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TURKS AND CAICOS ISLANDS

FINANCIAL SECTOR ASSESSMENT PROGRAM

FINANCIAL SYSTEM STABILITY ASSESSMENT

October 2015

This Report of the Financial System Stability Assessment for Turks and Caicos Islands was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in September 2015.

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FINANCIAL SYSTEM STABILITY ASSESSMENT

September 24, 2015

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This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited Turks and Caicos Islands in April 2015.

- The FSAP team was led by Hiroko Oura and included Johannes Ehrentraud, Hibiki Ichiue (all MCM), Ernesto Aguirre, Keith Bell, and Rodolfo Wehrhahn (all IMF consultants).
- FSAPs assess the stability of the financial system as a whole and not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- The mission met officials of the Financial Services Commission (FSC) led by Managing Director Mr. Kevin Higgins, the FSC Chairman, Sir Errol Allen, Governor, Mr. Peter Beckingham, Minister of Finance, Trade and Investment, Mr. Charles Washington Misick, Chief Financial Officer, Mr. Stephen Turnbull, other senior officials, and representatives of the financial industry.
- This report was prepared by Hiroko Oura.

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AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
AUM	Assets under Management
BAFSL	British Atlantic Financial Services Ltd.
BAICO	British American Insurance Company Ltd.
BCP	Basel Core Principle
BIS	Bank for International Settlements
BO	Banking Ordinance
CAR	Capital Adequacy Ratio
CARICOM	Caribbean Community
CDD	Customer Due Diligence
CFATF	Caribbean Financial Action Task Force
CLICO	Colonial Life Insurance Company
CO	Companies Ordinance
DIS	Deposit Insurance Scheme
DIO	Domestic Insurance Ordinance
D-SIB	Domestic Systemically Important Bank
FSAP	Financial Sector Assessment Program
FSC	Financial Services Commission
FSCO	Financial Services Commission Ordinance
HQLA	High-Quality Liquid Asset
ICP	Insurance Core Principle
IIO	International Insurance Ordinance
IO	Insurance Ordinance
LCR	Liquidity Coverage Ratio
MD	Managing Director
ML/TF	Money Laundering/Terrorism Financing
MoU	Memorandum of Understanding
NPL	Nonperforming Loan
PORC	Producer-Owned Reinsurance Company
SIFI	Systemically Important Financial Institution
SPRF	Special Purpose Reserve Fund
SBRR	Special Bank Resolution Regime
TCI	Turks and Caicos Islands

EXECUTIVE SUMMARY

Establishing a stable financial system with a sound oversight framework is critical for an offshore financial center such as Turks and Caicos Islands (TCI)—a British Overseas Territory. Although the economy relies mostly on tourism, the financial system's (largely offshore) assets amount to about 450 percent of GDP. TCI is home to a large number of small, niche U.S.-based reinsurance companies, but banks account for a large part of the system's assets. The FSC is an integrated supervisor overseeing all financial institutions. The territory uses the U.S. dollar and does not have a central bank.

TCI recently suffered from major domestic financial distress, highlighting the unique challenges of the territory. The severe recession that started in 2009 led to a sharp increase in nonperforming loans (NPLs). In this context, a large indigenous bank failed, and depositors have so far recovered 40 percent of their claims. Furthermore, in 2014 a local insurance company was liquidated, a delayed consequence of the failure of a large regional insurer. Branch-based operations in TCI made it difficult to adequately protect TCI policyholders, who have recovered 20 percent of claims so far. Contagion to the rest of the financial system was limited.

In the near term, TCI banks on aggregate seem to have the capacity to withstand a range of adverse scenarios, but one bank shows signs of weak governance. Banks are foreign owned and operate a traditional business model with high capital buffers. While legacy nonperforming loans (NPLs) remain high and credit has been contracting since the crisis, demand-side issues appear relatively more relevant: the contraction is concentrated in the construction sector, and banks have sufficient capital to write off most of the existing NPLs. Stress tests underscore the importance of credit and concentration risk together with real estate collateral valuation, and most banks have sufficient capital to withstand a range of adverse shocks. Regarding liquidity, key risks are from customer deposits and, for some, intragroup funding. Since most of liquid assets are claims on group affiliates, ensuring their continued availability is the key for managing liquidity risks. Weak governance in one large bank is an important vulnerability, so the FSC should remain vigilant.

Although the financial oversight framework has significantly improved, the FSC should strive for further progress. Major advances have been made regarding the operational independence of the FSC and staffing. Nonetheless, the outdated Banking Ordinance (BO) and Insurance Ordinance (IO) need urgent overhaul. The functioning of the FSC should be strengthened by enhancing Board oversight; filling key positions at Board and senior management levels; strengthening communication and consultation with the industry; and improving the supervision and risk-assessment capacities of FSC staff.

The FSC has made progress toward aligning its banking supervision practices with international best practices, but clearly needs to do more. Ample financial resources have allowed staffing in appropriate number and quality (including experienced external consultants); a formal offsite supervision process has been implemented; and a suite of Guidelines has been issued. However, further action is required. In particular, the FSC should be afforded prior notification of

licensees' dividend payments so that they may be stopped in light of any solvency concerns. Moreover, the FSC should continue progress toward greater observance of the Basel Core Principles (BCPs), particularly those addressing risk and its management. A supervisory college should be established with key foreign regulators for comprehensive consolidated supervision of a large bank with a cross-border parallel bank structure.

