narrow export base, the high cost of labor, an inability to retain skilled labor, and impediments to private sector activity.

### Box I. Determinants of Remittance Flows to Tonga

This box estimates the determinants of remittances in Tonga. Remittances are Tonga's main source of foreign exchange, accounting for over 67 percent of imports on average, while exports account for 31 percent. Tonga is also the leading recipient of remittances relative to GDP among Pacific island countries. Remittances are mostly used to finance consumption and originate mainly from the United States, New Zealand, and Australia, where Tongans reportedly work in the construction sector and in agricultural establishments. In 2009, 17 percent of remittances were sent to nonprofit organizations (mostly churches) and were used for church construction and maintenance.

Remittances in Tonga are also a much more reliable source of foreign exchange than exports (with a volatility that is 40 percent lower than that of exports). The smaller volatility of remittances has traditionally been explained by the strong altruistic relationships that Tongans living abroad maintain with their families in Tonga, like in many other Pacific island countries.

Staff analysis suggests that macroeconomic conditions in remitting countries and exchange rate fluctuations also influence remittances. A panel regression of growth in remittances on lagged growth in remittances, the change in the real effective exchange rate, the unemployment rate and real GDP growth in remitting countries, and the interest rate differential between Tonga and remitting countries show that remittance growth falls with an appreciating currency, but increases with higher GDP growth in remitting countries and the interest rate differential between Tonga and remitting countries.



Regressions for Changes in Remittance Flows: 2000Q2-2009Q1 1/

Change in Remittance	One-period Lagged Change in Remittances	Change in Real Exchange Rate 2/	One-period Lagged Real GDP Growth in Remitting Countries	One-period Lagged Unemployment Rate in Remitting Countries	One-period Lagged Interest rate differential
-0.295***	-1.486**	0.097***	-0.038	0.025***	
(0.038)	(0.608)	(0.009)	(0.034)	(0.007)	

1/ \*, \*\*, \*\*\* denote P-value less than 0.1, 0.05, and 0.01, respectively. Standard Errors are shown in parenthesis.

2/ An increase in the real exchange rate denotes a real appreciation of Pa'anga.

The effects of real GDP growth in remitting countries, as well as the exchange rate, capture the capacity of Tongans living abroad to send money to Tonga. In particular, the estimated exchange rate impact indicates that Tongans abroad do not compensate for changes in exchange rates (and possible higher transaction costs). The interest rate differential between Tonga and remitting countries may suggest that remittances help compensate for higher financing costs in Tonga (which effectively weakens the transmission mechanism of monetary policy) or that nonprofit organizations do take into account the level of interest rates when sending funds for reconstruction purposes.

6. **Risks.** In the near term, the strength of the global recovery is by no means assured and there are multiple risks that could weaken prospects in both Europe and the United States. If global growth falters, there would be a direct toll on remittances, tourism, and exports which, in turn, will feed through to weaken domestic activity and put pressure on the balance of payments. A further rise in world commodity and food prices would also hit Tonga hard, feeding through to inflation, growth, and the current account deficit. Tonga's high public debt now poses a major risk to economic prospects. Mitigating these risks will necessitate continued progress on structural improvements to raise growth potential, continued provision of grants from donors, as well as steady fiscal consolidation.

7. **Politics.** Elections are scheduled for November 2010, which may slow the pace of reform and lead to increased fiscal spending. Following King Siaosi Tupou V decision to renounce his political powers, Tonga's lawmakers will have to decide in the next few months on a new electoral system, as well as on the composition of a new legislative assembly.

### III. CALIBRATING MACROECONOMIC POLICIES

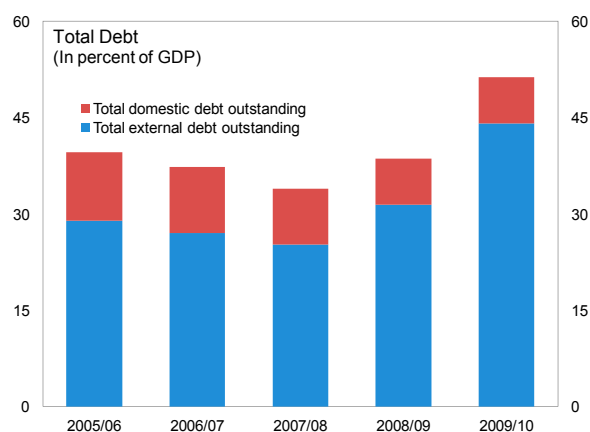
*Macroeconomic policies in the coming years will need to give priority to mitigating the risks to Tonga's external and fiscal sustainability and laying the foundations for higher growth. This will require improved fiscal management to support a steady fiscal consolidation and continued progress to raise growth potential.*

#### A. Fiscal Policy

##### *Background*

8. **In response to the global crisis, the government loosened fiscal policy to support the economy.** In FY2009/10, the deficit is expected to rise to 4 percent of GDP (from 3¼ percent of GDP in the previous fiscal year). This deterioration reflects primarily a 10 percent hike in civil servant wages, higher infrastructure spending, and weak revenues (which fell short of budget forecasts by about 6 percent of GDP, mainly due to lower trade and consumption taxes). As a result, the authorities have introduced an end-of-year cap on spending across line ministries and have requested additional budget-support grants from donors. Should the requested funds be allocated this fiscal year, the estimated fiscal deficit would be around 2½ percent of GDP.

9. **Both external and public debt over the past year have increased.** The marked increase in Tonga's indebtedness primarily reflects two renminbi loans from China's EXIM bank with a face value totaling over





30 percent of GDP.<sup>1</sup> This puts Tonga into the range of “high risk of debt distress” not least because the government bears all the credit and currency risk associated with on-lending of these loans to private parties. These higher debt levels leave the economy more vulnerable to shocks and limit the fiscal space for future spending on social and developmental priorities as interest costs are borne by the budget. As such, further borrowing by the government, even on concessional terms, should be avoided.

### *Policy Issues*

10. **A steady path of fiscal adjustment will be imperative.** In the upcoming budget the staff advised limiting growth in total employee compensation to below the level of CPI inflation, to carefully prioritize current spending, and to improve tax administration. This, combined with the pick-up in economic activity, continued grant support from donors, and a strengthening of revenue administration, should limit the deficit to around 5 percent of GDP. The authorities agreed a deficit of that magnitude would be consistent with their goals of providing some support to activity while ensuring fiscal sustainability. They also indicated there could be some room to boost revenues by rolling back some of the recent reductions in taxes.<sup>2</sup> Over the medium term, a primary surplus target of around 1 percent of GDP should be achievable and would place the fiscal position on a more sustainable path. However, this will require progress on improving revenue administration and expenditure control, better prioritizing of expenditures, and limiting new borrowing. Even with these efforts, though, the fiscal financing situation will be difficult and will require continued grant support from donors of the order of 3½ percent of GDP per year. Should grants be lower than expected, there will be a need for reducing associated current and capital spending for projects and possibly re-allocating some of the spending toward those projects deemed of higher priority.

11. **Improving revenue administration will be an essential ingredient of fiscal consolidation.** Significant progress has been made including issuing unique tax identification number to corporate tax payers, introducing self-assessment for personal and corporate income tax, and automating customs processing. Staff also argued for increasing the resources provided to the tax and customs administration in order to strengthen both auditing and tax collection efforts. The authorities emphasized the importance of the new customs management system and efforts to improve arrears collection but recognized that still more effort was needed to strengthen compliance.

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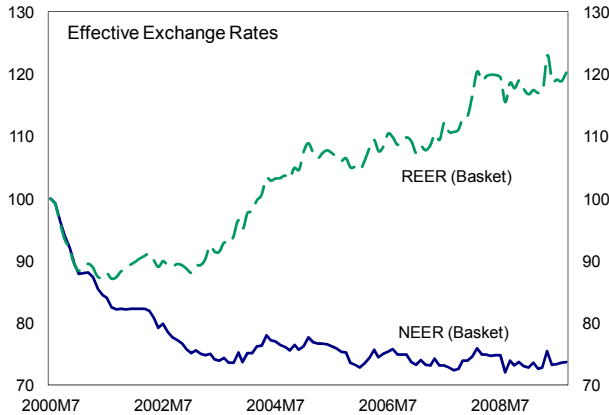
<sup>1</sup> The loan commitments were signed in November 2007 (for reconstruction of the central business district) and February 2009 (for roads), and bear a 2 percent interest rate, 5-year grace period, and a 20-year maturity.

<sup>2</sup> Ad-valorem tariffs of vehicles, fuel, tobacco, and alcohol were converted into specific excises as part of the 2008 tax reform. Duty bands were lowered in line with WTO commitments and capital goods were exempted from trade tariffs. The corporate tax rate was also reduced to 25 percent, down from 35 percent.

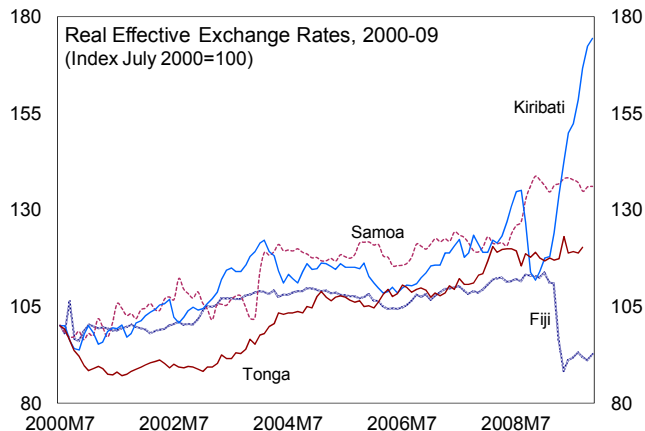
Figure 2. Tonga: Exchange Rate and Fiscal Policy Developments

The exchange rate has continued to appreciate in real effective terms, while the fiscal stance has loosened.

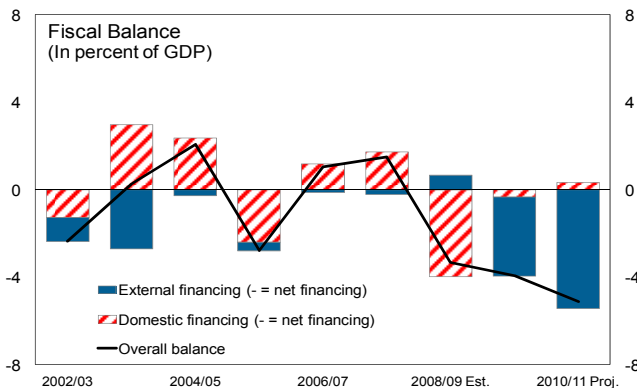
The nominal exchange rate has remained broadly stable against the basket of currencies that it is pegged to...



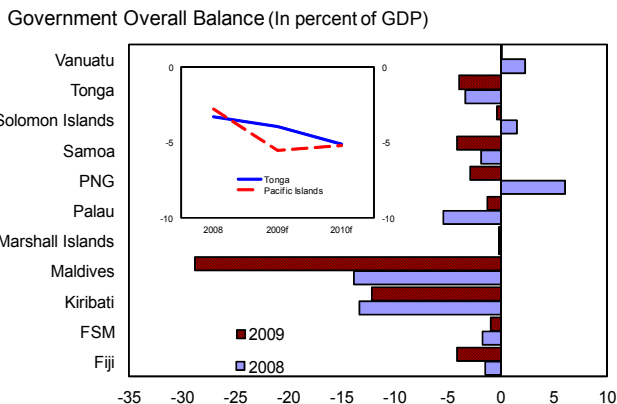
...which helped limit the post-crisis real appreciation.



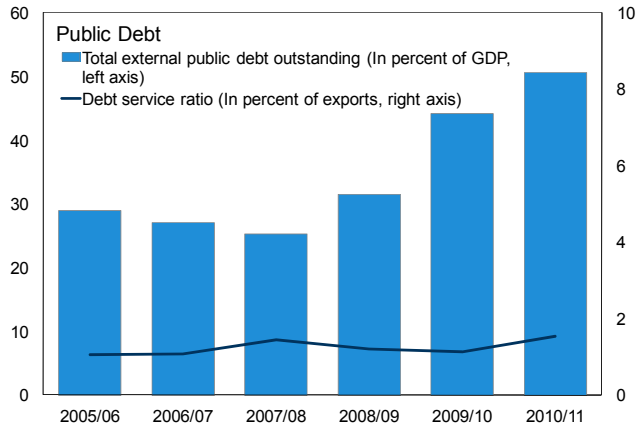
The fiscal balance is expected to deteriorate in the near term as the reconstruction of the Central Business District and other construction projects proceed ...



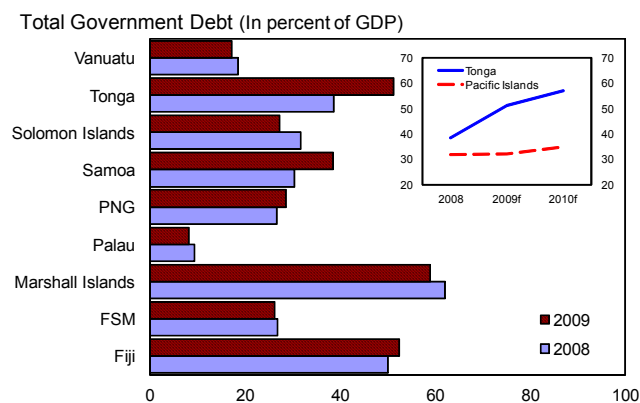
...but the fiscal position is expected to be in line with that of many Pacific islands.



This higher fiscal deficit is adding to Tonga's already high public debt...



...which makes the economy increasingly vulnerable.



Sources: CEIC Data Company Ltd.; and Fund staff estimates.

12. **Fiscal management and medium-term budgeting also need to be strengthened.** At present, fiscal decision-making is hampered by limited economic and policy analysis and an inadequate budget reporting system. There is a need to adopt a medium-term framework anchored by a path for the fiscal deficit that will achieve sustainable debt levels in the outer years. At the same time, there is scope to improve reporting by line ministries and strengthen communication between different government agencies. Such an institutional structure should integrate the annual budget, spending plans of line ministries, and the medium-term development objectives laid out in the government's National Strategic Planning Framework (NSPF) (Box II). In addition, fiscal control needs to be improved through more frequent monitoring of expenditure and revenue and better use of the electronic monitoring systems. Such efforts will help better align medium-term fiscal policies with government objectives, improve the prioritization of spending, increase fiscal discipline, and provide an anchor for expectations. The authorities stressed their commitment to these reforms over the next two years supported by technical assistance from the Asian Development Bank (ADB) and Pacific Financial Technical Assistance Centre (PFTAC).

13. **Given the increasing credit and currency risks, staff also recommended establishing a comprehensive debt management strategy to limit vulnerabilities.** In addition, care will be needed in selecting private sector construction projects that will receive on-lent funds from the government in order to limit the credit risk borne by the public balance sheet. The authorities recognized the risks that a build-up in foreign-currency debt poses and have requested IMF technical assistance to strengthen debt management capacity.

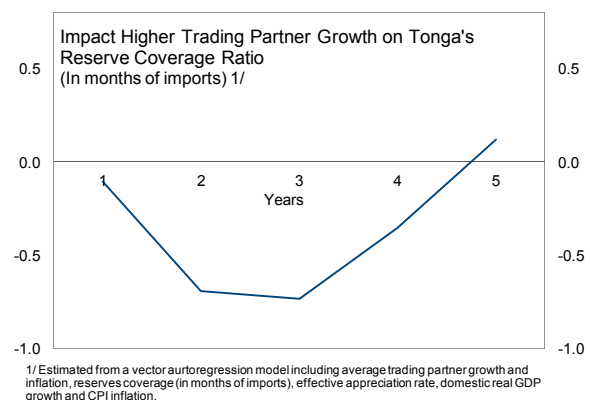
## B. Monetary and Exchange Rate Policies

### *Background*

14. **Monetary policy has been loosened since the onset of the global crisis.** The National Reserve Bank of Tonga (NRBT) has lowered reserve requirements (from 10 to 5 percent), reduced the interest rate on its repo facility (from 10 to 4½ percent) and suspended the issuance of central bank bills. Despite this, worsening credit quality has reduced banks' willingness to lend, thereby defusing the effect of the looser monetary policy on the real economy.

### *Policy Issues*

15. **Staff recommended maintaining a neutral monetary policy stance in the months ahead.** The loosening of monetary policy in FY2009/10 was appropriate but has failed to fully translate into looser monetary conditions. As a byproduct, there is now significant liquidity in the banking system and little reason to further loosen monetary



policy. Indeed, there is a risk that the liquidity overhang could, as banks restore their balance sheets, translate into higher credit growth ultimately leading to higher inflation, a worsening of the current account, and downward pressure on international reserves. Should such pressures materialize, the authorities would need to raise reserve requirements, resume the issuance of central bank paper, and raise rates on central bank repo facilities. A leading indicator of such pressures in the past has been a recovery in Tonga's main trading partners. The authorities vowed to continue supporting activity. They regarded the risks to reserves and likelihood of substantial inflation as relatively small at this point in the cycle. The authorities noted that they will remain alert to evolving economic and financial conditions and calibrate policies to ensure foreign reserves remain at comfortable levels (3–4 months of imports). In case there was a need to withdraw monetary stimulus, the authorities indicated they would favor higher reserve requirements and direct limits on credit growth given the burden that using indirect instruments would place on NRBT profitability.

### **Box II. Tonga's National Strategic Planning Framework**

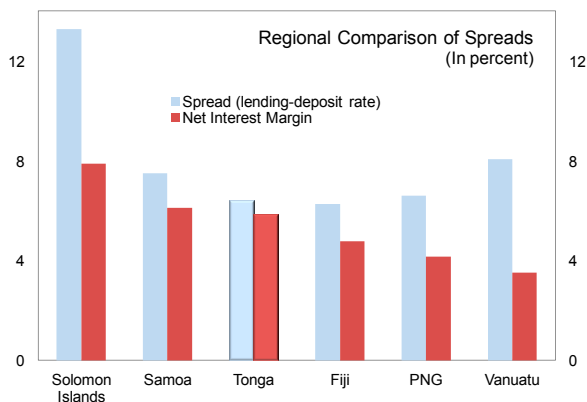
The National Strategic Planning Framework (NSPF) takes a longer-term strategic approach to achieving sustainable development (5–10 years) with attention to key determinants of economic and social development; and focuses on a limited number of government priorities, with implementation details to be laid out in the corporate plans of government agencies.

The NSPF considers the following seven outcomes as fundamental to a sustained and more equitable economic growth in Tonga: (i) community development that meets service needs; (ii) private sector growth (through better engagement with the government, appropriate incentives and streamlining of rules and regulations); (iii) constitutional reform; (iv) improved provision and maintenance of infrastructure; (v) increased performance of technical and vocational education and training to meet the challenges of maintaining and developing services and infrastructure; (vi) improved people health by minimizing the impact of non-communicable diseases; and (vii) environmental sustainability and climate change integrated into all program planning and execution.

The NSPF is being refined to include performance targets and indicators and will be implemented through government agencies corporate plans, which will be linked to the budget. In this regard, the NSPF requires a robust management and monitoring mechanism to track the achievement of strategic objectives and focuses on the quality of government agencies' corporate plans.