The formerly dormant insurance supervision is catching up at a fast pace, but several urgent challenges remain. The FSC has issued several internal procedures and central Guidelines and has begun issuing penalties. Onsite and offsite supervision of insurers has started. However, policyholders' protection needs to be upgraded by strengthening the ability of the FSC to realize assets sufficient to cover all the liabilities to policyholders. The government should also consider providing financial support to policyholders of the recently failed life insurer in order to protect the credibility of life insurance for long-term savings. Then new IOs should ensure the FSC's exclusive authority on all dispensation decisions; increase the enforcement power of central supervisory requirements; and maintain the attractiveness of TCI for international insurers. Supervision should also be extended to agents and brokers.

The FSC should further strengthen its capacity for risk and financial stability assessments, focusing on the real estate market. The FSC is working on a macroprudential policy framework, beginning with identifying systemically important financial institutions and expanding its capacity for macroeconomic analysis. The FSC should develop and devote capacity for comprehensive risk assessments of individual institutions and system-wide stability, including stress testing. In particular, monitoring the real estate market is essential, and limits on loan-to-value ratios could be highly effective micro- and macroprudential policy tools.

TCI should establish a quick, effective, and legally certain framework to deal with nonviable banks. For this, a Special Bank Resolution Regime (SBRR) should be introduced by law. The SBRR should empower the FSC to directly take a whole array of resolution actions. The FSC Ordinance should also be amended so that the FSC's resolution actions cannot be overridden by a court.

Protecting small depositors is important, but TCI is not positioned to introduce a Deposit Insurance Scheme (DIS). The preconditions for a DIS are not currently met. However, other tools could protect small depositors, including depositor preference in bank liquidation, the creation of Special Purpose Reserve Funds (SPRFs), and firm funding commitments from parent banks.

A framework for crisis prevention and management should be established. TCI should create a Financial Stability Committee to ensure regular interagency coordination. TCI should adopt a strategy for crisis prevention and management. The Committee should also be in charge of establishing and overseeing implementation of a specific crisis-management plan in case of an actual crisis. TCI should take other actions as well, including establishing recovery and resolution plans for the systemically important banks; arranging Memoranda of Understandings (MoUs) with relevant foreign regulatory authorities for crisis prevention and management; and exploring alternative funding sources as last-resort emergency funding.

Table 1. Key Recommendations

High-Priority Recommendations	Time frame[1]	Para #
Financial Services Commission		
Governance		
Conduct an external evaluation of the FSC Board.	ST	35
Fill all vacancies at FSC Board and senior management levels, and introduce and fill deputy Managing Director (MD) positions.	ST	35
Strategic Focus and Resource Allocation		
Develop and devote capacity for comprehensive risk assessment of individual financial institutions and financial system-wide stability assessment, including stress testing, and communicate key messages.	NT	33,43,54
Oversight Power and Practice		
The FSC should be notified in advance of licensees' dividend payments and should have explicit power to stop them in light of solvency concerns.	ST	31,40,46
The FSC should access training in both onsite and offsite supervision for all supervised sectors.	NT	43, 45
Communication		
Develop a continuous relationship with the financial industry and formalize the process for consultation.	ST	37
Bank Supervision and Regulation		
Complete preparation of and enact the new Banking Ordinance.	NT	35,40,41
Continue progress toward BCP observance, particularly those addressing risk and its management, including better monitoring of real estate markets and collateral valuations.	NT	30,43,54
Establish a "college" with supervisor(s) of "parallel" bank(s), and regularly review the banks and their affiliates.	NT	31,38
Bank Resolution Framework		
Establish, by law, a Special Bank Resolution Regime.	NT	57
Modify the FSC Ordinance to ensure that resolution actions by the FSC are not overridden by the Court.	NT	57
Protection for Small Depositors		
Amend the Companies Ordinance (CO) and introduce (two-tiered) depositor preference.	NT	59
Establish a Special Purpose Reserve Fund to hold a portion of total customer deposits in high-quality liquid assets exclusively earmarked to protect small depositors in cases of failure of the respective banks.	NT	59
Insurance Supervision and Regulation		
Enact the Domestic Insurance Ordinance (DIO) and draft the International Insurance Ordinance (IIO) without further delay.	ST	35,46,52
Consider financial support to British Atlantic Financial Service Ltd. (BAFSL) policyholders.	ST	48
Amend the IO to allow only the FSC to grant special dispensations to insure TCI risks outside the country.	ST	36
Create statutory funds in TCI to segregate company assets that back up the liabilities of the insurers.	NT	47
Crisis Prevention and Management		
Create Financial Stability Committee with the MD of the FSC, the Minister of Finance, and the Governor in charge of high-level policy coordination for prevention and management of financial crisis, supported by information sharing and interagency coordination.	ST	60
Prepare and adopt a Strategy for Crisis Prevention and Management.	NT	60
Introduce recovery and resolution plans as key tools for preventive actions.	NT	41,62
Review and update bilateral and regional MoUs, including actions and protocols for crisis prevention and management.	NT	38,61

1/ "ST" indicates short-term (within one year), "NT" indicates near-term (within 1-3 years), and "MT" indicates medium-term (3-5 years).