Preparation of government agencies corporate plans is now underway with support from AusAID, ADB, and PFTAC, especially on strengthening the link between the NSPF, the annual budget process, and the medium-term budget framework.

16. **There has been some political pressure to begin directly administering the level of deposit and lending rates.** Bank profitability in Tonga, including interest rate spreads, does not appear to be excessive when compared to other South Pacific jurisdictions. In addition, administering interest rates would likely result in significant credit rationing and hamper banks' ability to properly price risk. As such, staff advised the authorities to maintain their current market-determined process for setting interest rates.



17. **Making use of the flexibility afforded by the current exchange rate arrangement remains critical to safeguard external stability.** The staff assessed the currency to be moderately overvalued (Box III), which left little scope to tighten monetary conditions through a nominal appreciation of the currency. Indeed, if balance of payments pressures emerge, nominal rigidities would mean that the NRBT would need to be ready to gradually depreciate against the basket in order to safeguard external stability. To be effective, such depreciation would need to be supported by further fiscal restraint given the effect a weaker currency would have on the public debt burden. In addition, the authorities should build an information base in order to assess the potential effect on private balance sheets of a depreciation. Staff also welcomed the NRBT's decision to reassess the weights in the currency basket to better reflect economic circumstances, a shifting trade pattern, and the increased renminbi exposure. The PFTAC will soon provide technical assistance in this area.

### C. Financial Sector Issues

#### *Background*

18. **Following the marked deterioration in banks balance sheets in 2008, provisioning has increased.** Banks are actively improving their risk management practices, with greater staff training on credit risk analysis, better communication with bank management, and more frequent audits. Most of the credit-related losses have been frontloaded and banks are expected to return to profitability by the second half of this year.

#### Banks' Key Financial Ratios

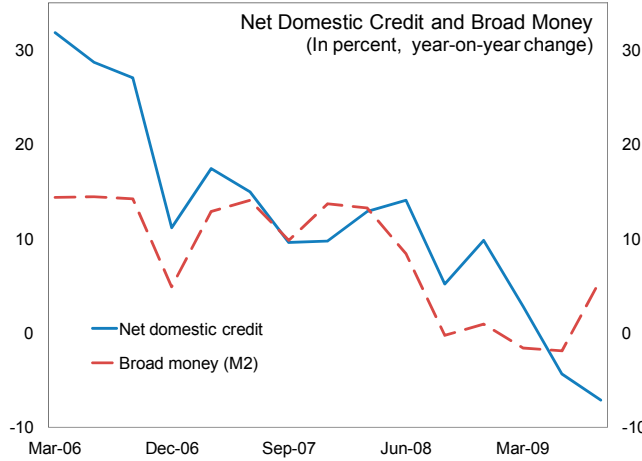
	2006/07	2007/08	2008/09
Pre-tax net profits (percent of assets)	2.9	4.9	-6.1
Operating income (percent of assets)	11.2	11.9	11.1
Net interest income (percent of assets)	6.6	6.3	6.3
(percent of GDP)			
Non-interest income (percent of assets)	4.6	5.6	4.9
Loan-loss reserve to gross loans 1/	3.6	6.4	9.6
Risk-weighted CAR	20.7	22.4	26.5

1/ End of calendar year.

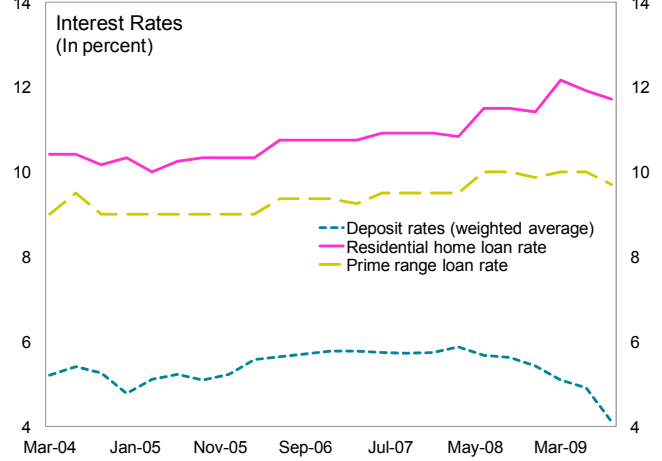
Figure 3. Tonga: Monetary Policy and Financial Sector Developments

Financial conditions have tightened alongside a worsening in credit quality.

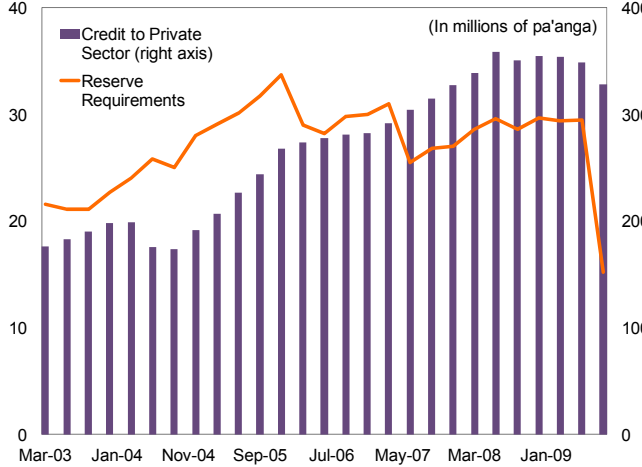
The efforts of the central bank to inject liquidity have not translated into higher credit growth.



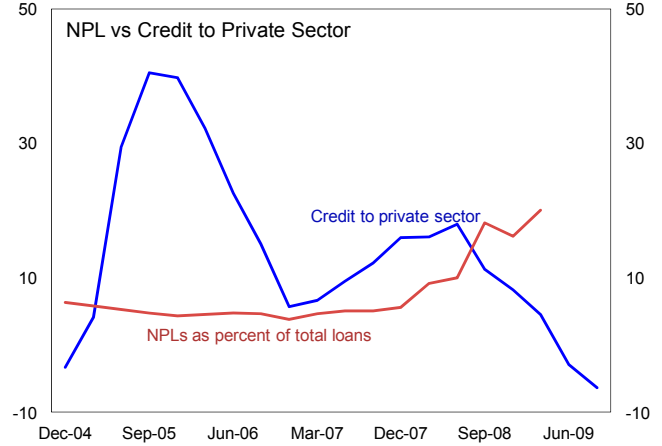
Indeed loan rates have increased as banks attempt to build margins to offset credit losses...



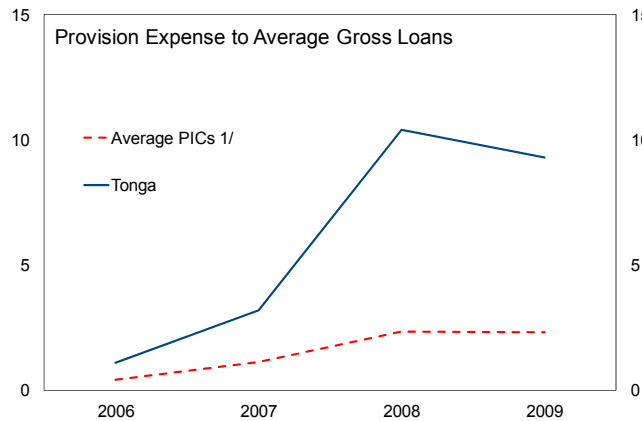
... and banks have been reluctant to expand lending despite lower reserve requirements...



...as a result of a worsening in credit quality resulting from past booms in lending and the slowing economy.

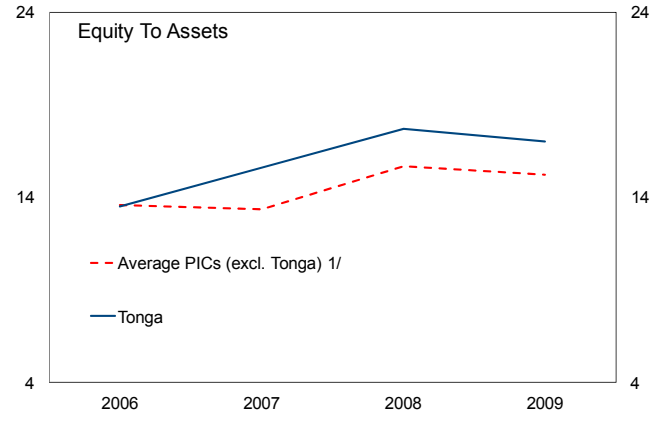


Despite high levels of provisioning...



1/ Average of Fiji, PNG, Tonga, Samoa, Solomon Islands, and Vanuatu.

...banks appear well capitalized following the injection of new capital from foreign parents.



1/ Average of Fiji, PNG, Tonga, Samoa, Solomon Islands, and Vanuatu.

Sources: CEIC Data Company Ltd.; and Fund staff estimates.

### Box III. Exchange Rate Assessment

*Tonga's exchange rate is assessed to be moderately overvalued. Standard analytical approaches—macroeconomic balance and purchasing power parity—suggest the pa'anga remains overvalued relative to medium-term fundamentals, but there is considerable uncertainty around this result. Other indicators, however, do not point to pressures from significant overvaluation.*

#### Standard Exchange Rate Assessment Methods

Two approaches were employed based on a cross section of 140 economies, including those that rely heavily on aid and remittances.<sup>1</sup> Both approaches suggest that the real exchange rate is overvalued relative to medium-term fundamentals, but considerable uncertainty surrounds the estimates.

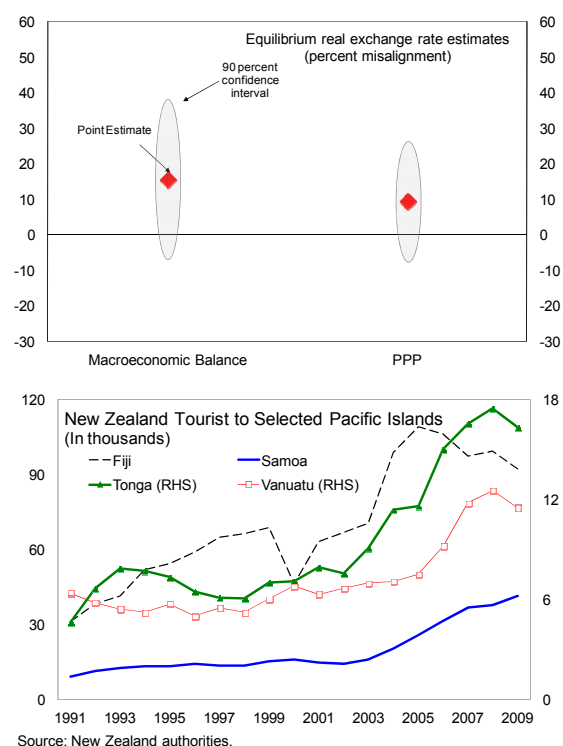
**The macroeconomic balance approach** indicates that the real exchange rate is around 16 percent above its medium-term value, with a confidence band of around -8 percent to around 40 percent. Underlying the point estimate is an estimated current account norm of around -4¼ percent of GDP, which could be as low as -14 percent of GDP in light of the important role of remittances and foreign.

**The purchasing power parity approach** suggests that the real exchange rate is currently overvalued by slightly less than 10 percent, also with a considerable uncertainty.

#### Other Indicators

Other indicators of misalignment do not point to a large deviation of the real exchange rate from medium-term fundamentals.

- The *current account deficit* has been relatively stable in recent years, remaining around 8–9 percent between 2005/06 and 2007/08. While a temporary rise in the deficit is expected in the next few years, this reflects both cyclical factors, as well as reconstruction-related imports, which are fully financed. The underlying current account deficit is around 10½ percent of GDP.
- *Domestic inflation* has eased in recent months, reflecting cyclical factors and an improvement in the terms of trade. There are no signs of sustained downward pressure on prices that would bring about the required real depreciation, if the pa'anga were significantly overvalued. Moreover, inflation has also not been out of line with other Pacific island countries.
- *Foreign reserves* have been stable or rising in recent years, even after abstracting from disbursements under the EXIM Bank reconstruction loan. Moreover, although the NRBT intervened on both sides of the market, it was a net purchaser of foreign exchange in 2008/09, with net purchases around 10 percent of its total gross flows.
- The *number of tourists from New Zealand* has increased markedly in recent years. Although this may have been influenced by the 2008 royal coronation, Tonga has clearly gained market as a tourist destination, while the share of Australian tourists going to Tonga has been stable in recent years, suggesting that the exchange rate is not largely overvalued.
- *Goods market.* New export products, such as sea cucumber have provided significant export earnings in the past year and helped offset the decline from squash export. Squash export to Japan was affected by additional supply from traditional squash exporters during Tonga's niche export period.



<sup>1</sup> The approaches are limited by the availability of net foreign assets data.

### *Policy Issues*

19. **Further stepping up prudential regulations and supervision is needed to promote financial stability and improve intermediation.** Progress has been made in strengthening bank supervision, including by setting trigger levels for capital, liquidity, and asset quality requirements, as well as requiring banks to improve the disclosure to their customers about the full costs of new loans (including all fees, interest, and charges). Nevertheless, staff encouraged the NRBT to increase the frequency of on-site visits and improve banks' prudential reporting requirements.

20. **Improving the legal framework for collateralized borrowing has the potential to lower financial intermediation costs, protect bank balance sheets, and restart bank lending.** The lack of collateral and the difficulties in attaching collateral are significant impediments to business lending (Box IV). Improving the institutional framework for lending would help protect bank balance sheets, improve access to financing, and lower the cost of borrowing. Potential changes that could be considered include instituting a centralized credit bureau and strengthening creditor rights through changes to the legal framework to ensure the timely registering and recovery of collateral. Enacting the planned secured property and bankruptcy protection laws should further expand access to finance. In addition, further improvements to transparency and disclosure for financial services would also afford greater protections to bank borrowers.

#### **D. Structural Improvements to Promote Private Sector-Led Growth**

21. **The government's structural priorities—laid out in its NSPF—hold the promise of increasing private sector-led development over the longer term.** The NSPF aims to rationalize public enterprises, modernize the commercial legal framework, and provide better access to finance. As part of this program, the government has proposed lengthening land leases to over 99 years in order to encourage private construction and investment and increase the availability of collateral for secured lending.

22. **However, additional efforts are still needed.** In particular, there is a need to reduce further the cost of doing business and improve the business environment. While some progress had been made in streamlining the approval process for investment more can be done. In particular, staff recommended increasing the access to land for development, reducing the number of licenses needed for private sector projects and speeding up their approval, and more narrowly defining the areas where foreign investment is not permitted. In addition, utility costs are amongst the highest in the Pacific and efforts will be needed to improve efficiency in the delivery and generation of utilities.

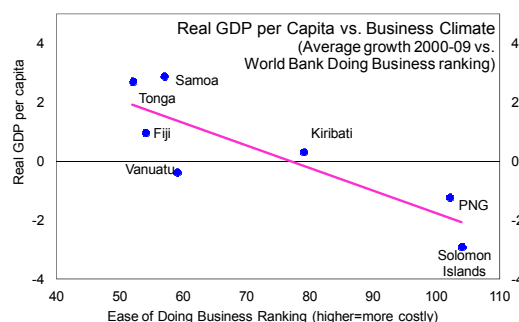


## Box IV. Impediments to Private Sector Development

Like many other Pacific island economies, Tonga's private sector development is hampered by high cost of doing business and limited access to credit.

*Doing business costs* are high and the environment is difficult, as in much of the Pacific, owing to costly utilities and poor infrastructure.

- *Utility cost.* Although telecommunication costs are relatively low, other utilities are less so.



Source: IMF, *World Economic Outlook*; and World Bank, *Doing Business*, 2010.

Structural Indicators

	Fiji	PNG	Samoa	Solomon Islands	Tonga	Vanuatu	New Zealand
Paved roads (in percent of total roads), 2000	49	...	42	...	27	24	64
Mobile phone subscribers per 100 residents, 2005	17	...	13	2	16	6	75
Fixed broadband Internet access tariff (US\$ per month), 2008	26	...	169	...	110	450	31
Mobile cellular prepaid tariff (US\$ per month), 2008	14	...	...	...	6	15	23
Cost of three-minute call to US (US\$), 2004	3.0	...	1.0	...	1.0	7.0	1.3
Internet users (per 1000 people), 2004	73	21	33	6.4	29	36	788
Electricity costs (US\$ per kwh) 2/	0.2	...	0.2	...	0.4	0.3	0.05
Improved sanitation facilities (percent of population with access)	72	44	100	31	96	50	...
Improved water facilities (percent of population with access)	47	39	88	70	100	60	...

Sources: Vanuatu authorities, Energy Information Administration; EIU Tonga Country Report, October 2009; International Telecommunication Union, *World Telecommunication Development Report* (2006); and World Bank, *World Development Indicators* (2006).

1/ Registered carrier departures for Papua New Guinea and Solomon Islands.

2/ The Tongan estimate follows the October 2009 tariff increase.

- *Business environment.* Tonga's regulatory environment is relatively welcoming with somewhat low business start-up costs and a flexible labor market. However, the cost of enforcing contracts (which raises uncertainty) and complying with tax laws is high. Although tax reform in Tonga has generally raised the share of economic returns retained by the private owners, compliance costs remains high.

Selected Investment Climate Indicators, 2010

	Fiji	Papua New Guinea	Samoa	Solomon Islands	Tonga	Vanuatu	Selected Indian Ocean <sup>2</sup>	All Pacific Islands	All Caribbean <sup>3</sup>
<b>Ease of Doing Business Rank<sup>1</sup></b>	54	102	57	104	52	59	72	83	87
<b>Starting a business</b>									
Procedures (number)	8	8	5	7	4	8	6	6	8
Cost (% of income per capita)	25	21	10	53	8	42	7	33	45
<b>Employing Workers</b>									
Difficulty of Hiring Index	11	11	11	22	0	22	26	13	13
Rigidity of Employment Index <sup>4</sup>	10	4	8	14	7	14	24	9	10
<b>Protecting Investors</b>									
Investor Protection Index <sup>5</sup>	6	6	6	6	5	5	6	5	5
<b>Paying Taxes</b>									
Time (hours)	150	194	224	80	164	120	79	131	179
Total tax rate (% profit)	41	42	19	36	28	8	25	37	39
<b>Enforcing Contracts</b>									
Cost (% of debt)	39	110	20	79	31	75	0	48	33

Source: World Bank, *Doing Business Report* (2010).

<sup>1</sup> Economies are ranked on their ease of doing business from 1-183, with first place being the best. A high ranking on the ease of doing business index means the regulatory environment is conducive to the operation of business.

<sup>2</sup> Average of Maldives, Mauritius, and Seychelles.

<sup>3</sup> Average. Excluding Bahamas and Barbados.

<sup>4</sup> The index assigns values between 0 and 100, with higher values representing more rigid regulations. The Rigidity of Employment Index is an average difficulties that employers face in hiring and firing workers.

<sup>5</sup> The indexes vary between 0 and 10, with higher values indicating better investor protection.

**Access to credit.** While the cost of financing seems relatively reasonable when compared with regional partners, several structural factors limit its availability. Because banks have limited information on borrowers' creditworthiness, banks typically rely on informal information and past relationships with borrowers to inform their lending decisions. The poor availability of credit information increases costs and risks associated with bank lending and reduces the availability of credit. Ultimately, savings may not be channeled toward the most productive projects, which will hamper medium-term growth. The lack of information on borrowers' credit worthiness is exacerbated by costly and time consuming property registry systems that increase cost of using property as collateral. Although Tonga's registry system is better than in several other island nations, it remains cumbersome. In addition, the use of property for collateral should be further improved with the passage of the proposed secured properties law.

Selected Financing Indicators, 2010

Country	Fiji	Papua New Guinea	Samoa	Solomon Islands	Tonga	Vanuatu	Selected Indian Ocean <sup>1</sup>	All Pacific Islands	All Caribbean <sup>2</sup>
<b>Registering Property</b>									
Procedures (number)	3	4	5	10	4	2	4	5	6
Time (days)	68	72	147	297	108	188	30	176	99
Cost (% of property value)	2	5	2	5	10	7	9	4	9
<b>Getting Credit</b>									
Credit Information Index <sup>3</sup>	4	0	0	0	0	0	1	0	1

Source: World Bank, *Doing Business Report* (2010).

<sup>1</sup> Average for Mauritius and Seychelles

<sup>2</sup> Average. Excluding Bahamas and Barbados.

<sup>3</sup> Index ranges from 0-10, with higher scores indicating more available credit information from public registry or private bureau.

#### IV. STAFF APPRAISAL

23. **Activity is expected to rebound next year.** Growth should reach 1¾ percent in FY2010/11 boosted by increased construction activity. As the global recovery takes hold, tourism and remittances should begin to pick up, albeit slowly. With the recapitalization of banks and most losses now realized, lending could resume. Inflation should rise in the coming months as a result of the expected recovery in domestic demand and a recent increase in electricity prices but should end the year at around 4 percent.

24. **However, achieving reasonably high medium-term growth will be challenging.** Prospects are constrained by Tonga's geographic isolation, its narrow export base, the high cost of labor, an inability to retain skilled labor, and impediments to private sector activity. Government policies in the coming years will need to focus on mitigating these limitations.

25. **The balance of risks is still tilted to the downside.** In the near-term, the strength of the global recovery is by no means assured and there are multiple risks that could weaken prospects in both Europe and the United States. A further rise in world commodity and food prices would also hit Tonga hard, feeding through to inflation, growth, and the current account deficit. Tonga's high public debt now poses a considerable risk to economic prospects through its potential impact on the country's external sustainability and ability to respond to shocks.

26. **The increase in both Tonga's external and public debt over the past year has left the economy more vulnerable to shocks.** The level of Tonga's debt puts the country into the range of "high risk of debt distress" according to the World Bank-IMF debt sustainability framework. In addition, there is considerable credit and currency risk associated with some of Tonga's debt. Mitigating these debt vulnerabilities will necessitate continued progress on structural improvements to raise growth potential, continued support from donors, fiscal consolidation, and careful management of liabilities, reserves, and Tonga's external position.

27. **There is little scope for further fiscal stimulus in the coming fiscal year.** The government will need to limit growth in employee costs to at most the level of CPI inflation, carefully prioritize current spending, and further improve tax administration. Economic activity could be supported by bringing forward some donor-financed infrastructure spending, subject to capacity constraints.

28. **In the coming years a sustained effort will be needed to put the public debt firmly on a downward path.** The government should aim at a primary surplus target of around 1 percent of GDP to lower the debt and place the fiscal position on a more sustainable path. Achieving such an adjustment will require progress on multiple fronts over the medium term, including stepping up revenue administration and expenditure control, prioritizing expenditure, limiting loan drawdown to finance projects that are productive, as well as structural reforms. There is also a need to establish a comprehensive debt management strategy that aims at limiting the large credit and currency risks in the government balance sheet. The government's fiscal efforts will need to be supplemented by continued provision of grants from donors. Lower-than-expected grants would affect the government's related project spending plans, requiring further fiscal restraint and possibly redirecting part of the government spending toward higher priority projects.

29. **Monetary policy should maintain a neutral stance in the months ahead.** The loosening of monetary policy in FY2009/10 was appropriate but failed to fully translate into looser monetary conditions as banks maintained a tight lending stance to restore the health of their balance sheets. As a result, there is now ample liquidity in the banking system and little need for a further loosening of monetary policy. However, there is a risk that as conditions normalize the expansionary monetary stance of the past year could feed through to higher inflation and downward pressure on international reserves.

30. **If higher inflation than expected in the baseline scenario, or downward pressures on reserves, were to materialize, the monetary policy stance will need to be tightened.** The NRBT should use the wide range of tools at its disposal, including raising reserve requirements, resuming the issuance of central bank paper, and raising interest rates on its repo facility. However, the use of direct credit controls should be limited so as to minimize the associated distortions. Such a tightening stance could begin once the recovery in Tonga's main trading partners is firmly established since a recovery in those economies

typically leads to stronger remittances and imports, and ultimately exerts downward pressure on the reserve coverage ratio.

31. **Making use of the flexibility afforded by the current exchange rate arrangement remains critical for safeguarding external stability.** The staff assesses the currency to be moderately overvalued. This leaves little scope to tighten monetary conditions through a nominal appreciation of the currency, but the NRBT should stand ready to gradually depreciate against the basket in order to safeguard external stability. However, to be effective, this will need to be accompanied with further fiscal restraint given the effect a weaker currency would have on the public debt burden. NRBT's decision to review the current weights in the basket is also welcome.

32. **Further stepping up prudential regulations and supervision will promote financial stability and improve intermediation.** NRBT's steady strengthening of bank supervision, as well as its recent decision requiring banks to improve the disclosure to their customers about the full costs of new loans (including all fees, interest, and charges) are welcome. Nevertheless, NRBT needs to continue improving the supervision and monitoring of banks, including through more on-site visits and by strengthening banks' prudential reporting requirements.

33. **Improving the legal framework for collateralized borrowing has the potential to lower financial intermediation costs and restart bank lending.** There is significant scope to improve the institutional framework for lending in order to increase access to finance and lower the cost of borrowing. In addition, further improvements to transparency and disclosure for financial services will afford greater protections to bank borrowers. Such measures will ultimately lower credit spreads toward those in other regions. In this regard, the pressure to begin administering the level of interest rates should be resisted since administering interest rates would likely result in significant credit rationing and hamper banks' ability to properly price risk.

34. **Finally, additional efforts are needed to promote private drivers of growth.** There is a need to (i) improve the institutional framework for lending—including the enforcement of creditor rights to collateral—as a means to increase access to finance and lower the cost of borrowing; (ii) extend land leases to over 99 years to encourage construction and investment; (iii) reduce the number of business licenses; and (iv) lower barriers to foreign investment.

35. It is recommended that the next Article IV consultation take place on a standard 12-month cycle.

Table 1. Tonga: Selected Economic Indicators, 2005/06–2010/11 1/

Nominal GDP (2008/09): US\$ 328.4 million  
 Population (2006): 101,991  
 GDP per capita (2008/09): US\$ 3,220  
 Quota: SDR 6.9 million

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
				Prel.	Proj.	
(Annual percent change)						
Output and prices						
Real GDP 2/	0.5	-1.2	2.0	-0.4	-0.5	1.7
Consumer prices (period average)	7.0	5.1	9.8	5.0	2.2	4.2
Consumer prices (end of period)	6.4	5.6	12.2	1.2	4.3	4.1
(In percent of GDP)						
Central government finance						
Total revenue and grants	26.6	28.3	26.3	24.0	25.3	29.2
Total revenue	24.9	24.6	24.9	17.4	18.7	18.8
Grants	1.7	3.7	1.3	6.6	6.6	10.4
Total expenditure and net lending	29.4	27.3	24.7	27.3	29.2	34.3
Of which: Current expenditure	28.8	26.2	24.3	24.1	23.9	22.8
Capital expenditure	0.8	0.9	0.4	2.3	2.7	8.6
Overall balance	-2.8	1.1	1.5	-3.3	-3.9	-5.1
Overall balance (excl. China's EXIM bank loans)	...	...	...	-3.3	-2.4	-2.5
External financing (net)	0.4	0.1	0.2	-0.7	3.6	5.4
Domestic financing (net)	2.4	-1.2	-1.7	8.6	0.5	-0.3
Privatization receipts	0.0	0.0	0.0	-4.6	-0.2	0.0
(Annual percent change)						
Money and credit						
Total liquidity 3/	13.3	13.3	6.7	-1.1	4.3	1.4
Of which: Broad money (M2)	16.6	11.9	8.2	-1.8	2.0	2.5
Domestic credit	25.8	11.6	11.6	-4.2	-11.2	1.3
Of which: Private sector credit	22.6	9.5	18.0	-2.9	-11.0	2.0
Interest rates (end of period)						
Average deposit rate	5.2	5.6	5.7	5.3	...	...
Base lending rate	9.0	9.4	10.0	10.0	...	...
(In millions of U.S. dollars)						
Balance of payments						
Exports, f.o.b.	15.4	13.3	12.4	5.5	5.2	6.3
Imports, f.o.b.	-122.2	-108.6	-138.1	-130.1	-115.7	-131.5
Services (net)	-7.8	-17.9	-3.3	-2.6	-3.3	-5.0
Investment income (net)	2.8	3.5	3.4	4.6	3.2	3.1
Services and investment income (net)	-5.0	-14.4	0.1	2.0	-0.1	-1.9
Current transfers (net)	88.9	84.2	94.7	75.8	59.1	66.7
Of which: Private transfer receipts	102.0	93.3	106.7	84.0	63.0	70.7
Current account balance	-22.8	-25.5	-30.9	-46.9	-51.5	-60.5
Current account balance (excl. China's EXIM bank loans)	-22.8	-25.5	-30.9	-46.8	-42.6	-45.0
(In percent of GDP)	-7.9	-8.4	-9.0	-14.3	-17.4	-19.9
Overall balance	0.6	4.2	-1.4	22.6	2.9	1.3
Terms of trade (annual percent change)	-12.0	21.9	-6.1	0.1	...	...
Gross official foreign reserves						
In millions of U.S. dollars	40.4	47.1	48.2	67.7	70.6	72.0
In months of goods and services imports	3.1	3.9	3.2	4.7	5.3	4.8
External debt (in percent of GDP)						
External debt	29.0	27.1	25.3	31.5	44.2	50.7
Debt service ratio	1.1	1.1	1.4	1.2	1.1	1.5
Exchange rates						
Pa'anga per U.S. dollar (period average)	2.0	2.0	1.9	2.1	...	...
Pa'anga per U.S. dollar (end of period)	2.1	1.9	1.8	2.0	...	...
Nominal effective exchange rate (1990=100)	70.5	68.4	66.0	67.6	...	...
Real effective exchange rate (1990=100)	103.6	103.5	105.9	111.7	...	...
Memorandum item:						
Nominal GDP (millions of T\$)	580.1	604.1	652.2	685.0	704.9	747.1

Sources: Data provided by the Tongan authorities; and Fund staff estimates and projections.

1/ Fiscal year beginning July.

2/ Including preliminary data.

3/ From the *Banking Survey*, which includes the Tonga Development Bank.

Table 2. Tonga: Summary of Government Operations, 2005/06-2010/11

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
				Prel.	Proj.	
(In millions of pa'anga)						
Total revenue and grants	154.5	171.1	171.2	164.4	178.2	217.8
Total revenue	144.6	148.5	162.5	119.4	131.7	140.5
Current revenue	144.6	148.5	162.5	119.4	131.7	140.5
Tax revenue	122.2	126.2	138.0	94.3	102.5	109.5
Taxes on income profits	26.9	26.4	26.8	40.3	24.5	19.3
Tax on property	0.0	0.1	0.1	0.1	0.1	0.1
Sales tax and Consumption tax	52.7	51.6	59.7	33.2	43.0	49.8
Trade taxes	41.9	47.6	51.4	19.3	34.9	40.4
Other taxes	0.7	0.5	0.0	1.4	0.0	0.0
Nontax revenue	22.4	22.3	24.5	25.1	29.2	31.0
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0
Grants (in cash)	9.9	22.6	8.7	45.0	46.4	77.4
Total expenditure and net lending	170.7	164.7	161.4	187.2	205.9	256.0
Total expenditure	171.9	164.1	161.4	181.0	187.6	234.7
Current expenditure	167.0	158.5	158.8	165.3	168.2	170.4
Wages and salaries 1/	90.8	80.1	70.2	74.9	82.2	85.6
Retirement funds employer contribution	3.8	5.8	4.4	4.2	5.6	5.8
Interest expense	3.3	3.2	4.2	5.2	5.8	8.2
Other current expenditures	69.0	69.4	80.0	80.9	74.7	70.7
Capital expenditure	4.6	5.6	2.6	15.7	19.3	64.3
Of which : China's EXIM bank loans 2/	...	...	...	0.2	9.1	27.1
Total lending minus repayments	-1.2	0.6	0.0	6.2	18.4	21.2
Current balance	-22.3	-10.0	3.7	-45.9	-36.5	-29.9
Overall balance (incl. grants)	-16.1	6.4	9.8	-22.8	-27.8	-38.1
Overall balance (excl. China's EXIM bank loans)	...	...	...	-22.7	-16.6	-18.8
Total financing	16.1	-6.4	-9.8	22.8	27.8	38.1
External financing	2.3	0.8	1.4	-4.5	25.4	40.7
Disbursements	6.9	5.8	8.4	41.8	82.5	47.4
Repayments	4.6	5.0	7.0	4.7	4.2	6.7
Net change in external cash balance 2/	0.0	0.0	0.0	-41.6	-53.0	0.0
Domestic financing 3/ 4/	13.9	-7.2	-11.2	58.7	3.6	-2.6
Net bond financing	-1.4	-1.6	-3.3	-1.0	8.0	-0.9
Net bank loan financing	0.0	0.0	0.0	-3.0	-0.3	0.0
Net changes in cash balances	0.0	0.0	-12.5	4.5	-4.2	-1.7
Other	15.3	-5.6	4.5	58.2	0.0	0.0
Privatization receipts	0.0	0.0	0.0	-31.4	-1.2	0.0
(In percent of GDP)						
<b>Total revenue and grants</b>	<b>26.6</b>	<b>28.3</b>	<b>26.3</b>	<b>24.0</b>	<b>25.3</b>	<b>29.2</b>
Total revenue	24.9	24.6	24.9	17.4	18.7	18.8
Current revenue	24.9	24.6	24.9	17.4	18.7	18.8
Tax revenue	21.1	20.9	21.2	13.8	14.5	14.7
Taxes on income profits	4.6	4.4	4.1	5.9	3.5	2.6
Tax on property	0.0	0.0	0.0	0.0	0.0	0.0
Sales tax and Consumption tax	9.1	8.5	9.2	4.9	6.1	6.7
Trade taxes	7.2	7.9	7.9	2.8	4.9	5.4
Other taxes	0.1	0.1	0.0	0.2	0.0	0.0
Nontax revenue	3.9	3.7	3.8	3.7	4.1	4.1
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0
Grants (in cash)	1.7	3.7	1.3	6.6	6.6	10.4
<b>Total expenditure and net lending</b>	<b>29.4</b>	<b>27.3</b>	<b>24.7</b>	<b>27.3</b>	<b>29.2</b>	<b>34.3</b>
Total expenditure	29.6	27.2	24.7	26.4	26.6	31.4
Current expenditure	28.8	26.2	24.3	24.1	23.9	22.8
Wages and salaries 1/	15.7	13.3	10.8	10.9	11.7	11.5
Retirement funds employer contribution	0.7	1.0	0.7	0.6	0.8	0.8
Interest expense	0.6	0.5	0.6	0.8	0.8	1.1
Other current expenditures	11.9	11.5	12.3	11.8	10.6	9.5
Capital expenditure	0.8	0.9	0.4	2.3	2.7	8.6
Total lending minus repayments	-0.2	0.1	0.0	0.9	2.6	2.8
<b>Current balance</b>	<b>-3.8</b>	<b>-1.7</b>	<b>0.6</b>	<b>-6.7</b>	<b>-5.2</b>	<b>-4.0</b>
<b>Overall balance (incl. grants)</b>	<b>-2.8</b>	<b>1.1</b>	<b>1.5</b>	<b>-3.3</b>	<b>-3.9</b>	<b>-5.1</b>
Overall balance (excl. China's EXIM bank loans)	...	...	...	-3.3	-2.4	-2.5
<b>Total financing</b>	<b>2.8</b>	<b>-1.1</b>	<b>-1.5</b>	<b>3.3</b>	<b>3.9</b>	<b>5.1</b>
External financing	0.4	0.1	0.2	-0.7	3.6	5.4
Disbursements	1.2	1.0	1.3	6.1	11.7	6.3
Repayments	0.8	0.8	1.1	0.7	0.6	0.9
Net change in external cash balance 2/	...	...	...	-6.1	-7.5	0.0
Domestic financing 3/ 4/	2.4	-1.2	-1.7	8.6	0.5	-0.3
Privatization receipts	0.0	0.0	0.0	-4.6	-0.2	0.0
Memorandum item:						
Nominal GDP (in millions of pa'anga)	580.1	604.1	652.2	685.0	704.9	747.1

Sources: Data provided by the Tongan authorities; and Fund staff estimates.

1/ Wage bill for 2006/07 includes TOP 9.6 million of carryover payments from 2005/06.

2/ Reflects unspent balances of China's EXIM Bank loans.

3/ In 2008/09 includes the implementation of the natural disaster fund.

4/ Includes domestic net bond financing and net changes in government cash balance and investment.