Table 2. Risk Assessment Matrix[1]

Source of Risk	Likelihood of severe realization in the next 1-3 years	Expected impact of financial stability if risk is realized
A severe economic downturn in TCI with a plunge in real estate prices	**Low**	**High**
	• Similar to other Caribbean economies, TCI's economy is highly dependent on tourism demand from North America. However, a near-term U.S. economic slowdown is unlikely. • Other key current global risks (protracted growth in Europe and Japan, recession in China, and volatility and persistently low energy prices) matter little to TCI's economy.	• TCI banks' NPLs rise. On aggregate, high current capital ratios support the system's resilience, but stress tests show the system's CAR may fall below the regulatory minimum for a shock similar to the one experienced during the global financial crisis. • Resident and nonresident depositors may panic and run, owing to weak bank performance; the lack of standard safety-net tools; and the negative experience with TCI Bank. While most banks can sustain deposit run as long as deposits at foreign head offices are liquidated smoothly, there are no domestic policy tools to support troubled bank depositors.
Distress of a local financial institution due to weak governance	**Medium**	**Medium**
	• Although bank capital is high, asset quality is weaker than for Canadian banks. • Local capital may suddenly drop due to dividend payment to the parent bank—licensees do not need to notify the FSC of dividend payments, and the FSC does not have explicit power to stop dividend payment in light of solvency concerns. • Complex group structure and intragroup transactions challenge the overall assessment of the health of an institution. • Global corresponding banks may stop their services to Caribbean banks due to higher compliance costs.	• Each of the top four banks is large relative to the economy and has systemic importance for credit growth and financing the economy. • Canadian banks take most of domestic deposits, while the British–Belizean bank has only 2 percent of domestic retail deposits. • However, contagion effects and loss on depositors seem limited, with a small share in the banking system and without any domestic interbank exposures. • Insurers (foreign and local) are very small relative to the economy and have limited systemic stability implication. However, this could raise an important small policyholder protection issue.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Table 2. Risk Assessment Matrix (concluded)		
Distress of large borrowers of TCI banks	**Low**	**High**
	• A macroeconomic or company-specific shock could distress some of the large borrowers in the construction, land development, infrastructure, and tourism sectors.	• Loans are highly concentrated, and stress tests confirm the vulnerability to this risk, especially if real estate (serving as key collateral) prices plunge at the same time.
Distress of foreign head offices and group entities of banks and insurers.	**Low (Canadian banks)/Medium (Caribbean banks and insurers)**	**Low (insurance)/High (banks)**
	• Distress is unlikely for head offices of Canadian banks that are highly rated and well supervised at group levels. • As for the British–Belizean bank, its parallel banks in the Caribbean region also have high NPL ratios. Group performance is hard to determine due to limited group-wide disclosures. • Domestic insurers are owned by foreign parents in the Caribbean region, where insurance supervision is generally weak, and there is a history of major insurance-firm failure.	• TCI banks have large intragroup exposures and stress testing indicates the effects of credit loss or funding strain vis-à-vis parents are serious for some banks. Withstanding additional funding run would be difficult, as most liquidity buffers are deposits at foreign head offices. • Domestic insurers could fail following parent banks' failure, but systemic impact on the financial system should be limited because domestic insurers are small and have minimal links to banks. However, the loss on policyholders could be substantial without improving the framework for policyholders' protection.
Side effects from global financial conditions	**High**	**Low**
	• A surge in financial volatility could arise because investors reassess underlying risk and move to safe-haven assets given slow and uneven growth as well as asymmetric exit from expansionary monetary policy, with poor market liquidity and amplifying the effects on volatility.	• Market volatility may reduce nonresident deposits, but TCI banks have deposits at foreign head offices larger than nonresident deposits on aggregate. • The stress tests show banks have little maturity mismatch on the short end and are resilient against interest rate hikes. Also, banks are resilient against persistent U.S. dollar appreciation against the British pound. • Global financial volatility may increase foreign financing costs for resorts, hampering domestic growth.
Serious hurricane hitting the TCI	**Low**	**Medium**
	• TCI has suffered from hurricanes in the past. A strong hurricane season could result in unexpectedly high damages to the economy.	• Hurricanes can cause physical and economic damage. However, TCI has better physical infrastructure and stronger building codes than other Caribbean economies, reducing the damage compared with others. • The direct impact on TCI insurers is limited because a large part of property insurance is reinsured by global reinsurers.

INTRODUCTION

1. The authorities requested the IMF team to conduct the first Financial Sector Assessment Program (FSAP). Previously, TCI had a review of financial sector regulation and supervision in 2003. The Financial Services Commission (FSC), established in 2002, is an integrated supervisor overseeing all financial institutions. Since the 2003 assessment, the FSC has made substantial progress in improving its operational independence and staffing in line with the Fund recommendations (Appendix Table 1). However, the challenges of further strengthening the oversight framework and FSC's capacity remain. In addition, TCI has recently suffered from a failure of a systemically important local bank and a key life insurer, which revealed the need for establishing an effective resolution and safety net framework.

MACROECONOMIC BACKGROUND AND FINANCIAL SYSTEM PROFILE

A. Macroeconomic and Financial Context

2. TCI is a small prosperous island economy with a population of 35,000 and nominal GDP of about US$ 800 million (Appendix Figure 1). It had high GDP per capita of around US$ 23,000 in 2014, comparable to a number of small euro-area economies. Tourism (mainly from North America) generates more than half of GDP directly and indirectly. The U.S. dollar is used as legal tender, and TCI has no central bank.

3. The economy was hit hard in 2009, after some 15 years of steady growth. Following an average annual growth of 12 percent during 2004–08, GDP contracted by nearly 20 percent in 2009 due to the combined effects of the global financial crisis and Hurricane Ike, which reduced tourism receipts; and severe financial mismanagement by the TCI government, discovered in 2009. As a result, the United Kingdom took over the territory's governance, provided short-term funding, and imposed fiscal austerity measures. The government has been generating 3½-nearly 8 percent of GDP overall surplus since 2012, and public debt declined to 11 percent of GDP in 2014.