Table 3. Tonga: Banking Survey, 2005/06-2010/11 1/

	2005/06	2006/07	2007/08	2008/09	2009/10 proj.	2010/11 proj.
(In millions of pa'anga; end of period)						
Net foreign assets	73.2	81.9	80.5	117.6	123.3	136.2
Foreign assets	97.0	104.9	101.5	155.5	171.1	189.0
NRBT	85.2	92.9	90.7	137.7	157.4	175.3
DMBs	11.8	12.0	10.8	17.8	13.7	13.7
Foreign liabilities	-23.7	-23.0	-21.0	-37.9	-47.8	-52.8
NRBT	-7.8	-5.2	-3.4	-10.4	-22.7	-25.0
DMBs	-15.3	-17.2	-16.9	-22.4	-20.6	-22.8
TDB	-0.6	-0.6	-0.6	-5.1	-4.5	-5.0
Net domestic assets	186.7	211.8	225.7	185.2	192.6	184.0
Net domestic credit	264.5	295.2	329.5	315.6	280.3	283.9
Government (net)	-18.9	-12.9	-34.3	-37.9	-34.4	-36.9
Non-financial public enterprises	5.4	3.7	4.7	4.7	4.2	4.2
Private sector	278.0	304.3	359.1	348.8	310.4	316.6
Other items, net	-77.8	-83.3	-103.7	-130.3	-87.6	-99.9
Total liquidity	253.4	287.1	306.3	302.8	315.9	320.2
Broad money (M2)	237.5	265.8	287.5	282.3	287.9	295.1
Narrow money	55.7	73.8	72.6	77.9	106.0	95.0
Quasi money	181.8	192.0	214.9	204.4	181.9	200.1
Notes and bills 2/	15.9	21.4	18.7	20.6	28.0	25.1
Government lending funds 3/	6.1	5.4	5.0	0.0	0.0	0.0
(Annual percentage change)						
Net foreign assets	-5.5	11.8	-1.6	46.0	4.8	10.5
Net domestic assets	21.0	13.5	6.6	-17.9	4.0	-4.5
Net domestic credit	25.8	11.6	11.6	-4.2	-11.2	1.3
Private sector	22.6	9.5	18.0	-2.9	-11.0	2.0
Total liquidity	13.3	13.3	6.7	-1.1	4.3	1.4
Broad money (M2)	16.6	11.9	8.2	-1.8	2.0	2.5
(In millions of U.S. dollars)						
Net foreign assets	35.6	42.1	43.6	58.5	55.5	56.4
Foreign assets	47.1	53.9	55.0	77.3	77.0	78.3
NRBT	41.3	47.7	49.1	68.5	70.8	72.6
DMBs	5.7	6.2	5.8	8.9	6.2	5.7
Foreign liabilities	-11.5	-11.8	-11.4	-18.8	-21.5	-21.9
Memorandum items:						
Velocity (GDP/average M2)	2.6	2.4	2.3	2.4	2.5	2.6
Pa'anga per U.S. dollar (end of period)	2.06	1.95	1.85	2.01	2.22	2.41
Average M2 (pa'anga millions)	224.0	252.9	280.2	283.0	285.1	291.5
Nominal GDP (pa'anga millions)	580.1	604.1	652.2	685.0	704.9	747.1

Sources: Data provided by the Tongan authorities; and Fund staff estimates.

1/ Comprises the National Reserve Bank of Tonga (NRBT), the deposit money banks, and the Tonga Development Bank (TDB).

2/ Comprises bills and promissory notes issued by financial sector and held outside the sector.

3/ Represents borrowing by the Government from foreign sources for onlending to the TDB.

Table 4: Tonga: Balance of Payments Summary, 2005/06–2010/11 1/

(In millions of U.S. dollars, unless otherwise indicated)

	2005/06	2006/07	2007/08	2008/09 Prel.	2009/10 Proj.	2010/11
Trade balance	-106.7	-95.3	-125.7	-124.6	-110.5	-125.2
Exports, f.o.b.	15.4	13.3	12.4	5.5	5.2	6.3
Imports, f.o.b.	-122.2	-108.6	-138.1	-130.1	-115.7	-131.5
Services (net)	-7.8	-17.9	-3.3	-2.6	-3.3	-5.0
Receipts	25.3	19.4	36.9	40.1	40.7	41.8
Payments	-33.2	-37.3	-40.1	-42.7	-44.0	-46.9
Investment income (net)	2.8	3.5	3.4	4.6	3.2	3.1
Receipts	4.9	6.4	6.8	6.2	5.0	5.1
Payments	-2.1	-2.9	-3.5	-1.6	-1.8	-2.0
Current transfers (net)	88.9	84.2	94.7	75.8	59.1	66.7
Official transfers (net) 2/	0.0	0.0	0.2	0.6	5.2	5.4
Private transfers (net)	88.9	84.2	94.5	75.1	53.9	61.3
Current account balance	-22.8	-25.5	-30.9	-46.9	-51.5	-60.5
(In percent of GDP)	-7.9	-8.4	-9.0	-14.3	-17.4	-19.9
Capital and financial account balance	22.5	26.9	36.3	55.6	54.4	61.8
Official capital flows (net)	8.4	9.8	11.9	17.7	34.7	42.1
Of which: China's EXIM bank loans	...	...	...	20.1	33.5	19.3
Private capital flows (net)	14.1	17.1	24.4	37.9	19.7	19.7
Errors and omissions	1.0	2.7	-6.7	13.9	0.0	0.0
Overall balance 3/	0.6	4.2	-1.4	22.6	2.9	1.3
Memorandum items:						
Gross official foreign reserves	40.4	47.1	48.2	67.7	70.6	72.0
In months of goods and services imports 4/	3.1	3.9	3.2	4.7	5.3	4.8
Exchange rate						
Pa'anga per U.S. dollar (period average)	2.0	2.0	1.9	2.1	2.4	2.5
Pa'anga per U.S. dollar (end of period)	2.1	1.9	1.8	2.0	2.2	2.4
Nominal GDP	288.8	301.6	343.1	328.4	296.6	304.4
Commodity price indexes (2005 = 100)						
Food	103.9	115.8	151.3	139.4	136.8	132.5
Fuel	115.2	117.7	177.0	128.8	137.4	147.0

Source: Data provided by the Tongan authorities; and Fund staff estimates.

1/ On OET base; projections include adjustments for imports related to two loans from China's EXIM Bank.

2/ Includes grants from ADB of US\$5 million in 2009/10 and 2010/11.

3/ Change in gross official foreign reserves.

4/ The current year's imports.



Table 5. Tonga: Medium-Term Scenario, 2007/08–2014/15 1/

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
			Proj.					
	(Annual percent change)							
Output and prices								
Real GDP	2.0	-0.4	-0.5	1.7	1.7	1.8	1.8	1.8
Consumer prices (end of period)	12.2	1.2	4.3	4.1	4.1	6.0	6.0	6.0
Consumer prices (period average)	9.8	5.0	2.2	4.2	4.1	5.1	6.0	6.0
	(In percent of GDP)							
Central government finance								
Total revenue and grants	26.3	24.0	25.3	29.2	27.2	26.2	25.7	24.3
Total revenue	24.9	17.4	18.7	18.8	19.7	20.1	20.3	21.5
Grants	1.3	6.6	6.6	10.4	7.5	6.1	5.5	2.7
Total expenditure and net lending	24.7	27.3	29.2	34.3	32.0	31.4	28.6	25.6
Current expenditure	24.3	24.1	23.9	22.8	22.3	21.2	21.1	21.1
Capital expenditure	0.4	2.3	2.7	8.6	7.6	8.4	5.5	3.8
Expenditure discrepancy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net lending	0.0	0.9	2.6	2.8	2.0	1.8	2.0	0.6
Overall balance	1.5	-3.3	-3.9	-5.1	-4.7	-5.2	-2.8	-1.3
External financing (net)	0.2	-0.7	3.6	5.4	5.7	4.4	3.6	0.8
Domestic financing (net)	-1.7	8.6	0.5	-0.3	-0.9	0.9	-0.7	0.5
Privatization receipts (net)	0.0	-4.6	-0.2	0.0	0.0	0.0	0.0	0.0
	(In millions of U.S. dollars)							
Balance of payments								
Exports, f.o.b.	12.4	5.5	5.2	6.3	7.4	8.7	10.1	11.8
(Annual percent change)	-7.3	-55.6	-5.6	21.0	18.4	17.7	16.3	16.0
Imports, f.o.b.	-138.1	-130.1	-115.7	-131.5	-137.3	-143.1	-150.6	-154.0
(Annual percent change)	27.2	-5.8	-11.1	13.7	4.4	4.2	5.3	2.3
Services and investment income (net)	0.1	2.0	-0.1	-1.9	-3.3	-4.6	-6.2	-7.7
Transfers (net)	94.7	75.8	59.1	66.7	69.8	79.4	90.4	100.8
<i>Of which:</i> Private transfer receipts	106.7	84.0	63.0	70.7	79.3	89.3	100.6	111.7
(Annual percent change)	14.4	-21.3	-25.0	12.3	12.2	12.5	12.7	11.0
Current account balance	-30.9	-46.9	-51.5	-60.5	-63.3	-59.6	-56.2	-49.2
(In percent of GDP)	-9.0	-14.3	-17.4	-19.9	-20.2	-18.1	-16.2	-13.5
Capital account balance	36.3	55.6	54.4	61.8	61.3	56.9	54.1	39.6
Official capital flows (net)	11.9	17.7	34.7	42.1	40.5	33.3	28.2	11.4
Private capital flows (net)	24.4	37.9	19.7	19.7	20.7	23.6	25.9	28.2
Overall balance	-1.4	22.6	2.9	1.3	-2.1	-2.6	-2.1	-9.6
Gross international reserves (end of period)								
In millions of U.S. dollars	48.2	67.7	70.6	72.0	69.9	67.3	65.2	55.6
In months of imports (goods and services)	3.2	4.7	5.3	4.8	4.5	4.2	3.8	3.2
External debt (in percent of GDP)								
Public sector external debt	25.3	31.5	44.2	50.7	52.7	51.1	48.5	45.5
Debt service ratio	1.4	1.2	1.1	1.5	1.5	1.5	2.0	2.2
Memorandum items:								
Private transfers (net, in millions of U.S. dollars)	94.5	75.1	53.9	61.3	69.6	79.2	90.0	100.7
(In percent of imports, goods and services)	53.0	43.5	33.8	34.4	37.4	40.8	44.0	47.8
Commodity price indexes (2005 = 100)								
Food	151.3	139.4	136.8	132.5	133.9	134.1	135.5	136.0
Fuel	177.0	128.8	137.4	147.0	150.4	153.7	157.2	158.8
Nominal GDP (millions of T\$)	652.2	685.0	704.9	747.1	791.0	846.0	912.7	984.6

Sources: Data provided by the Tongan authorities; and Fund staff estimates and projections.

1/ Fiscal year beginning July.

Table 6. Tonga: Millennium Development Goals

	1990	1995	2000	2005	2008
<b>Goal 1: Eradicate extreme poverty and hunger</b>					
Employment to population ratio, 15+, total (%)	..	..	..	..	..
Employment to population ratio, ages 15-24, total (%)	..	..	..	..	..
GDP per person employed (annual % growth)	..	..	..	..	..
Income share held by lowest 20%	..	..	..	..	..
Malnutrition prevalence, weight for age (% of children under 5)	..	..	..	..	..
Poverty gap at \$1.25 a day (PPP) (%)	..	..	..	..	..
Poverty headcount ratio at \$1.25 a day (PPP) (% of population)	..	..	..	..	..
Prevalence of undernourishment (% of population)	..	..	..	..	..
Vulnerable employment, total (% of total employment)	..	57	..	..	..
<b>Goal 2: Achieve universal primary education</b>					
Literacy rate, youth female (% of females ages 15-24)	..	99	..	100	100
Literacy rate, youth male (% of males ages 15-24)	..	99	..	100	100
Persistence to last grade of primary, total (% of cohort)	..	..	95	91	..
Primary completion rate, total (% of relevant age group)	133	114	104	137	100
Total enrollment, primary (% net)	..	..	96	99	..
<b>Goal 3: Promote gender equality and empower women</b>					
Proportion of seats held by women in national parliaments (%)	0	0	0	3	3
Ratio of female to male enrollments in tertiary education	..	..	164	168	..
Ratio of female to male primary enrollment	98	99	97	96	95
Ratio of female to male secondary enrollment	104	..	110	104	104
Share of women employed in the nonagricultural sector (% of total nonagricultural employment)	..	35.7	..	38.6	..
<b>Goal 4: Reduce child mortality</b>					
Immunization, measles (% of children ages 12-23 months)	86	94	95	99	99
Mortality rate, infant (per 1,000 live births)	26	24	22	20	19
Mortality rate, under-5 (per 1,000)	32	29	26	24	23
<b>Goal 5: Improve maternal health</b>					
Adolescent fertility rate (births per 1,000 women ages 15-19)	..	20	21	22	23
Births attended by skilled health staff (% of total)	92	..	95	98	..
Contraceptive prevalence (% of women ages 15-49)	..	41	33	..	..
Maternal mortality ratio (modeled estimate, per 100,000 live births)	..	..	..	..	..
Pregnant women receiving prenatal care (%)	..	..	..	..	..
Unmet need for contraception (% of married women ages 15-49)	..	..	..	..	..
<b>Goal 6: Combat HIV/AIDS, malaria, and other diseases</b>					
Children with fever receiving antimalarial drugs (% of children under age 5 with fever)	..	..	..	..	..
Condom use, population ages 15-24, female (% of females ages 15-24)	..	..	..	..	..
Condom use, population ages 15-24, male (% of males ages 15-24)	..	..	..	..	..
Incidence of tuberculosis (per 100,000 people)	34	31	28	25	24
Prevalence of HIV, female (% ages 15-24)	..	..	..	..	..
Prevalence of HIV, male (% ages 15-24)	..	..	..	..	..
Prevalence of HIV, total (% of population ages 15-49)	..	..	..	..	..
Tuberculosis cases detected under DOTS (%)	..	67	123	98	129
<b>Goal 7: Ensure environmental sustainability</b>					
CO2 emissions (kg per PPP \$ of GDP)	0.4	0.4	0.4	0.3	..
CO2 emissions (metric tons per capita)	0.8	1.1	1.2	1.2	..
Forest area (% of land area)	5	5	5	5	..
Improved sanitation facilities (% of population with access)	96	96	96	96	96
Improved water source (% of population with access)	100	100	100	100	100
Marine protected areas, (% of surface area)	..	..	..	..	..
Nationally protected areas (% of total land area)	..	..	..	8.6	8.6
<b>Goal 8: Develop a global partnership for development</b>					
Aid per capita (current US\$)	315	399	191	312	296
Debt service (PPG and IMF only, % of exports, excluding workers' remittances)	3	4	8	6	8
Internet users (per 100 people)	0.0	0.1	2.4	2.9	8.1
Mobile cellular subscriptions (per 100 people)	0	0	0	29	49
Telephone lines (per 100 people)	5	7	10	13	25
<b>Other</b>					
Fertility rate, total (births per woman)	4.6	4.3	4.2	4.1	4.0
GNI per capita, Atlas method (current US\$)	1,160	1,740	1,650	1,950	2,560
GNI, Atlas method (current US\$) (billions)	0.1	0.2	0.2	0.2	0.3
Gross capital formation (% of GDP)	18.5	19.5	18.8	18.1	16.7
Life expectancy at birth, total (years)	70	70	71	72	72
Literacy rate, adult total (% of people ages 15 and above)	..	99	..	99	99
Population, total (millions)	0.1	0.1	0.1	0.1	0.1
Trade (% of GDP)	99.0	83.0	66.8	85.3	77.0

Source: World Development Indicators database

INTERNATIONAL MONETARY FUND

TONGA

**Staff Report for the 2010 Article IV Consultation—Informational Annex**

Prepared by the Staff Representatives for the 2010 Consultation with Tonga

(In consultation with other departments)

April 21, 2010

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**ANNEX I. TONGA: FUND RELATIONS**  
(As of March 31, 2010)

I. **Membership Status:** Joined September 13, 1985; Article VIII.

II. <b>General Resources Account:</b>	SDR Million	% Quota
Quota	6.90	100.00
Total holdings of currency	5.19	75.20
Reserve position in Fund	1.71	24.81

III. <b>SDR Department:</b>	SDR Million	% Allocation
Net cumulative allocation	6.58	100
Holdings	7.07	107.48

IV. **Outstanding Purchases and Loans:** None.

V. **Financial Arrangements:** None.

VI. **Projected Obligations to Fund:<sup>1/</sup>**

(SDR Million; based on existing use of resources and present holdings of SDRs):

	<u>2010</u>	<u>2011</u>	<u>Forthcoming</u> <u>2012</u>	<u>2013</u>	<u>2014</u>
Principal					
Charges/Interest	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00	0.00	0.00

<sup>1/</sup> When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

VII. **Exchange Rate Arrangement:**

Since February 11, 1991, the value of the pa'anga is determined based on a weighted basket of currencies comprising the United States, Australian, and New Zealand dollars, with the U.S. dollar as the intervention currency. In July 2000, the Japanese yen was added to the basket, and the monthly maximum adjustment limit was raised to 5 percent from 2 percent that had prevailed since March 1998, when the allowance for adjustment was introduced. Tonga has accepted the obligations of Article VIII, Sections 2, 3, and 4.

The authorities have removed in April 2010 the exchange restriction in the form of a tax certification requirement applied to various current international transactions. The exchange restriction subject to approval under Article VIII, Section 2 (a) consisted of a tax certification requirement imposed by the authorities on the making of payments and transfers for certain current international transactions: (i) payments for oil imports; (ii) airline ticket sales; (iii) payments for specified

charges/fees/services; (iv) insurance payments; (v) lease payments; (vi) payments for medical expenses incurred by residents; (vii) transfers by nonresidents of profits and dividends abroad; (viii) external loan payments; and (xi) maintenance payments including remittances for family living expenses.

VIII. **Last Article IV Consultation:**

Staff discussions were held during May, 2009 and the Executive Board discussed the staff report (IMF Country Report No. 09/292) on September 4, 2009.

IX. **Technical Assistance:**

Legal Department (LEG) has provided assistance on AML/CFT issues for the Pacific islands countries, including Tonga, with an emphasis on risk management.

Pacific Financial Technical Assistance Centre (PFTAC) has provided assistance on budgetary management; tax administration; banking legislation and supervision; and balance of payments and national accounts statistics.

X. **Resident Representative:** None.

**ANNEX II. TONGA: RELATIONS WITH THE  
PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE (PFTAC)<sup>1</sup>**  
(As of March 2010)

Assistance to Tonga since 2006 included 27 advisory missions across all technical assistance (TA) sectors. During 2006–March 2010, Tonga has sent 63 officials to the Centre’s regional seminars, workshops and training courses, and six attachments were organized.

**Public Financial Management**

Since 2003, PFTAC's missions have focused on complementing the considerable assistance provided by other TA agencies, including through the introduction of a midyear economic review and fiscal update, reconciliation of monetary and fiscal data, and changes in budget documentation. For the 2003/04 and 2004/05 budgets, assistance was provided in presenting the final aggregate budget figures on a GFSM 2001 basis. In 2004, PFTAC arranged for a Tongan official to participate on a delegation of Pacific Island officials to the Australian Commonwealth Ministry of Finance. During 2005, the PFTAC PFM Advisor participated in a joint donor/government Feasibility Study related to a proposed long-term Financial and Economic Management Program (FEMP), as well as worked with the Ministry of Finance on assessing the financial implications of the proposed civil service wage increase. Since then assistance in the form of a peripatetic advisor has been provided in 2006, and again in 2007, to assist in revenue estimation work. The PFM Advisor has also delivered lectures on PFM to all CEOs, in late April 2007. A joint PFTAC mission on revenue estimation visited Tonga in mid-March 2008 to further assist in these areas. A PFTAC mission on decentralization also visited Tonga in May 2008 and made several recommendations in this area. A scoping mission on Medium Term Budgeting in Tonga will take place in late March 2010.

**Tax Administration and Policy**

Tonga has improved revenue policy and administration over the last three years. Key outcomes are: the passing of new Income tax and Customs Acts, both self assessed; a post implementation review of the value-added tax (VAT) and substantial change to the tax administration principally with the introduction of self assessment. This progress has complemented the introduction of the consumption tax in 2005 and has seen tax revenues increase steadily to GDP in recent years.

An IMF/PFTAC Tax Policy and Administration mission in March 2008 had the objective of reviewing tax policy issues in small Pacific island countries and in particular to consider the fiscal challenges posed by prospective trade liberalization and assess the experience with the

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<sup>1</sup> The Pacific Financial Technical Assistance Centre (PFTAC) in Suva, Fiji is a regional technical assistance institution operated by the IMF with financial support of the Asian Development Bank, Australia, Japan, Korea and New Zealand. The Centre's aim is to build skills and institutional capacity for effective economic and financial management that can be sustained at the national level. Member countries are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu.

VAT. The mission visited Fiji, Kiribati, Samoa, Solomon Islands, and Tonga. In Tonga, the mission found that the consumption tax was catalytic to the improvement of revenues collected in an environment of the political will to reform of the public sector and also dissatisfaction with the performance of some existing taxes.

Revenue losses arising from trade liberalization through the Pacific Island Countries Trade Agreement (PICTA) and Pacific Agreement for Closer Economic Relations (PACER) have been estimated as high as 27 percent of total revenue by external research.<sup>2</sup> This presents an issue for Tonga to deal with in the immediate future to replace those lost revenues.

Informal discussions between PFTAC and Tongan revenue officials regarding the modernizing of stamp duties also Customs administration and processes where improvements to trade revenues can be made.

### **Banking Sector Regulation and Supervision**

An assessment to determine compliance with the Basel Core Principles for Effective Banking Supervision (BCP) was conducted in 2002. It identified some shortcomings in Tonga's legal framework and resulted in a review of the Financial Institutions Act (FIA). The enhanced FIA was enacted in late 2004. A TA mission provided assistance with drafting regulations and guidelines, and establishing procedures for their implementation in April 2005. Further assistance in conducting on-site examinations of banks was provided in late 2005 and again in February 2006. Amendments to the NRBT Act, which will strengthen the central bank's enforcement capacity, are still awaiting Parliament's enactment. PFTAC also arranged, through funding provided in late 2005 by NZAID, for the renewal of the secondment of a central banking manager from the Reserve Bank of Fiji to serve as the Deputy Governor of the National Reserve Bank of Tonga. Peripatetic advisors to provide assistance and training in the conduct of on-site bank examinations are being provided by Monetary and Capital Markets Department (MCM). The PFTAC Advisor visited the NRBT in January 2010 to review, among other things, the adequacy of prudential reporting requirements for banks. Based on that visit, additional visits by the Advisor are planned for later in 2010 to strengthen prudential bank reporting requirements and assist the authorities in revising/updating bank regulations.

### **Economic and Financial Statistics**

In 2002, two reviews were undertaken in accordance with the GDDS and the *Data Quality Assessment Framework*; one on BOP statistics and the other on the wider statistical system. Subsequent missions in 2004 finalized GDDS metadata, provided training in BOP concepts and practices, developed a new BOP business survey, and reviewed national accounts data.

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<sup>2</sup> Soni, Harris and Zinner-Toa: *Responding to the Revenue Consequences of Trade Reforms in the Forum Island Countries*: September 2007: Report commissioned by the Pacific Island Forum Secretariat.

In September 2005 a partial update of the 2002 statistical system review was done, focused on outputs of the Statistics Division of the Ministry of Finance. Further assistance was provided to peer review GDP and BOP estimates prior to publication. GDDS metadata was approved and published in 2006 on the Data Dissemination Bulletin Board. A TA mission in April 2007 provided further assistance with reviewing BOP statistics. Follow-up missions on BOP statistics were undertaken in April 2008 and March 2009, resulting in revised BOP estimates based on the *Balance of Payments Manual, 5<sup>th</sup> edition* (BPM5) standards being compiled. A further advisory mission on BOP was undertaken in March 2010 to assist in improving the use of source data and the methodology, as well as mapping the estimates to the BPM6 classification. In addition to the an advisory mission on revenue estimation and review of National Accounts Statistics (NAS) in mid-March 2008, a further TA advisory mission in March 2009 and a short-term expert mission in February 2010 implemented significant improvements in NAS methodology and use of source data, resulting in substantial improvements in the estimates and dissemination of an expanded range of NAS estimates. TA expert missions to develop producer price indexes were also undertaken in July 2008 and March 2009.



**ANNEX III. TONGA: RELATIONS WITH THE WORLD BANK GROUP**  
(As of March 30, 2010)

Tonga became a member of the World Bank Group in 1985. Since that time, the World Bank has approved six IDA credits and grants worth a total of SDR 18.6 million (equivalent to approximately USD 28 million based on exchange rates at the time of each loan approval).

There is scope for the Bank to potentially commit as much as USD 30 million in new IDA and trust fund assistance to Tonga during the IDA-15 period (FY09–FY11). Tonga's indicative IDA-15 envelope of approximately USD 7.5 million has been increased to USD 11.5 million to allow for additional reconstruction efforts following the impact of the tsunami in September 2009 on the outlying Niua islands. The Bank also has potential scope to provide further additional funds for Tonga on top of its IDA allocation, to respond to the impacts of the global slowdown and to assist Tonga participate in regional arrangements to improve broadband connectivity. In addition, the Bank in FY10 has mobilized an additional AUD 10.3 million from the Australian Government through the Pacific Regional Infrastructure Facility (PRIF) to support transport sector investments, particularly road maintenance.

Given Tonga's debt position, all new IDA support for Tonga is provided on grant terms.

Key components of the World Bank's current engagement include:

- **Health:** The Tonga Health Sector Support Project (an IDA credit of USD 10.9 million equivalent approved in 2003) has successfully supported Tongan Government efforts to improve the performance of the health sector, particularly Vaiola hospital, and make further progress toward the MDGs. The project closed in early FY10.
- **Education:** The Tonga Education Support Project (an IDA credit of USD 1 million approved in 2005 in conjunction with a New Zealand grant of USD 4.1m) introduced a successful schools grants program. School grants, allocated on a capitation formula, have ensured funding has been allocated equitably and able to be used flexibly by schools for maintenance and educational materials. This program has supported Tonga's own progress toward universal primary education, where the country remains broadly on track.
- **Transport:** The Tonga Transport Sector Consolidation Project (an IDA grant of USD 5.4 million equivalent approved in July 2008) aims to assist the Government to unify transport sector-policy, planning and regulation in the newly established Ministry of Transport. This is intended to improve civil aviation and maritime safety and security. With anticipated grant support through PRIF, the TSCP will also assist the government to directly contract local firms to undertake urgent and necessary road maintenance in a manner which ensures local participation and strengthening of the local industry as well as support maritime and air transport investments. The Australian Government has committed to provide an additional AUD 8.3 million through TSCP over the next 3 years.

- **Post-tsunami reconstruction:** The bank is finalizing a \$5 million investment to support reconstruction in the outlying Niuaus islands affected by the tsunami. It is anticipated that this will be presented to the Board in May 2010.
- **Energy:** The Bank is currently working with the Tongan Government and other development partners to develop a Tonga Energy Roadmap, as a series of integrated investments and reforms required to improve access and reduce the cost of electricity supply in Tonga, and minimize Tonga's vulnerability to oil price shocks, including by making greater use of renewable sources of energy. Leadership by the Tonga Government has ensured that this process has been a strong example of development coordination in the Pacific region. It is anticipated that the Bank will be able to support the final roadmap – with other development partners and potentially private sector investors – with current unallocated IDA resources, as well as with support through PRIF.
- **Development policy support:** The Bank is discussing options with the Tongan Government to potentially provide finance to assist Tonga respond to the global slowdown. Additional funds could possibly be found on top of Tonga's current IDA allocation from the Bank's pilot crisis response window. Policy actions could focus on implementation of the energy sector road map and improvements in the business environment. Critically, however, moving ahead with this operation will require the Tonga authorities to provide a coherent policy response to the actions that Tonga itself is taking to address fiscal imbalances.
- **Broadband connectivity:** The Bank Group is working with the Tongan authorities and other development partners, particularly the Asian Development Bank, to explore options for landing a broadband cable in Tonga to improve connectivity. Given the regional dimensions of connectivity arrangements, there is potential scope for this to be financed in addition to Tonga's regular IDA allocation.

**ANNEX IV. TONGA: RELATIONS WITH THE ASIAN DEVELOPMENT BANK<sup>3</sup>**  
(As of March 2010)

The Asian Development Bank (AsDB) strategy for Tonga supported the Government's Strategic Development Plan Eight 2006/07–2008/09 (SDP-8) in alignment with the objectives of the 2005 Paris Declaration on Aid Effectiveness. The Country Partnership Strategy 2007–2012 (CPS) focuses on poverty reduction by means of three intervention pillars—pro-poor, environmentally sustainable integrated urban infrastructure development; financing of pro-poor policies through effective, prudent macroeconomic and fiscal management; and private sector development—that address binding constraints on growth. Capacity strengthening and institution building will be among the key outcomes of the results-based CPS. The CPS outcomes expected are (i) improved fiscal governance, (ii) improved social services delivery in urban areas, and (iii) an improved private sector-enabling environment.

The SDP8 ended in June 2009 and a new National Strategic Planning Framework (NSPF) is now in place. The NSPF takes a longer term strategic approach and focuses on a limited number of uniquely national or whole of government priorities – with the implementation details to be contained in the corporate plans of ministries and departments. The NSPF identified seven outcomes fundamental to producing sustained and more equitable economic growth – (i) community development, (ii) private sector growth, (iii) constitutional reform, (iv) improved provision and maintenance of infrastructure, (v) increased performance of technical and vocational training, (vi) improved health, and (vii) environmental sustainability and climate change. The three pillars of the AsDB's strategy for Tonga remain valid in light of the outcome objectives highlighted under NSPF.

AsDB has approved 15 loans and two grants totaling \$79.1 million from the Asian Development Fund (ADF) to Tonga since it joined AsDB in 1972. Fifty-eight technical assistance (TA) projects with a value of \$17.5 million were also provided to improve capacity and strengthen institutional development in various sectors. Past AsDB investments have focused on finance development and infrastructure development in transport, power, agriculture, and fisheries.

Active projects include two grant-financed projects and three TA projects in the country portfolio. The grant-financed program approved in 2009 will help Tonga mitigate the impact of the global economic crisis, while establishing the basis for higher, more equitable and sustainable growth in the medium term and creating an economy more resilient to future shocks. Another grant-financed project supports enhancing living standards by improving urban infrastructure. The three ongoing TA projects focus on public enterprise reforms, urban planning and management system and economic and strategic management. Tonga also benefits from a number of regional technical assistance projects in private sector

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<sup>3</sup> Prepared by Asian Development Bank staff.

development, economic management, infrastructure-related activities, public financial management, statistics and HIV/Aids prevention and capacity development.

Tonga: Loan, Grant and Technical Assistance Approvals, 2005–09

	2005	2006	2007	2008	2009
Loan approvals					
Number	0	0	0	0	0
Amount (in millions of U.S. dollars)	0	0	0	0	0
Grant approvals					
Number	0	0	0	1	1
Amount (in millions of U.S. dollars)	0	0	0	11.3	10.0
Technical assistance approvals					
Number	1	2	1	1	2
Amount (in millions of U.S. dollars)	0.7	0.9	0.5	0.7	1.0

## **Annex V. Tonga: Statistical Issues**

While economic statistics are broadly adequate for surveillance, data deficiencies continue to complicate the monitoring of economic conditions and policy formulation. The Statistics Department (SD) and the Ministry of Finance (MOF) have received, on a regular basis, technical assistance in national accounts, government finance, and balance of payments (BOP) statistics from STA as well as the Pacific Financial Technical Assistance Centre (PFTAC); nevertheless, data provision to the Fund continues with long delays.

The two main sources of statistical information are the Quarterly Bulletin of the National Reserve Bank of Tonga (NRBT), and the annual and semi-annual budget reports from the MOF. The country has been participating in the GDDS since May 30, 2006. The metadata are posted on the Fund's Dissemination Standards Bulletin Board (<http://dsbb.imf.org/Applications/web/gdds/gddscountrycategorylist/?strcode=TON>).

### **Real Sector Statistics**

Following PFTAC assistance in 2008 and 2009 a new series of national accounts was released in June 2009. The new series retains a 2000/01 base year but has been revised to improve coverage and estimation techniques. However, source data remains weak and needs to be improved to allow a long overdue rebase of the national accounts.

The Consumer Price Index is based on a basket of goods and services from the 2000/01 Household Income and Expenditure Survey. Technical assistance was provided in 2008 on the development of an import price index.

Labor market statistics are weak: employment statistics have not been compiled since 2003; and average earnings statistics are not available.

### **Government Finance Statistics**

The FY 2002/03 Budget Statement introduced a presentation of fiscal data compiled according to the methodology of the 2001 Government Finance Statistics Manual. However, improvements are still needed to ensure accurate and reliable fiscal data. Proper classification of transactions is needed to permit reconciliation with monetary financing data. Lags in updating the accounting system should be shortened. Published data are often subject to significant revisions. No data are reported for publication in the *IFS* or *GFS Yearbook*.

### **External Sector Statistics**

Official BOP statistics are compiled annually by the SD with long lags. Monthly trade figures, derived from customs data, are available with a three-month lag. Unofficially, the NRBT compiles monthly balance of payments statistics based on the Overseas Exchange Transactions records of the banking system with a six-week lag. There are significant differences between the BOP estimates compiled by the two agencies. Moreover, large errors and omissions point to possible under recording of imports.

With PFTAC assistance in March 2009 the Statistics Department developed revised draft BoP statistics and methodology and made recommendations for further improvements in compilation techniques and source data. A follow-up mission took place in March 2010. The MOF has put in place a system that provides detailed information on official sector external disbursements and debt service.

### **Monetary and Financial Statistics**

NRBT reports data for the central bank, other depository corporations, and monetary aggregates using the standardized report forms (SRFs). These data were published for the first time in the March 2008 issue of *IFS* and *IFS Supplement on Monetary and Financial Statistics*. The NRBT will have to allocate resources to improve the quality of MFS by obtaining source data suitable for compilation of the SRFs in line with the recommendations of the *Monetary and Financial Statistics Manual*.

**Tonga: Table of Common Indicators Required for Surveillance**  
(As of April 7, 2010)

	Date of latest observation	Date received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of publication <sup>6</sup>
Exchange Rates	2/2010	March/2010	M	M	<i>M</i>
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	1/2010	March/2010	M	M	<i>M</i>
Reserve/Base Money	1/2010	March/2010	M	M	<i>M</i>
Broad Money	1/2010	March/2010	M	M	<i>M</i>
Central Bank Balance Sheet	1/2010	March/2010	M	M	<i>M</i>
Consolidated Balance Sheet of the Banking System	1/2010	March/2010	M	M	<i>M</i>
Interest Rates <sup>2</sup>	1/2010	March/2010	M	M	<i>M</i>
Consumer Price Index	1/2010	March/2010	M	M	<i>M</i>
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>	NA	NA	NA	NA	<i>NA</i>
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	02/2010	March/2010	M	Q	<i>Q</i>
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	02/2010	March/2010	A	A	<i>A</i>
External Current Account Balance	Q4/2009	March/2010	Q	Q	<i>Q</i>
Exports and Imports of Goods and Services	Q4/2009	March/2010	Q	Q	<i>Q</i>
GDP/GNP	2008/09	March/2010	A	A	<i>A</i>
Gross External Debt	6/2009	March/2010	A	A	<i>A</i>
<i>International Investment Position</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>

<sup>1</sup> Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

<sup>2</sup> Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA).

INTERNATIONAL MONETARY FUND AND  
INTERNATIONAL DEVELOPMENT ASSOCIATION

TONGA

**Joint IMF/World Bank Debt Sustainability Analysis 2010<sup>1</sup>**

Prepared by the staffs of the International Monetary Fund and  
The International Development Association

Approved by Nigel Chalk and Tom Dorsey (IMF)  
Vikram Nehru and Sudarshan Gooptu (IDA)

April 21, 2010

*Based on the joint IMF-WB low-income country debt sustainability assessment (LIC DSA), Tonga remains at a high risk of debt distress. Under the baseline scenario, both the PV-of-debt to GDP as well as the PV-of-debt to export ratios remain above the country-specific indicative thresholds for a prolonged period, and longer than indicated in the 2009 Debt Sustainability Analysis because of the recently contracted Y291 million (\$42½ million) China EXIM bank loan for road construction. Nonetheless, Tonga's very high and relatively stable remittance inflows (over 30 percent of GDP)—which are by far the largest source of foreign exchange earnings—help mitigate liquidity risks. Tonga's overall public sector debt indicators, are elevated in the short term, but show a decreasing trend over the longer run. Taking into account the cushion provided to the economy by the large workers' remittances, the projected debt profile is consistent with manageable—if high risk—debt dynamics. However, additional debt will further heighten the already high risk of debt distress, as well as risks to external sustainability, and significantly constrain the space available for social and developmental priorities, as outlined in the National Strategic Planning Framework. These vulnerabilities underscore the importance of sound macroeconomic policies to improve Tonga's growth potential on a sustained basis, export diversification, and continued efforts in fiscal consolidation.*

## I. BACKGROUND

1. **The external and public debt sustainability analyses are based on the standard LIC DSA framework.**<sup>2</sup> The DSA presents the projected path of Tonga's external and public

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<sup>1</sup>This DSA was prepared jointly with the World Bank, and in collaboration with the Asian Development Bank, in accordance with the Debt Sustainability Framework for low-income countries approved by the Executive Boards of the IMF and IDA. The debt data underlying this exercise were provided by the Tongan authorities.

<sup>2</sup>See "Debt Sustainability in Low-Income Countries: Proposal for an Operational Framework and Policy Implications" (<http://www.imf.org/external/np/pdr/sustain/2004/020304.htm> and IDA/SECM2004/0035,

(continued)



sector debt burden indicators, and draws some conclusions on the forward-looking sustainability of debt.

2. **Tonga’s total public sector debt stock (including publicly guaranteed debt) is high and rose substantially in FY2008/09 and FY2009/10, reaching over 50 percent of GDP.** This increase reflects the contracting of two loans from China’s Exim Bank for reconstruction—together with face values totaling over 30 percent of GDP—as well as the impact of weaker external environment on both GDP and the fiscal balance.<sup>3</sup> Work under the first reconstruction loan was initially postponed, as the government sought to ensure it was used productively and negotiated for a greater use of local inputs. The first drawdown was made in April 2009, with over half the amount projected to be disbursed by end-June 2010. Currently, it is believed only 30 percent of the funds from this loan will be used to finance direct government capital spending, with the remaining 70 percent of funds expected to be on-lent to the private sector for office, residential, and retail construction. The second loan agreement was signed in February 2010, and the first disbursement (30 percent) occurred shortly after the signing.

3. **Despite the rise in overall debt, the government has continued to reduce its domestic debt level.** Domestic debt has fallen from around 20 percent of GDP at the beginning of the decade to around a projected 7¼ percent of GDP by June 2010. Outstanding bank loans were repaid in 2007/08. This fiscal year, the government issued bonds amounting to a net issuance of T\$8 million to partly cover the deficit, leaving outstanding bonds at an expected 4¼ percent of GDP by end-June. The remaining domestic debt reflects mainly government guarantees and obligations to the Retirement Fund Board.