4. The economic distress has led to the high-profile bankruptcies of a local bank and a key life insurer, substantially harming small depositors and policyholders (Box 1). In early 2010, TCI Bank—TCI's only home-grown bank (funded mainly by small local depositors)—failed. The bank was put into a lengthy court-ordered liquidation, and without deposit insurance, other safety net tools (including lender of last resort), or support from the United Kingdom to bail out the bank, the depositors have so far recovered only about 40 cents to the dollar. In addition, a key local life insurer failed in 2014 as a delayed consequence of the failure of Trinidad and Tobago-based Colonial Life Insurance Company (CLICO) in 2009.[1] The ill-conceived attempt to continue its TCI branch

[1] The group had about US$ 16 billion—equal to some 30 percent of the Caribbean region's GDP in 2009—and had operations in all 15 Caribbean Community (CARICOM) states except for Jamaica and Haiti. See IMF Country Report 11/74, Trinidad and Tobago, Selected Issues, "Collapse of CL financial and government intervention."

operations by establishing a new local insurer—British Atlantic Financial Services Ltd. (BAFSL)—with an initial capital shortfall eventually failed. Policyholders—mostly local public servants with modest income who contributed for retirement, in some cases for over 20 years—are expected to recover 20 cents to the dollar so far.

Box 1. Failure of Financial Institutions in TCI

TCI Bank

TCI Bank was the only home-grown bank with assets of about 12 percent of GDP in 2010. It started operations in 2005, offering retail, corporate, and investment services. Most of its funding was local deposits. The National Insurance Board, managing national pension and insurance schemes, had substantial equity and deposit exposures. Many large real estate loans became nonperforming during the global financial crisis, which led to deposit outflows and eventually the failure of the bank. The licensing, supervision, and management of the bank remain contentious. There is a discussion that the licensing decision was made inadequately in favor of having an indigenous bank. There are also ongoing investigations concerning the preference for three large depositors over retail depositors.

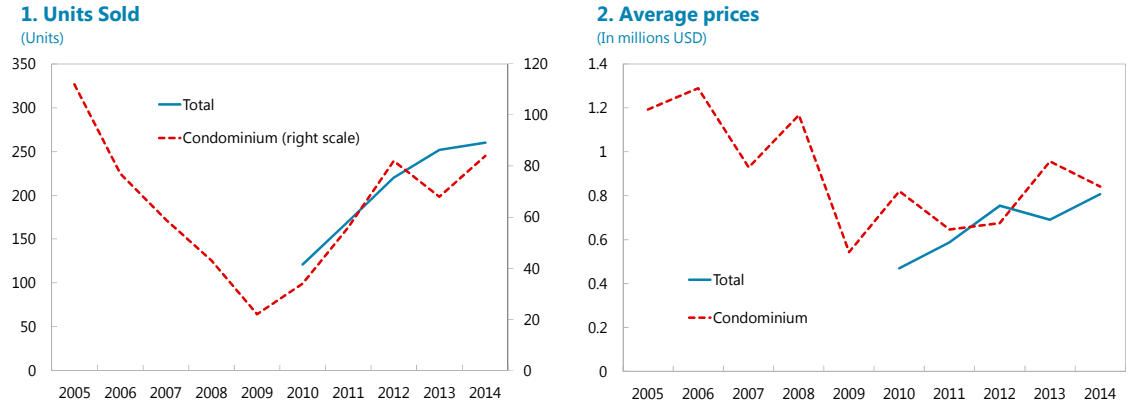
British Atlantic Financial Services Ltd.

The British Atlantic Financial Services Ltd. (BAFSL) was established in 2010, taking over the TCI operation of failed Bahamas-based British American Insurance Company (BAICO). BAICO failed with its parent (Trinidad and Tobago-based CLICO). BAFSL was licensed to operate, despite an inherited capital shortfall due to lost intragroup claims vis-à-vis BAICO, because an external actuarial report assessed that there was a chance to reduce policyholders' losses under a new company. However, losses increased, as BAFSL continued to guarantee returns on investments and a substantial amount of money was transferred from BASFL's restricted deposit (which should have been earmarked for protecting policyholders) to BAICO's administrator. Moreover, policyholders were not properly informed of the transition from BAICO to BASFL—both of which advertised as "BA."

5. Since the crisis, the economy has recovered gradually and the near-term prospect is favorable (Appendix Table 2). The aggressive fiscal austerity that started in 2012 limited the recovery of GDP. However, moderate near-term growth is expected, as fiscal surplus gradually declines and the strong U.S. growth helps the tourism sector.[2] Economic recovery has led to a rapid turnaround of high-end real estate markets, though indicators remain below the pre-crisis peaks (Figure 1).

[2] Much of the fiscal surplus has been set aside in a sinking fund to prepare for the repayment of US$ 170 million debts that will be guaranteed by the U.K, until 2016. As of March 2015, the balance of the sinking fund was US$ 110 million, leaving the gap of US$ 60 million (7½ percent of GDP).

Figure 1. Development in Real Estate Market



Source: Turks and Caicos Sotheby's International Reality.
Note: The data cover 15 TCI real estate agencies..

B. Financial System Profile

6. As an offshore financial center with no income and capital gain taxes, TCI has large banking, insurance, and asset management sectors with (mostly offshore) assets of about 450 percent of GDP (Table 3). Banks are the largest sector by assets, at about 230 percent of GDP and credit to residents stands just over 100 percent of GDP. The insurance sector is much smaller by assets (about 11 percent of GDP), but the largest by number because of niche U.S. manufacturer-owned offshore reinsurance companies called Producer-Owned Re-insurance Companies (PORCs).[3] The asset management industry is also large relative to the economy because of its offshore activities, but is relatively small compared to other U.K. overseas territories that actively offer these products.[4] Financial market activities are limited, and there is no domestic interbank, wholesale funding, or capital market, including government bonds.