4. **Tonga’s DSA builds on the baseline scenario assumptions presented in Box 1.** It assumes that near-term GDP growth will recover to rates close to its historical average. Although the current reconstruction will likely lift growth in the short-term, the DSA conservatively assumes little increase in long-term growth despite the current large infrastructure investment. The reconstruction and road infrastructure projects are assumed to take place over the period until 2014/15, although they will be drawn down over the period through 2012/13. Excluding reconstruction and road spending, public spending will be set to grow more slowly than projected revenues and grants over the medium term, limiting the longer-term need for additional external borrowing. Remittances—which are the largest

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2/3/04), “Debt Sustainability in Low-Income Countries: Further Considerations on an Operational Framework and Policy Implications” (<http://www.imf.org/external/np/pdr/sustain/2004/091004.htm> and IDA/SECM2004/0629, 9/10/04), and reference to “Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries” (<http://www.imf.org/external/pp/longres.aspx?id=4419>).

<sup>3</sup> These loan commitments were signed in November 2007 (for reconstruction), and February 2009 (for roads), and bear a 2 percent interest rate, 5-year grace, and a 20-year maturity. The arrangement with the Chinese contractor performing the work associated with these loans requires an initial disbursement of 30 percent to cover the down payment, while outstanding disbursements are well ahead of work performed.

source of foreign exchange earnings (one-half of Tongans live abroad, mostly in Australia, New Zealand, and United States)—are assumed in the medium and longer term and remain an important external cushion.

**Post mortem analysis** suggests a similar path for debt dynamics. As in the last DSA, Tonga is at high risk of debt distress, with the debt burden peaking early in the projection period and then gradually declining. However, this year debt is expected to peak later at higher level, and external debt remain above the country-specific risk thresholds for slightly longer. This reflects the addition of the second Exim bank loan this year and bad economic outcomes in 2009/10. The current DSA assumes similar longer-term growth and export prospects, but a worse non-interest current account position due to the additional imports associated with the Exim loans and other donor support. However, reflecting this the current DSA assumes going forward that the Tongan government takes additional corrective action and runs a larger primary surplus and undertakes less new borrowing as part of its medium-term fiscal strategy. Specifically, the current DSA assumes primary surpluses of around 1 percent of GDP rather than the 0.4 percent assumed last year, and new concessional external borrowing to finance capital construction of only 4 million a year over the period 2015/16–2029/30, rather than the over 9 million assumed last year.

Key Macroeconomic Assumptions

	Baseline		Historical Average	2009 DSA Baseline	
	2009/10-2014/15	2015/16-2029/30		2008/09-2013/14	2014/15-2028/29
Real GDP growth (percent)	1.4	1.8	1.4	1.4	1.8
Growth of exports of goods and services (U.S. dollar terms)	3.8	4.9	6.5	1.8	4.7
Growth of remittance inflows (U.S. dollar terms)	5.9	5.2	5.1	...	...
Non-interest current account balance (in percent of GDP)	-16.6	-10.4	-4.7	-8.8	-6.2
GDP deflator growth (U.S. dollar terms)	0.5	2.9	4.2	0.8	2.9
Primary deficit (in percent of GDP)	2.6	-0.9	0.0	0.3	-0.4

## II. EXTERNAL DSA

### Baseline

5. **Under the baseline, the external debt trajectory breaches several policy-dependent thresholds in 2009/10 before receding to safer levels.** Public and publicly guaranteed (PPG) external debt is currently over 30 percent of GDP, the indicative threshold level, increasing in line with the reconstruction borrowing (disbursement of the China EXIM bank loan) in the last two years. Given the drawdown of the Exim Bank loans the PV of PPG external debt is projected to increase to about 42 percent of GDP by 2011/12, 12 percentage points above the threshold, before dropping under the threshold by 2017/18 and declining to around 8 percent of GDP by 2030.

### Box 1: Key Assumptions

- Real GDP growth is projected to average around 1½ percent over the period 2009/10–2014/15, reflecting a slowdown from the global financial crisis in the first two years and a recovery thereafter. Growth is assumed to strengthen marginally over the longer run, reflecting the impact of the current rebuilding and road construction exercises (amounting to over 30 percent of projected 2009/10 GDP). However, growth will likely remain low given structural impediments.
- As growth recovers, the current balance is assumed to narrow from a deficit over 5 percent of GDP in 2009/10 to surplus of ½ percent by 2014/15. The surplus is generated through wage restraint following the recent public sector restructuring and some tax administration gains.
- Over the longer-term, current revenue and spending are assumed to be broadly stable as a percent of GDP, with an average current balance of around ¾ percent of GDP. This results in a primary fiscal balance of around 1 percent of GDP, somewhat smaller outturns than before the current recession.
- Grants are projected to decline from current high levels, but remain significant at around 2½ percent of GDP over the longer term. This reflects the importance of donor commitments given the relatively small size of the Tongan economy and its vulnerability to external shocks. These grants, together with projected disbursements from concessional loans are assumed to be spent entirely on development projects and associated maintenance. Following the last disbursement of the current China Exim Bank loan (in 2012/13), we assume all future external borrowing is from concessional IFI (AsDB and World Bank) facilities.
- The external current account deficit is projected to reach 20 percent of GDP in 2011/12, up from 14 percent of GDP in 2008/09, driven largely by the large construction-related imports. Over the medium term, the deficit should return to around 10½ percent of GDP.
- Net FDI is projected to stabilize at around 9 percent of GDP.
- The export base is projected to remain narrow and relatively undiversified, while remittances have recently dropped as a result of the decline in economic activity in the United States and New Zealand, from which the greater part of remittances emanate. They are, however, expected to recover as these economies rebound from the impact of the global economic slowdown, including seasonal worker programs in Australia and New Zealand.

#### 6. **External debt remains well above the PV of debt-to-export distress threshold.**

Reflecting Tonga's low exports, the PV of PPG external debt-to-exports ratio is well over two-and-a-half times the indicative threshold of 100 percent, and is projected to remain above the threshold well past 2020. However, Tonga's large remittances, which are the largest source of foreign exchange earnings (one half of Tongans live abroad, mostly in Australia, New Zealand, and the United States), would help to reduce liquidity risks. Tonga's remittances have averaged more than twice export receipts over the past decade, and have provided a considerably more stable source of foreign exchange inflows.<sup>4</sup> Relative to

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<sup>4</sup> Remittance income growth has historically been much more stable than export growth. The coefficient of variation of remittances has been 1.3, much lower than the coefficient of 2 for export receipts.

remittances and exports the PV of PPG debt is projected to exceed 100 percent in 2010–12, and is projected to remain above the (lower) modified threshold until around 2013/14, 10 years sooner than when remittances are ignored. The PV of debt is expected to decline below the revenue threshold by 2014.

Tonga: External Debt Indicators

	Indicative Thresholds 1/	2008/09	2009/10
<b>NPV of external debt</b>			
In percent of GDP	30	24	34
In percent of exports	100	171	220
In percent of remittances and exports	90	60	93
In percent of revenue	200	136	183
<b>Debt service</b>			
In percent of exports	15	9	9
In percent of remittances and exports	14	3	4
In percent of revenue	25	7	7

1/ Represents Low Income Country DSA indicative thresholds for Tonga that is classified as a poor performer under the World Bank's Country Policy Institutional Assessment. The threshold for the ratios in percent of remittance and exports are modified by a 10 percent rule-of-thumb.

7. **Debt and debt service are expected to stay above the exports threshold for most of the projection period, but not when remittances are accounted for.** The impact of the global economic crisis will make it harder for Tonga to expand its very narrow export base in the short term, aggravating solvency and liquidity risks. Remittances will decline in the short term, but they are expected to recover and stabilize at around 30 percent of GDP over the longer term, somewhat below historical highs, but still providing a vital cushion against external debt distress and liquidity risks. Relative to exports and remittances, external debt service remains well under 10 percent throughout the projection period to 2029/30. The ratio of debt service to revenue remains well below the threshold of 25 percent throughout the projection period (Figure 1), albeit with a deterioration in the short to medium term.

#### Alternative scenario and stress tests

8. **Stress tests show the vulnerability of the debt position to a slowdown in exports or a significant depreciation.** The export shock stress test causes the present value of debt to exceed 500 percent of exports and remain more than 10 percent above the 100 percent threshold for the entire projection period. Similarly debt service to exports ratios rise even further above the 15 percent threshold, reaching over 30 percent in 2015. A large one-time depreciation causes the present value of debt to rise to around 60 percent of GDP and remain persistently above the 30 percent threshold even after 2020. Similarly a large depreciation also causes the present value of debt-to-revenue ratio to persistently breach threshold. Several other potential shocks would also see debt levels remain above the indicative GDP and export thresholds for a prolonged period. Similar stresses emerge when remittances are considered. The historical scenario is more sanguine mainly due to the fact that the current

rise in construction projects and donor assistance result in a larger current account deficit than occurred historically. Therefore, if the current account deficit were at historical levels, debt could be reduced more quickly, although these smaller current account deficits are unlikely in coming years.

### III. PUBLIC SECTOR DSA

#### Baseline

9. **The public sector DSA reinforces the conclusions of the external DSA.** The resumption of large scale public sector borrowing for road building and reconstruction of the capital reversed the trend, with present value of debt building up to almost 50 percent of GDP in 2011/12 before declining steadily thereafter under the baseline scenario. This highlights the importance of fiscal prudence, and a continued commitment to limit new public borrowing.

#### Alternative scenario and stress tests

10. **Stress tests indicate that vulnerabilities remain throughout the projection period, especially to a sizable depreciation.** Among the stress tests performed, a 30 percent depreciation results in the largest rise in the overall public debt burden. The NPV of public debt would rise and remain above 60 percent of GDP until 2013/14 and would be at 30 percent of GDP in 2030.<sup>5</sup> Maintaining the primary balance at its historical level (around balance) brings debt down faster given the large deficits implied by the Exim bank financed construction currently in train. This burst of construction will require larger longer-term primary surpluses (of around 1 percent of GDP) to ensure debt in line with our baseline.

### IV. STAFF ASSESSMENT

11. **Tonga remains at a high risk of external debt distress.** While Tonga benefits from very high and stable remittance inflows, which clearly mitigate its liquidity risks, remittances are insufficient to limit risks from projected debt service payments. Nonetheless, Tonga is able to service its current obligations, and the overall public sector debt dynamics, while elevated over the short term, shows a downward trend over the longer run, suggesting that debt dynamics are manageable, despite being at high risk.

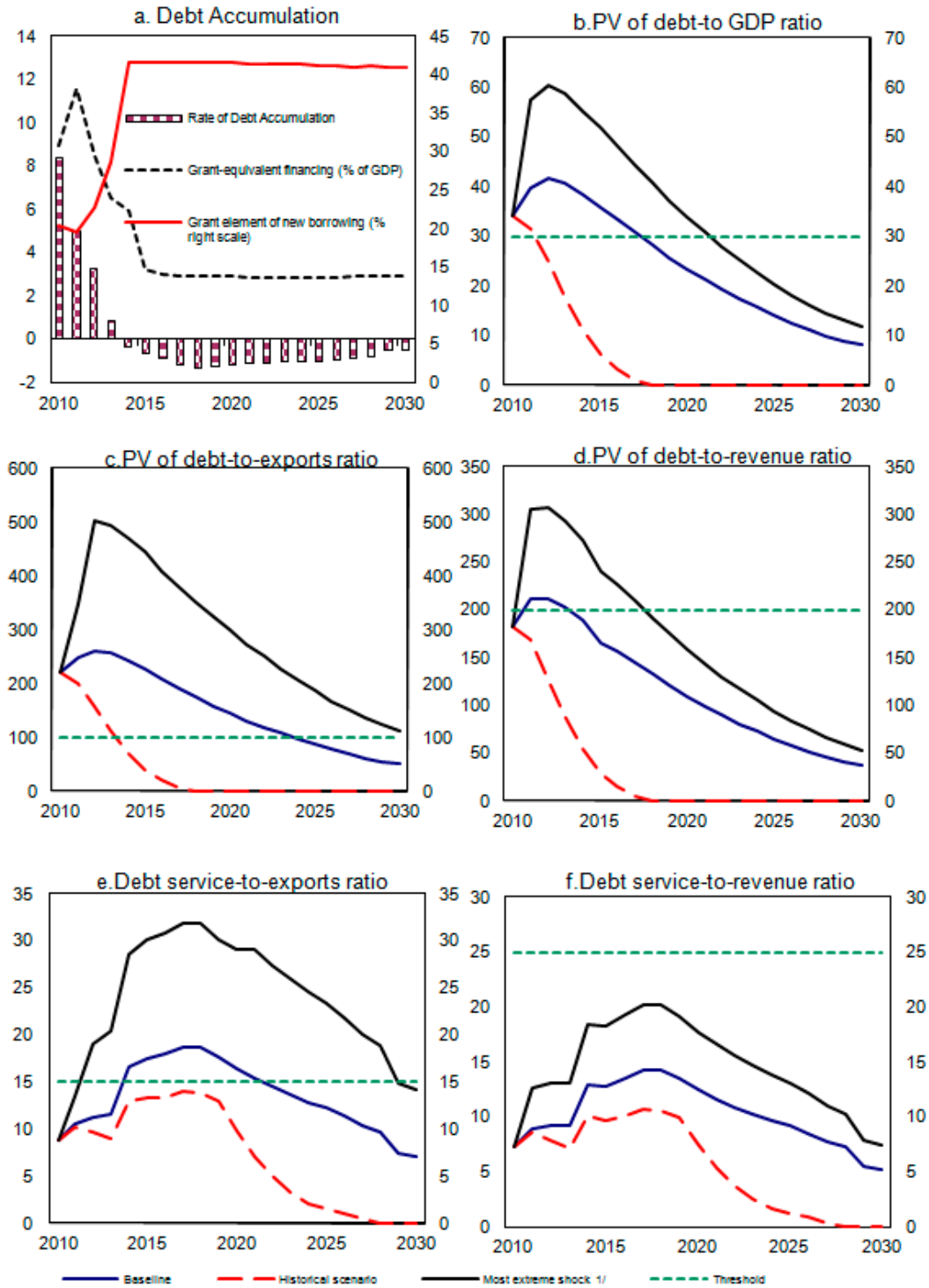
12. **Key medium-term vulnerabilities include lower GDP growth, major external shocks, and borrowing on less concessional terms.** These vulnerabilities underscore the importance of sound macroeconomic policies to improve Tonga's growth potential on a sustained basis, export diversification, and continued efforts in fiscal consolidation.

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<sup>5</sup> In the Fix Balance scenario, we assume a more ambitious medium-term fiscal program, where the primary balance is kept at 1 percent of GDP after 2010/11.

Moreover, increased utilization of donor grants and limiting recourse to further borrowing (even on concessional terms) is necessary to maintain manageable public debt dynamics and reduce the risk of external debt distress. Sound public debt management, anchored in a medium-term debt management strategy and in line with the medium-term fiscal framework, is also essential to guide future development financing in Tonga. Priority should be given to projects which would help generate high growth and employment, especially in the context of the NSPF, to help ensure debt service capacity in the future.

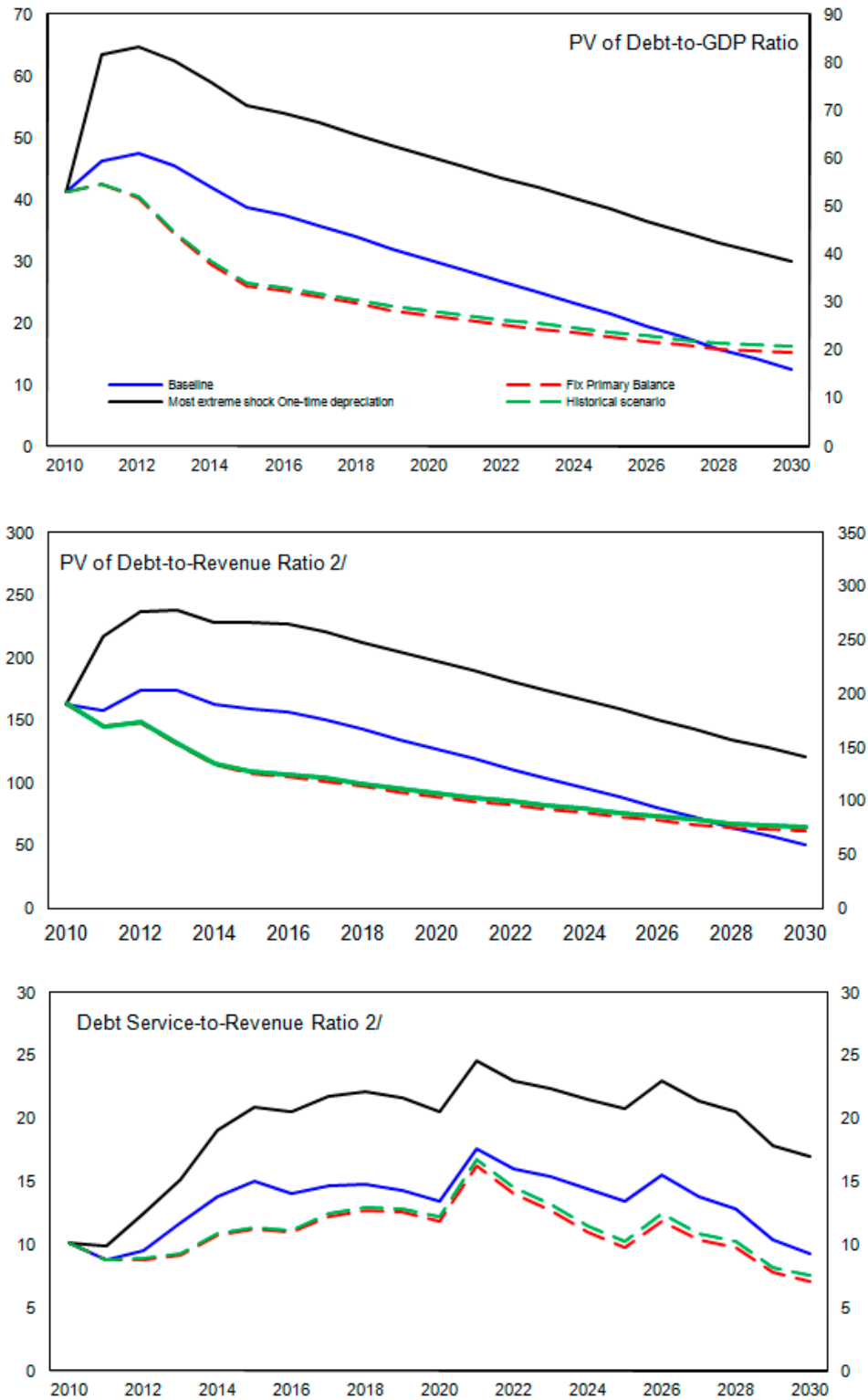
Figure 1. Tonga: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2010–2030 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2020. In figure b. it corresponds to a Non-debt flows shock; in c. to a Exports shock; in d. to a Non-debt flows shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock. Data refers to last date in fiscal year (e.g., 2010, refers to FY ending June 30, 2010).