[3] See Box 1 of IMF's 2003 review of financial sector regulation and supervision for TCI.

[4] For instance, Cayman Islands and British Virgin Islands are two of the most important domiciles for hedge funds operating around the world. As of 2014, Cayman Islands hosted about 1,200 hedge funds with over US$ 500 billion in assets under management (AUM) and British Virgin Islands hosted nearly 1,700 hedge funds with about US$ 150 billion in AUM (see Chapter 3 of the April 2015 *Global Financial Stability Report* by the IMF).

Table 3. Financial System Structure

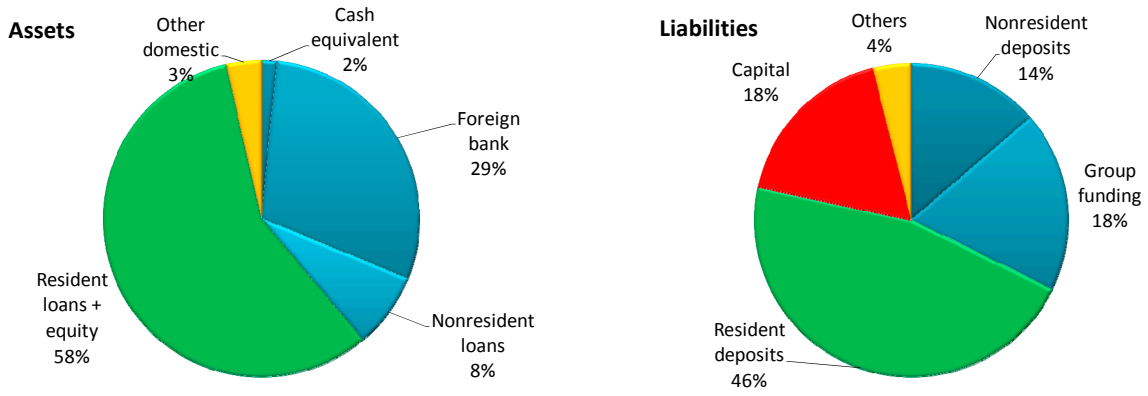
	2008	2009	2010	2011	2012	2013	2014
Number							
Banks (domestic and offshore)	9	9	8	8	8	7	7
Insurance companies							
Offshore insurers							
Reinsurers (PORCs)	3,565	4,000	4,700	5,095	5,494	6,161	6,954
Captives	183	190	220	224	97	88	80
Insurance managers	8	8	7	7	6	6	7
Domestic insurers							
Domestic insurance companies	17	18	19	20	20	21	19
Brokers, agents, subagents	19	22	22	24	25	27	27
Asset management							
Mutual funds	4	6	5	7	8	8	11
Mutual funds administrators	3	4	3	3	3	3	3
Investment dealers & advisors	...	8	8	9	7	5	7
Trust companies	20	19	19	16	15	13	11
Others							
Money transmitters	4	6	7	4	5	5	5
Assets (in millions of USD)							
Banks	1,791	1,710	1,656	1,750	1,827	1,743	1,820
Insurance companies							
Offshore insurers	...	39	46	48	37	40	43
Domestic insurers							
Domestic insurance companies	...	21	25	27	32	39	41
Asset management (assets under management)							
Mutual funds	...	...	...	...	...	210	256
Investment dealers & advisors	...	...	...	...	...	462	406
Trust companies	...	...	...	...	...	...	1,010
Others							
Money transmitters	...	...	3	2	2	2	2
Memorandum items:							
Nominal GDP (in millions of USD)	863	703	687	729	716	736	797
National Insurance Board (assets in millions of USD)	123	132	144	162	176	184	...
System assets (banks and insurers, in percent of GDP)	...	252	251	250	265	247	239
System assets (all, in percent of GDP)	...	...	...	...	...	...	449

Sources: TCI authorities; Turks and Caicos Islands National Insurance Board; and IMF staff calculations.
Notes: Assets under management of a financial institution with multiple licenses are decomposed by license. Assets managed by exempt investment dealers and mutual funds are not reported. Assets of trust companies include US$ 15 million assets of the company, in addition to their clients' assets.

Banking Sector

7. Ninety percent of the system's assets are held by three Canadian banks and one British–Belizean bank (Figure 2)**.** All banks are branches or subsidiaries of foreign banks or foreign holding companies. For supervision and reporting purposes, branches are treated in a similar manner as subsidiaries and are required to hold notional capital dedicated to local operations. All top four banks have both domestic and international licenses without much firewall in between. The FSC designates the top four banks as domestic systemically important banks (D-SIBs). About 60 percent of D-SIBs' assets are linked to domestic loan risks because equity investment is linked to domestic loans. Remaining assets are mostly liquidity up-streamed to foreign head offices. Key sources of funding are resident deposits and, to a lesser extent, capital and external funding (intragroup funding and nonresident deposits).

Figure 2. Balance Sheet Structure of Top Four Banks (Domestic and Offshore)



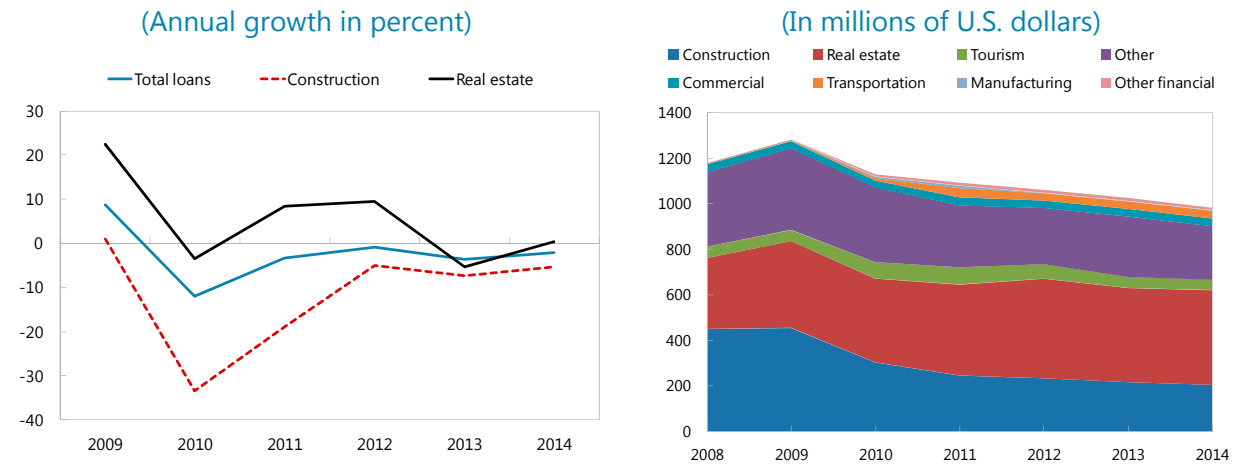
Source: FSC
Note: As of June, 2014.

8. The other three banks, one from Panama and two from Switzerland, specialize in offshore wealth management. Wealthy nonresidents, mostly European, are attracted to these TCI banks partly for tax reasons. Almost half of the banks' deposit accounts show a balance of at least US$ 100,000. Deposits on their balance sheets are typically placed with foreign group members.

9. Credit is given mostly to residents, and it has been contracting since the crisis because of the stagnation in the construction sector (Figure 3). About 90 percent of loans outstanding are to residents, mostly to households, followed by private businesses. Some of the nonresident loans appear to have domestic risk, as they could be lending for nonresidents' purchase of TCI real estate. Loans are concentrated in personal property, real estate, and, to a lesser extent, construction and land development. Credit has been contracting since the economic crisis. However, the contraction is concentrated in the construction sector, while banks managed to extend credit to other sectors in 2011-12 (notably real estate). Credit growth dented once again when drastic fiscal austerity started in 2012, causing demand shock. This seems to indicate weak credit growth has been mostly driven

by demand factors, and banks did have some capacity to extend credit where demand existed even after the crisis.

Figure 3. Loans to the Private Sector



Sources: FSC and IMF staff calculations.
Note: Share of private sector in total loans for 2011 was used to estimate loans to the private sector for 2008 to 2010.
"Other" includes Agriculture, Fisheries, Quarry Works, Public Utilities, Entertainment, Professional Services, Public Administration, Personal loans (not related to property acquisition) and in some case loans to overseas residents.

Insurance Sector

10. The offshore insurance sector continues to grow rapidly. There are over 7,000 firms, mostly PORCs, and 800 new licenses were issued in 2014. But the PORCs are small, and their assets are estimated to be about 5 percent of GDP. Little financial information on these insurers is collected regularly by the FSC, because this type of business usually poses low risks to the system.

11. The domestic insurance market is served by foreign branches. Currently, only two insurers out of 17 domestic insurers are incorporated in TCI. There are 11 non-life insurers, and they account for nearly 90 percent of premium income. Property insurance accounts for 67 percent of non-life insurers' gross premiums, but 90 percent are reinsured, distributing out natural disaster risks. The main life insurance business is credit life. (Bank borrowers are often required to obtain life insurance policies.)

Asset management industry

12. Most assets are managed for nonresident clients investing in foreign assets, although there are some domestic activities. Two trust companies and two mutual funds primarily focus on investment in TCI real estate (including mortgage funds), and they manage both foreign and wealthy local investors' money. Without adequate safeguards, large redemptions may weigh on real estate markets, though total assets were relatively small, amounting to around US$ 140 million (less than 20 percent of GDP), in 2014.

RISKS AND VULNERABILITIES

A. Risk Assessment

13. TCI's macroeconomy is subject to various external shocks (see Risk Assessment Matrix).

- The economy depends on tourism from the United States and, to a lesser extent, Canada. A North America recession would have a considerable and prolonged impact, but the likelihood of a near-term U.S. recession is currently low. TCI depends little on other economies.
- TCI has suffered from hurricanes in the past, but compared to most Caribbean islands, it has better physical infrastructure, which limits storm impact.
- Tighter U.S. monetary policy and related financial market volatility would increase dollar financing costs and availability, but the negative effects seem not to be large. External debt appears to be limited to the government's borrowing, guaranteed by the U.K. government, and its nonguaranteed loans from other official sector lenders.[5] The large hotels and resorts typically receive external funding from parent companies and sometimes from local banks.

14. However, TCI's institutional setup limits the likelihood and effects of potential domestic macroeconomic policy missteps. Monetary policy is anchored by using the U.S. dollar as legal tender. The United Kingdom is expected to hold a tight grip on TCI's public finances even after the expiration of the government debt guarantee, in 2016, providing institutional anchors for economic stability.[6] Many of the institutional reforms made since 2009 will remain.

15. Banks and insurers are dominated by foreign-owned companies with large intragroup transactions, making them vulnerable to spillover risks from the distress of foreign group entities.