Figure 2. Tonga: Indicators of Public Debt Under Alternative Scenarios, 2010-2030 1/



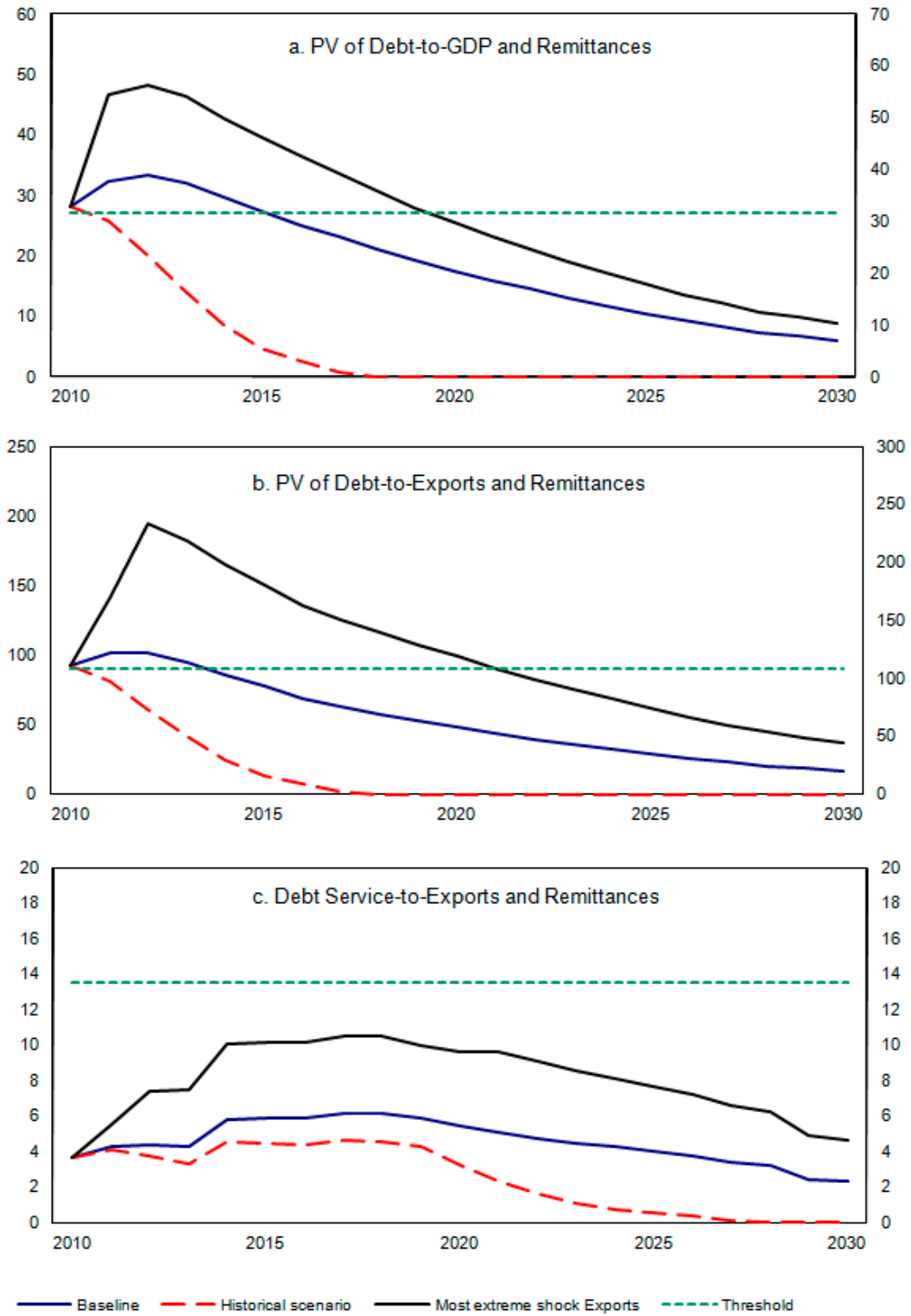
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2020. Data refers to last date in fiscal year (e.g., 2010, refers to FY ending June 30, 2010).

2/ Revenues are defined inclusive of grants.



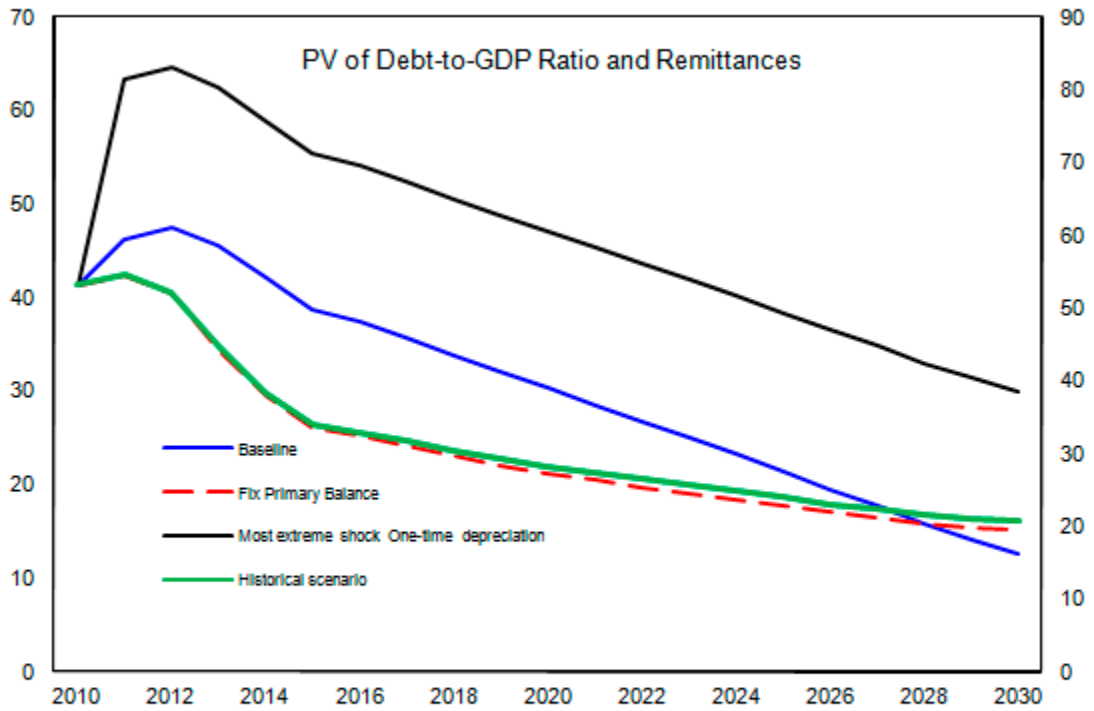
Figure 3. Tonga: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2010-2030 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2020. In figure a, it corresponds to a non-debt flows shock; in b, to exports shock; in c, to exports shock. Data refers to last date in fiscal year (e.g., 2010, refers to FY ending June 30, 2010).

Figure 4. Tonga: Indicators of Public Debt Under Alternative Scenarios, 2010-2030 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2020. Data refers to last date in fiscal year (e.g., 2010, refers to FY ending June 30, 2010).

2/ Revenues are defined inclusive of grants.

Table 1a.Tonga: External Debt Sustainability Framework, Baseline Scenario, 2007-2030 1/  
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average	Standard Deviation	Projections						2010-2015		2016-2030	
	2007	2008	2009			2010	2011	2012	2013	2014	2015	Average	2020	2030	Average
<b>External debt (nominal) 1/</b>	<b>27.1</b>	<b>25.3</b>	<b>31</b>			<b>44.2</b>	<b>50.7</b>	<b>52.8</b>	<b>51.2</b>	<b>47.9</b>	<b>44.8</b>		<b>29.4</b>	<b>11.6</b>	
o/w public and publicly guaranteed (PPG)	27.1	25.3	31.5			44.2	50.7	52.8	51.2	47.9	44.8		29.4	11.6	
Change in external debt	-1.9	-1.8	6.2			12.7	6.5	2.1	-1.6	-3.2	-3.2		-2.8	-1.0	
Identified net debt-creating flows	1.6	-1.4	3.9			10.8	12.5	12.6	10.0	7.8	4.9		0.7	1.9	
<b>Non-interest current account deficit</b>	<b>8.2</b>	<b>8.7</b>	<b>13.8</b>	<b>4.7</b>	<b>5.7</b>	<b>16.5</b>	<b>19.0</b>	<b>19.1</b>	<b>17.1</b>	<b>15.2</b>	<b>12.6</b>		<b>10.1</b>	<b>11.3</b>	10.4
Deficit in balance of goods and services	37.5	37.6	38.7			38.3	42.7	43.3	43.3	43.2	42.2		41.2	41.9	
Exports	10.8	14.4	13.9			15.5	15.9	16.0	15.9	15.8	15.7		16.1	16.1	
Imports	48.4	51.9	52.6			53.8	58.6	59.3	59.2	59.0	58.0		57.3	58.1	
Net current transfers (negative = inflow)	-27.9	-27.6	-23.1	-28.3	4.7	-19.9	-21.9	-22.2	-24.2	-26.0	-27.7		-29.6	-29.6	-29.6
o/w official	0.0	-0.1	-0.2			-1.7	-1.8	-0.1	-0.1	-0.1	0.0		0.0	0.1	
Other current account flows (negative = net inflow)	-1.4	-1.3	-1.9			-1.8	-1.8	-1.9	-2.0	-2.0	-1.9		-1.5	-1.1	
<b>Net FDI (negative = inflow)</b>	<b>-5.7</b>	<b>-7.1</b>	<b>-11.5</b>	<b>-4.3</b>	<b>4.2</b>	<b>-6.6</b>	<b>-6.5</b>	<b>-6.6</b>	<b>-7.2</b>	<b>-7.5</b>	<b>-7.7</b>		<b>-9.2</b>	<b>-9</b>	-9.2
<b>Endogenous debt dynamics 2/</b>	<b>-1.0</b>	<b>-2.9</b>	<b>1.6</b>			<b>0.9</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>		<b>-0.1</b>	<b>-0.1</b>	
Contribution from nominal interest rate	0.2	0.4	0.5			0.7	0.7	0.9	1.0	0.9	0.9		0.4	0.1	
Contribution from real GDP growth	0.3	-0.5	0.1			0.2	-0.7	-0.8	-0.9	-0.9	-0.8		-0.5	-0.2	
Contribution from price and exchange rate changes	-1.6	-2.8	1.0			...	...	...	...	...	...		...	...	
<b>Residual (3-4) 3/</b>	<b>-3.4</b>	<b>-0.4</b>	<b>2.3</b>			<b>1.9</b>	<b>-6.0</b>	<b>-10.5</b>	<b>-11.6</b>	<b>-11.0</b>	<b>-8.1</b>		<b>-3.5</b>	<b>-2.9</b>	
o/w 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/	...	...	23.7			34.1	39.8	41.8	40.9	38.4	35.8		23.4	8.1	
In percent of exports	...	...	170.7			219.8	249.7	261.2	257.3	243.2	228.2		144.9	50.2	
<b>PV of PPG external debt</b>	<b>...</b>	<b>...</b>	<b>24</b>			<b>34.1</b>	<b>39.8</b>	<b>41.8</b>	<b>40.9</b>	<b>38.4</b>	<b>35.8</b>		<b>23.4</b>	<b>8.1</b>	
<b>In percent of exports</b>	<b>...</b>	<b>...</b>	<b>171</b>			<b>220</b>	<b>250</b>	<b>261</b>	<b>257</b>	<b>243</b>	<b>228</b>		<b>145</b>	<b>50</b>	
<b>In percent of government revenues</b>	<b>...</b>	<b>...</b>	<b>136</b>			<b>183</b>	<b>212</b>	<b>212</b>	<b>203</b>	<b>189</b>	<b>166</b>		<b>110</b>	<b>37</b>	
<b>Debt service-to-exports ratio (in percent)</b>	<b>9.8</b>	<b>10.0</b>	<b>8.7</b>			<b>8.8</b>	<b>10.5</b>	<b>11.2</b>	<b>11.6</b>	<b>16.6</b>	<b>17.5</b>		<b>16.4</b>	<b>7.1</b>	
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>9.8</b>	<b>10.0</b>	<b>8.7</b>			<b>8.8</b>	<b>10.5</b>	<b>11.2</b>	<b>11.6</b>	<b>16.6</b>	<b>17.5</b>		<b>16.4</b>	<b>7.1</b>	
<b>PPG debt service-to-revenue ratio (in percent)</b>	<b>4.3</b>	<b>5.8</b>	<b>6.9</b>			<b>7.3</b>	<b>8.9</b>	<b>9.1</b>	<b>9.2</b>	<b>12.9</b>	<b>12.8</b>		<b>12.4</b>	<b>5.2</b>	
Total gross financing need (Millions of U.S. dollars)	10.9	10.3	11.3			33.4	43.1	45.0	38.5	35.9	27.7		16.0	22.9	
Non-interest current account deficit that stabilizes debt ratio	10.1	10.4	7.6			3.8	12.5	17.1	18.7	18.4	15.8		12.8	12.3	
<b>Key macroeconomic assumptions</b>															
Real GDP growth (in percent)	-1.2	2.0	-0.4	1.4	1.9	-0.5	1.7	1.7	1.8	1.8	1.8	1.4	1.8	1.8	1.8
GDP deflator in US dollar terms (change in percent)	5.7	11.5	-3.9	4.2	9.0	-9.2	0.9	1.4	2.8	3.9	2.9	0.5	2.9	2.9	2.9
Effective interest rate (percent) 5/	0.9	1.5	1.9	1.0	0.5	2.1	1.7	1.9	1.9	1.9	1.9	1.9	1.4	1.1	1.4
Growth of exports of G&S (US dollar terms, in percent)	-19.8	50.6	-7.4	6.5	25.1	1.0	5.3	3.6	3.8	4.9	4.3	3.8	4.7	4.7	4.9
Growth of imports of G&S (US dollar terms, in percent)	-6.1	22.2	-3.0	10.1	12.8	-7.6	11.7	4.4	4.3	5.4	2.9	3.5	5.2	4.7	4.8
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	20.3	19.5	22.8	28.6	41.6	41.6	29.1	41.5	41.0	41.3
Government revenues (excluding grants, in percent of GDP)	24.6	24.9	17.4			18.7	18.8	19.7	20.1	20.3	21.5		21.3	21.9	21.5
Aid flows (in Millions of US dollars) 7/	11.3	4.6	21.6			20.8	31.5	25.6	22.0	23.0	13.9		15.6	23.5	
o/w Grants	11.3	4.6	21.6			19.5	31.5	23.6	20.0	19.0	9.9		11.6	19.5	
o/w Concessional loans	0.0	0.0	0.0			1.3	0.0	2.0	2.0	4.0	4.0		4.0	4.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			9.0	11.6	8.5	6.5	5.9	3.2		2.9	2.9	2.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			49.0	69.4	71.6	85.9	89.7	83.1		84.8	89.7	86.3
<b>Memorandum items:</b>															
Nominal GDP (Millions of US dollars)	301.6	343.1	328.4			296.6	304.4	313.9	328.3	347.2	363.7		458.4	728.2	
Nominal dollar GDP growth	4.4	13.8	-4.3			-9.7	2.6	3.1	4.6	5.8	4.7	1.9	4.7	4.7	4.7
PV of PPG external debt (in Millions of US dollars)	...	...	80.8			108.3	123.1	133.1	135.8	134.6	132.3		108.7	59.8	
(PVT-PVT-1)/GDPT-1 (in percent)	...	...	...			<b>8.4</b>	<b>5.0</b>	<b>3.3</b>	<b>0.9</b>	<b>-0.4</b>	<b>-0.7</b>		<b>2.7</b>	<b>-1.2</b>	<b>-0.5</b>
Gross remittances (Millions of US dollars)	93.3	106.7	84.0			63.0	70.7	79.3	89.3	100.6	111.7		150.0	238.2	
PV of PPG external debt (in percent of GDP + remittances)	...	...	18.9			28.2	32.3	33.4	32.2	29.7	27.4		17.6	6.1	
PV of PPG external debt (in percent of exports + remittances)	...	...	60.1			92.8	101.6	101.3	94.9	85.7	77.2		47.8	16.6	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	3.1			3.7	4.3	4.4	4.3	5.8	5.9		5.4	2.3	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as  $[r - g - p(1+g)] / (1+g+p+gp)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $p$  = 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).

Table 1b.Tonga: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030  
(In percent)

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
<b>PV of debt-to GDP ratio</b>								
<b>Baseline</b>	34	40	42	41	38	36	<b>23</b>	8
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	34	32	25	18	11	6	<b>0</b>	0
A2. New public sector loans on less favorable terms in 2010-2030 2	34	42	45	44	42	40	<b>29</b>	15
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	34	41	44	43	40	38	<b>25</b>	9
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	34	43	49	48	45	42	<b>29</b>	11
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	34	43	48	47	44	41	<b>27</b>	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	34	44	49	48	45	42	<b>29</b>	11
B5. Combination of B1-B4 using one-half standard deviation shocks	34	43	50	49	46	43	<b>30</b>	11
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	34	58	60	59	55	52	<b>34</b>	12
<b>PV of debt-to-exports ratio</b>								
<b>Baseline</b>	220	250	261	257	243	228	<b>145</b>	50
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	220	199	156	113	71	40	<b>0</b>	0
A2. New public sector loans on less favorable terms in 2010-2030 2	220	261	279	277	265	253	<b>177</b>	93
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	220	254	265	261	246	232	<b>148</b>	51
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	220	347	502	494	469	445	<b>300</b>	112
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	220	254	265	261	246	232	<b>148</b>	51
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	220	273	304	300	285	270	<b>182</b>	68
B5. Combination of B1-B4 using one-half standard deviation shocks	220	297	367	361	342	325	<b>216</b>	80
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	220	254	265	261	246	232	<b>148</b>	51
<b>PV of debt-to-revenue ratio</b>								
<b>Baseline</b>	183	212	212	203	189	166	<b>110</b>	37
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	183	168	127	89	55	29	<b>0</b>	0
A2. New public sector loans on less favorable terms in 2010-2030 2	183	222	227	219	206	184	<b>134</b>	69
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	183	220	225	215	200	176	<b>116</b>	39
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	183	228	248	237	222	197	<b>138</b>	50
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	183	228	244	233	216	191	<b>126</b>	43
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	183	231	248	237	222	197	<b>137</b>	50
B5. Combination of B1-B4 using one-half standard deviation shocks	183	230	254	243	227	202	<b>140</b>	50
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	183	306	307	293	272	241	<b>159</b>	54

Table 1b. Tonga: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030 (continued)  
(In percent)

Debt service-to-exports ratio								
<b>Baseline</b>	9	10	11	12	17	18	<b>16</b>	7
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	9	10	10	9	13	13	<b>10</b>	0
A2. New public sector loans on less favorable terms in 2010-2030 2	9	10	11	12	17	18	<b>14</b>	6
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	9	10	11	12	17	18	<b>16</b>	7
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	9	14	19	20	29	30	<b>29</b>	14
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	9	10	11	12	17	18	<b>16</b>	7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	9	10	12	12	17	18	<b>18</b>	9
B5. Combination of B1-B4 using one-half standard deviation shocks	9	12	14	15	21	22	<b>21</b>	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	9	10	11	12	17	18	<b>16</b>	7
Debt service-to-revenue ratio								
<b>Baseline</b>	7	9	9	9	13	13	<b>12</b>	5
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2010-2030 1/	7	9	8	7	10	10	<b>7</b>	0
A2. New public sector loans on less favorable terms in 2010-2030 2	7	9	9	9	13	13	<b>11</b>	4
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	7	9	10	10	13	13	<b>13</b>	5
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	7	9	9	10	13	13	<b>13</b>	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	7	9	10	10	15	14	<b>14</b>	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	7	9	9	10	13	13	<b>13</b>	6
B5. Combination of B1-B4 using one-half standard deviation shocks	7	9	10	10	14	14	<b>14</b>	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	7	13	13	13	18	18	<b>18</b>	7
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	36	36	36	36	36	36	<b>36</b>	36

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.