- Parent bank distress seems unlikely for the majority of the banking sector, owned by highly rated Canadian parent banks well supervised by the home country regulator.[7] However,

[5] Only a limited amount of macroeconomic data is available for the territory. In particular, data on balance of payments, other than merchandise trade, and international investment positions are scant.

[6] TCI has to submit to the U.K. a four-year fiscal and strategic policy statement, which is updated annually along with the budget. The budget is monitored semiannually. The fiscal framework restricts government debt to funding capital projects and imposes stringent procedures for assessing new projects.

[7] Canada has a very high level of compliance with the Basel Core Principles for Effective Banking Supervision (FSAP 2014).

assessing group-wide health is difficult when a bank is held by a nonfinancial holding company or has a parallel bank structure.[8]

- The risk of group entity distress seems to be more acute for domestic insurers because most of them are branches of insurers from the Caribbean region (especially the Bahamas, Barbados, Bermuda, Cayman Islands, and Trinidad and Tobago), as seen with the CLICO case. On the other hand, the spillover risk from offshore insurers owned by U.S. manufacturers seems negligible, given that each of them is small with no TCI operations.

16. TCI's local financial institutions have a history of weak governance (Box 1). The failed institutions exhibited issues with local management's capacity to manage risks properly and with challenges for the FSC to address problems promptly. Similar types of concerns apply to some existing institutions, in particular among those headquartered in the Caribbean. Some have complex, nontransparent ownership structures (including parallel banks) that challenge consolidated supervision. Moreover, rising compliance costs appear to have made some global banks discontinue their correspondent bank services with banks in offshore financial centers, which could immediately close down affected banks' international operations.

17. Outward spillover risks generally appear small. Foreign exposures of TCI banks are small for most banks. An exception could be the British–Belizean bank, though it is hard to map its intragroup linkages fully, including nonfinancial entities. As for insurers, TCI-domiciled domestic insurers do not have overseas operations. They are also too small to affect groups' performance. Spillovers through offshore PORCs seem limited as well because they are small and have straightforward and low-risk insurance characteristics, and their parents are manufacturers, not financial institutions.

B. Vulnerability Analysis

Banks

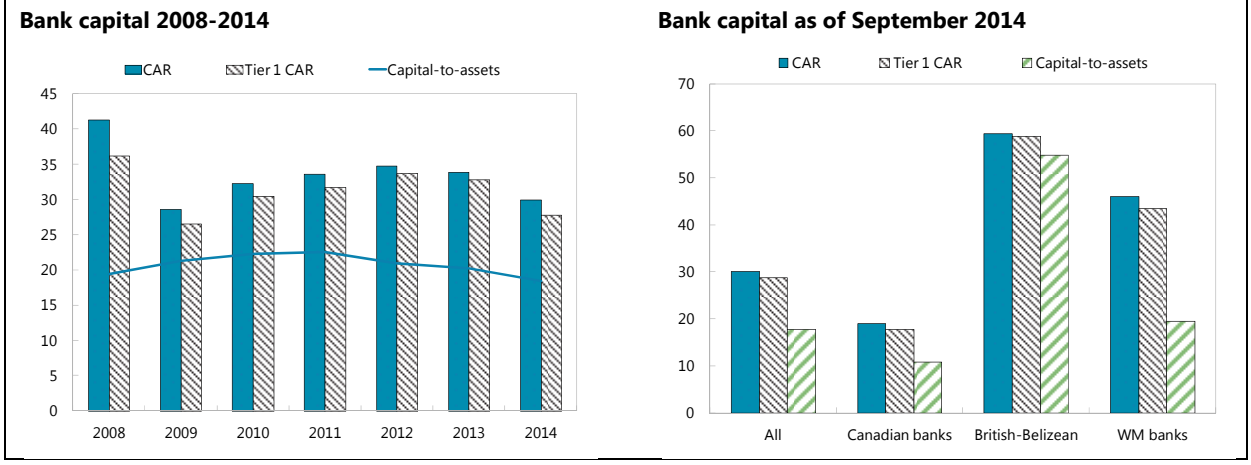
18. Banks have high capital ratios but suffer from weak asset quality and subdued profitability (Figure 4 and Appendix Table 3). The total capital adequacy ratio (CAR) for the system stood at 30 percent in 2014, much higher than the regulatory minimum of 11 percent and other economies in the Caribbean. This high level is mainly driven by the third largest and three wealth management banks with 45-60 percent CAR. The NPL ratio has increased by more than 15 percentage points since the crisis, especially in the construction sector that has NPL ratio of 78 percent. Banks have been cutting credit exposures to this sector. Difficulty in selling real estate collateral and deficiencies in the insolvency regime slow down write-offs, keeping the NPL ratio at a high level of almost 20 percent. As is typical in a small economy, banks face high loan-concentration

[8] Parallel banks are defined as banks licensed in different jurisdictions that, while not being part of the same financial group for regulatory consolidation purposes, have the same beneficial owner(s), and consequently, often share common management and interlinked businesses (BIS 2003).

risk, and the share of the top 10 borrowers in net credit is about 35 percent. Profitability remains weak due to provisioning needs for the NPLs and subdued interest margin, and the aggregate CAR has been declining. Although provisioning practices seem conservative (banks usually do not incorporate collateral value for provision calculations), legacy NPLs could weigh on credit and economic growth, especially if the need for write-offs and additional provisions leads to capital shortfalls. Moreover, (equity) investment assets seem to be linked to NPLs for one bank.