3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

4/ Includes official and private transfers and FDI.

5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 2a. Tonga: Public Sector Debt Sustainability Framework, Baseline Scenario, 2007-2030 1/  
(In percent of GDP, unless otherwise indicated)

	Actual			Average	Standard Deviation	Estimate			Projections						
	2007	2008	2009			2010	2011	2012	2013	2014	2015	2010-15 Average		2016-30 Average	
													2020	2030	
<b>Public sector debt 2/</b>	37.3	33.9	38.6			51.4	57.1	58.5	55.8	51.6	47.6			36.3	16.1
o/w foreign-currency denominated	27.1	25.3	31.5			44.2	50.7	52.8	51.2	47.9	44.8			29.4	11.6
Change in public sector debt	-2.3	-3.4	4.7			12.7	5.7	1.4	-2.7	-4.1	-4.0			-2.2	-1.8
Identified debt-creating flows	-4.2	-5.9	8.4			5.1	5.8	3.0	2.6	-0.2	-1.4			-1.9	-1.8
Primary deficit	-1.6	-2.1	2.6	0.0	1.9	2.9	3.9	3.4	3.9	1.6	0.2	2.6		-0.8	-1.3
Revenue and grants	28.3	26.3	24.0			25.3	29.2	27.2	26.2	25.7	24.3			23.8	24.6
of which: grants	3.7	1.3	6.6			6.6	10.4	7.5	6.1	5.5	2.7			2.5	2.7
Primary (noninterest) expenditure	26.7	24.1	26.6			28.2	33.0	30.6	30.1	27.4	24.5			23.0	23.3
Automatic debt dynamics	-2.6	-3.4	1.3			3.1	1.9	-0.4	-1.3	-1.9	-1.6			-1.1	-0.5
Contribution from interest rate/growth differential	-0.4	-1.3	-0.1			0.4	-0.6	-0.7	-0.9	-1.0	-0.5			-0.5	-0.3
of which: contribution from average real interest rate	-0.9	-0.5	-0.2			0.2	0.2	0.3	0.1	0.0	0.4			0.2	0.1
of which: contribution from real GDP growth	0.5	-0.7	0.1			0.2	-0.8	-0.9	-1.0	-1.0	-0.9			-0.7	-0.3
Contribution from real exchange rate depreciation	-2.2	-2.1	1.3			2.7	2.5	0.2	-0.3	-0.9	-1.1			...	...
Other identified debt-creating flows	0.0	-0.3	4.6			-0.9	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Privatization receipts (negative)	0.0	0.0	4.6			0.2	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Recognition of implicit or contingent liabilities	0.0	-0.3	0.0			-1.1	0.0	0.0	0.0	0.0	0.0			0.0	0.0
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	1.8	2.5	-3.7			7.7	-0.1	-1.5	-5.4	-3.9	-2.7			-0.3	0.0
<b>Other Sustainability Indicators</b>															
<b>PV of public sector debt</b>	10.2	8.6	30.9			41.3	46.2	47.6	45.5	42.1	38.7			30.3	12.6
o/w foreign-currency denominated	0.0	0.0	23.7			34.1	39.8	41.8	40.9	38.4	35.8			23.4	8.1
o/w external	...	...	23.7			34.1	39.8	41.8	40.9	38.4	35.8			23.4	8.1
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...			...	...
Gross financing need 3/	-0.2	-0.4	4.6			5.5	6.5	6.0	7.0	5.2	3.9			2.4	1.0
PV of public sector debt-to-revenue and grants ratio (in percent)	36.1	32.8	128.6			163.5	158.5	174.9	173.7	163.5	159.4			127.1	51.2
PV of public sector debt-to-revenue ratio (in percent)	41.6	34.6	177.0			221.1	245.8	241.8	226.2	207.5	179.6			142.2	57.5
o/w external 4/	...	...	136.0			182.7	211.7	212.4	203.2	189.3	166.4			109.6	36.9
Debt service-to-revenue and grants ratio (in percent) 5/	4.7	6.5	8.4			10.2	8.8	9.5	11.7	13.8	15.1			13.5	9.3
Debt service-to-revenue ratio (in percent) 5/	5.5	6.9	11.6			13.8	13.7	13.1	15.3	17.5	17.0			15.1	10.4
Primary deficit that stabilizes the debt-to-GDP ratio	0.8	1.2	-2.1			-9.8	-1.9	2.0	6.6	5.8	4.2			1.4	0.5
<b>Key macroeconomic and fiscal assumptions</b>															
Real GDP growth (in percent)	-1.2	2.0	-0.4	1.4	1.9	-0.5	1.7	1.7	1.8	1.8	1.8	1.4	1.8	1.8	1.8
Average nominal interest rate on forex debt (in percent)	0.9	1.5	1.9	1.0	0.5	2.1	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.1
Average real interest rate on domestic debt (in percent)	-2.4	-2.7	-2.4	-4.0	3.5	0.6	2.3	2.4	1.5	0.6	0.6	1.3	0.6	0.6	0.6
Real exchange rate depreciation (in percent, + indicates depreciation)	-7.6	-8.1	5.1	-1.3	11.2	8.5	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.4	5.8	5.5	6.8	3.5	3.4	4.2	4.1	5.1	6.0	6.0	4.8	6.0	6.0	6.0
Growth of real primary spending (deflated by GDP deflator, in percent)	-0.1	-0.1	0.1	0.0	0.1	0.1	0.2	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	20.3	19.5	22.8	28.6	41.6	41.6	29.1	41.5	41.0	...

Sources: Country authorities; and staff estimates and projections.

1/ Data refers to last date in fiscal year (e.g., 2010 refers to FY ending June 30, 2010).

2/ Data covers general government and nonfinancial public enterprises. Gross debt is used.

3/ 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.

4/ Revenues excluding grants.

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

Table 2b.Tonga: Sensitivity Analysis for Key Indicators of Public Debt 2010-2030 1/

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
<b>PV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	41	46	48	46	42	39	30	13
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	41	42	41	35	30	26	22	16
A2. Primary balance is unchanged from 2010	41	42	40	34	30	26	21	15
A3. Permanently lower GDP growth 2/	41	46	48	47	44	41	36	32
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	41	48	51	50	47	44	40	30
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	41	44	44	42	39	35	27	9
B3. Combination of B1-B2 using one half standard deviation shocks	41	44	43	42	39	36	30	17
B4. One-time 30 percent real depreciation in 2011	41	63	65	63	59	55	47	30
B5. 10 percent of GDP increase in other debt-creating flows in 2011	41	56	58	56	52	49	40	22
<b>PV of Debt-to-Revenue Ratio 3/</b>								
<b>Baseline</b>	163	159	175	174	163	159	127	51
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	163	146	149	132	116	109	92	65
A2. Primary balance is unchanged from 2010	163	145	148	131	115	107	89	62
A3. Permanently lower GDP growth 2/	163	159	177	177	169	167	152	130
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	163	162	185	188	181	182	167	123
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	163	152	162	160	150	145	113	38
B3. Combination of B1-B2 using one half standard deviation shocks	163	150	158	158	149	147	124	68
B4. One-time 30 percent real depreciation in 2011	163	218	238	239	229	228	197	122
B5. 10 percent of GDP increase in other debt-creating flows in 2011	163	193	212	213	203	200	168	89

Table 2b. Tonga: Sensitivity Analysis for Key Indicators of Public Debt 2010-2030 1/ (continued)

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
<b>Debt Service-to-Revenue Ratio 3/</b>								
<b>Baseline</b>	10	9	9	12	14	15	13	9
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	10	9	9	9	11	11	12	8
A2. Primary balance is unchanged from 2010	10	9	9	9	11	11	12	7
A3. Permanently lower GDP growth 2/	10	9	10	12	14	16	15	15
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	10	9	10	12	15	17	16	15
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	10	9	9	10	13	14	13	8
B3. Combination of B1-B2 using one half standard deviation shocks	10	9	9	10	12	15	14	10
B4. One-time 30 percent real depreciation in 2011	10	10	12	15	19	21	21	17
B5. 10 percent of GDP increase in other debt-creating flows in 2011	10	9	11	17	16	17	15	14

Sources: Country authorities; and staff estimates and projections.

1/ Data refers to last date in fiscal year (e.g., 2010 refers to FY ending June 30, 2010).

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

3/ Revenues are defined inclusive of grants.





INTERNATIONAL MONETARY FUND

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Public Information Notice (PIN) No. 10/57  
FOR IMMEDIATE RELEASE  
May 12, 2010

International Monetary Fund  
700 19<sup>th</sup> Street, NW  
Washington, D. C. 20431 USA

## **IMF Executive Board Concludes 2010 Article IV Consultation with Tonga**

On May 6, 2010, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with Tonga on a lapse of time basis. Under the IMF's lapse of time procedures, the Executive Board completes Article IV consultations without convening formal discussions.

### **Background**

Tonga has been hit hard by the global crisis with declines in tourism, remittances and exports. At the same time, in large part due to worsening credit quality, bank balance sheets have weakened. This, in turn, has restrained the availability of credit despite the central bank's efforts to stimulate demand. Compounding these downward pressures, part of the Tongan archipelago was hit by a tsunami on September 29, 2009, causing loss of life and significant material damage.

Activity is estimated to fall in FY2009/10 (July-June) by ½ percent given delays in the implementation of capital projects and the low domestic value added content of spending linked to the China reconstruction loan, while the global crisis lowered both tourism activity and remittances inflows, banks contracted lending.

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

Consumer price inflation fell to 1½ percent year-on-year (y/y) in January 2010, reflecting a combination of lower global fuel and commodity prices. For 2009/10, inflation is expected to average 2¼ percent, reflecting stronger domestic demand and a recent increase in electricity prices.

The current account deficit has widened somewhat due to lower remittances and exports. Reserves have risen this year as a result of the recent SDR allocation and the disbursement of donor grants and loans to reconstruct the Central Business District.

The government has responded to the global crisis by loosening fiscal policy. In FY2009/10, the deficit is expected to rise to around 4 percent of GDP (from 3¼ percent of GDP in the previous fiscal year). This, together with the government contracting a new renminbi loan from China's EXIM bank, has increased Tonga's indebtedness and put the country into the range of "high risk of debt distress" according to the joint World Bank–IMF sustainability framework. Tonga's high debt leaves the economy more vulnerable to shocks and limits the fiscal space for future spending on social and developmental priorities as interest costs are borne in the budget.

Monetary policy also has been loosened since the onset of the global crisis. The National Reserve Bank of Tonga (NRBT) has lowered reserve requirements, reduced the interest rate on its repo facility and suspended the issuance of central bank bills. Despite this, a worsening credit quality has reduced banks' willingness to lend defusing the effect of the looser monetary policy on the real economy.

Following the marked deterioration in banks balance sheets in 2008, provisioning has increased. Banks are actively improving their risk management practices, with greater staff training on credit risk analysis, better communication with bank management, and more frequent audits. Most of the credit-related losses have been front-loaded and banks are expected to return to profitability by the second half of this year.

### **Executive Board Assessment**

In concluding the 2010 Article IV consultation with Tonga, Executive Directors endorsed staff's appraisal, as follows:

The Executive Directors observed that Tonga has been hit hard by the global crisis. The authorities' accommodative monetary and fiscal policy stances together with support from donor helped provide some relief and set conditions for a turnaround in the year ahead. Growth is expected to reach 1¾ percent in FY2010/11, on the back of increased construction activity, tourism, and remittances. However, near-term risks are the downside and relate to the strength of the global recovery and world commodity and food prices.

Directors noted that Tonga's medium-term growth prospects are constrained by the country's geographic isolation, its narrow export base, the high cost of labor, an inability to retain skilled labor, and impediments to private sector activity. They considered that the increase in both Tonga's external and public debt over the past year has left the economy more vulnerable to shocks. Directors emphasized the need for government policies in the coming years to focus on mitigating these limitations and debt vulnerabilities through continued progress on structural improvements to raise growth potential, continued support from donors, fiscal consolidation, and careful management of liabilities, reserves, and Tonga's external position.

Directors highlighted the limited room for fiscal support in FY2010/11 and urged the authorities to maintain a sustained effort in the coming years to put the public debt firmly on a downward path. Directors encouraged the authorities to step up revenue administration and expenditure control, prioritize expenditure, limit loan drawdown to finance projects that are productive, and establish a comprehensive debt management strategy that aims at limiting the large credit and currency risks in the government balance sheet. Directors encouraged donors to continue providing grants to support the government's fiscal efforts. Nevertheless, should grants be lower than expected, further fiscal restraint and possibly redirecting part of the government spending toward higher priority projects would be required.

Directors encouraged the authorities to maintain a neutral monetary policy stance in the months ahead given the risk that the ample liquidity in the banking system could feed through to higher inflation and downward pressure on international reserves. They emphasized the need to tighten the monetary policy stance by using the wide range of tools at NRBT's disposal if risks of higher inflation or downward pressures on reserves were to materialize. Directors recommended limiting the use of direct credit controls so as to minimize the associated distortions.

Directors noted the staff assessment that the currency is moderately overvalued and underscored the critical role of the flexibility afforded by the current exchange rate arrangement in safeguarding external stability. They encouraged the authorities to stand ready to gradually depreciate against the basket in order to safeguard external stability. However, to be effective, this will need to be accompanied with further fiscal restraint given the effect a weaker currency would have on the public debt burden. Directors welcomed NRBT's decision to review the current weights in the basket.

Directors welcomed NRBT's steady strengthening of bank supervision, as well as its recent decision requiring banks to improve the disclosure to their customers about the full costs of new loans. They encouraged the authorities to further step up supervision to promote financial stability and improve intermediation.

Directors underscored the importance of improving the legal framework for collateralized borrowing to lower financial intermediation costs and restart bank lending and promote private

drivers of growth. They encouraged the authorities to streamline the business licensing process and lower barriers to foreign investment and saw significant scope to improve the institutional framework for lending in order to increase access to finance and lower the cost of borrowing. In this regard, Directors urged the authorities to resist pressure to begin administering the level of interest rates to avoid a possible significant credit rationing as well as hampering banks' ability to properly price risk.

**Public Information Notices (PINs)** form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case. The [staff report](#) (use the free [Adobe Acrobat Reader](#) to view this pdf file) for the 2010 Article IV Consultation with Tonga is also available.

**Tonga: Selected Economic Indicators, 2005/06–2010/11 1/**

Nominal GDP (2008/09): US\$ 328.4 million  
 Population (2006): 101,991  
 GDP per capita (2008/09): US\$ 3,220  
 Quota: SDR 6.9 million

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
				Prel.	Proj.	
	(Annual percent change)					
Output and prices						
Real GDP 2/	0.5	-1.2	2.0	-0.4	-0.5	1.7
Consumer prices (period average)	7.0	5.1	9.8	5.0	2.2	4.2
Consumer prices (end of period)	6.4	5.6	12.2	1.2	4.3	4.1
	(In percent of GDP)					
Central government finance						
Total revenue and grants	26.6	28.3	26.3	24.0	25.3	29.2
Total revenue	24.9	24.6	24.9	17.4	18.7	18.8
Grants	1.7	3.7	1.3	6.6	6.6	10.4
Total expenditure and net lending	29.4	27.3	24.7	27.3	29.2	34.3
Of which: Current expenditure	28.8	26.2	24.3	24.1	23.9	22.8
Capital expenditure	0.8	0.9	0.4	2.3	2.7	8.6
Overall balance	-2.8	1.1	1.5	-3.3	-3.9	-5.1
Overall balance (excl. China's EXIM bank loans)	...	...	...	-3.3	-2.4	-2.5
External financing (net)	0.4	0.1	0.2	-0.7	3.6	5.4
Domestic financing (net)	2.4	-1.2	-1.7	8.6	0.5	-0.3
Privatization receipts	0.0	0.0	0.0	-4.6	-0.2	0.0
	(Annual percents change)					
Money and credit						
Total liquidity 3/	13.3	13.3	6.7	-1.1	4.3	1.4
Of which: Broad money (M2)	16.6	11.9	8.2	-1.8	2.0	2.5
Domestic credit	25.8	11.6	11.6	-4.2	-11.2	1.3
Of which: Private sector credit	22.6	9.5	18.0	-2.9	-11.0	2.0
Interest rates (end of period)						
Average deposit rate	5.2	5.6	5.7	5.3	...	...
Base lending rate	9.0	9.4	10.0	10.0	...	...
	(In millions of U.S. dollars)					
Balance of payments						
Exports, f.o.b.	15.4	13.3	12.4	5.5	5.2	6.3
Imports, f.o.b.	-122.2	-108.6	-138.1	-130.1	-115.7	-131.5
Services (net)	-7.8	-17.9	-3.3	-2.6	-3.3	-5.0
Investment income (net)	2.8	3.5	3.4	4.6	3.2	3.1
Services and investment income (net)	-5.0	-14.4	0.1	2.0	-0.1	-1.9
Current transfers (net)	88.9	84.2	94.7	75.8	59.1	66.7
Of which: Private transfer receipts	102.0	93.3	106.7	84.0	63.0	70.7
Current account balance	-22.8	-25.5	-30.9	-46.9	-51.5	-60.5
Current account balance (excl. China's EXIM bank loans)	-22.8	-25.5	-30.9	-46.8	-42.6	-45.0
(In percent of GDP)	-7.9	-8.4	-9.0	-14.3	-17.4	-19.9
Overall balance	0.6	4.2	-1.4	22.6	2.9	1.3
Terms of trade (annual percent change)	-12.0	21.9	-6.1	0.1	...	...

Gross official foreign reserves						
In millions of U.S. dollars	40.4	47.1	48.2	67.7	70.6	72.0
In months of goods and services imports	3.1	3.9	3.2	4.7	5.3	4.8
External debt (in percent of GDP)						
External debt	29.0	27.1	25.3	31.5	44.2	50.7
Debt service ratio	1.1	1.1	1.4	1.2	1.1	1.5
Exchange rates						
Pa'anga per U.S. dollar (period average)	2.0	2.0	1.9	2.1	...	...
Pa'anga per U.S. dollar (end of period)	2.1	1.9	1.8	2.0	...	...
Nominal effective exchange rate (1990=100)	70.5	68.4	66.0	67.6	...	...
Real effective exchange rate (1990=100)	103.6	103.5	105.9	111.7	...	...
Memorandum item:						
Nominal GDP (millions of T\$)	580.1	604.1	652.2	685.0	704.9	747.1

Sources: Data provided by the Tongan authorities; and IMF staff estimates and projections.

1/ Fiscal year beginning July.

2/ Including preliminary data.

3/ From the *Banking Survey*, which includes the Tonga Development Bank.