19. Banks face special challenges to manage liquidity risk, given TCI's institutional setup and the structure of the financial system. All top four banks have domestic and offshore operations. On aggregate, about two-thirds of total liabilities are residents' deposits and capital, and one-third is external funding including both intragroup funding and nonresidents' deposits (Figure 2). Most of the liquid assets are deposits at foreign head offices and a small amount of cash, because the lack of government debt and an underdeveloped private capital market cap the supply of safe and liquid domestic assets.[9] As a result, external liquid assets nearly match up with all external funding. Yet the resilience against systemic liquidity shocks critically depends on the timely availability of the liquidity buffer kept at head offices. So far, the experiences during the financial crisis show fairly smooth provision of liquidity by head offices. Furthermore, TCI does not have a central bank and therefore no lender-of-last-resort function. In addition, there is no tool to manage liquidity in the system through a cycle such as a reserve requirement.

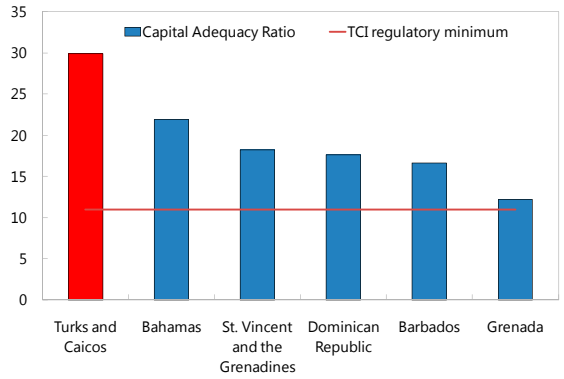
Figure 4. Bank Soundness
(In percent unless otherwise indicated)



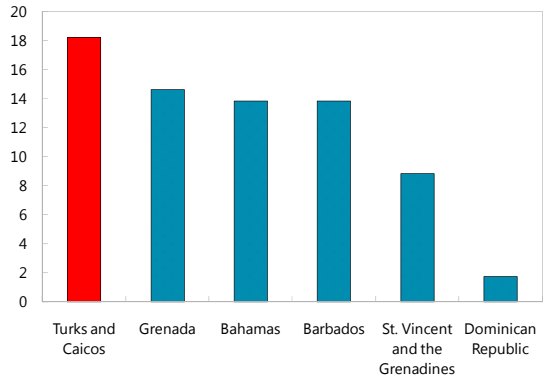
[9] Gross public debt is low by international standards (11 percent of GDP in 2014).

Figure 4. Bank Soundness (continued)

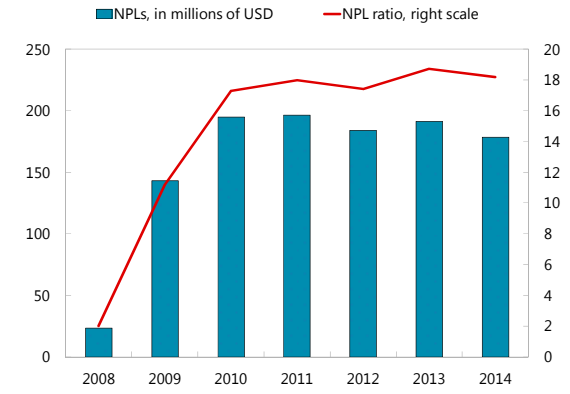
Capital adequacy ratio



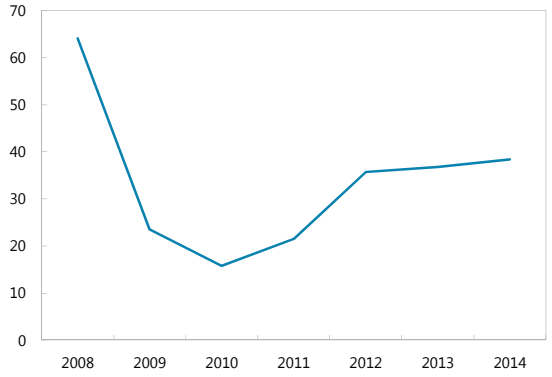
NPLs in percent of total loans



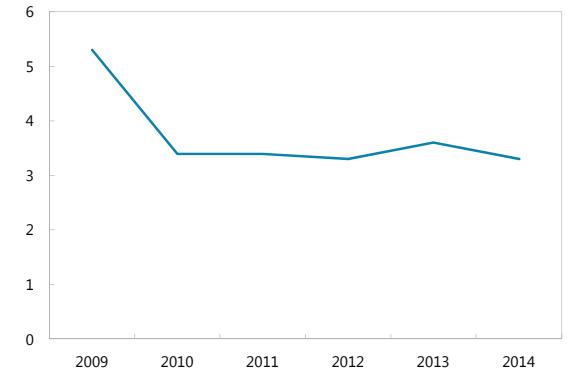
NPLs



Provisions + write-offs in percent of NPLs



Net interest margin



Profitability and efficiency

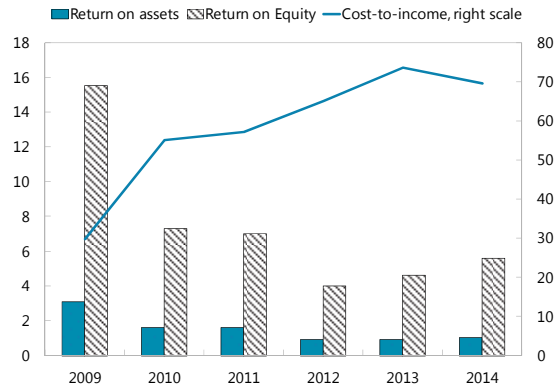
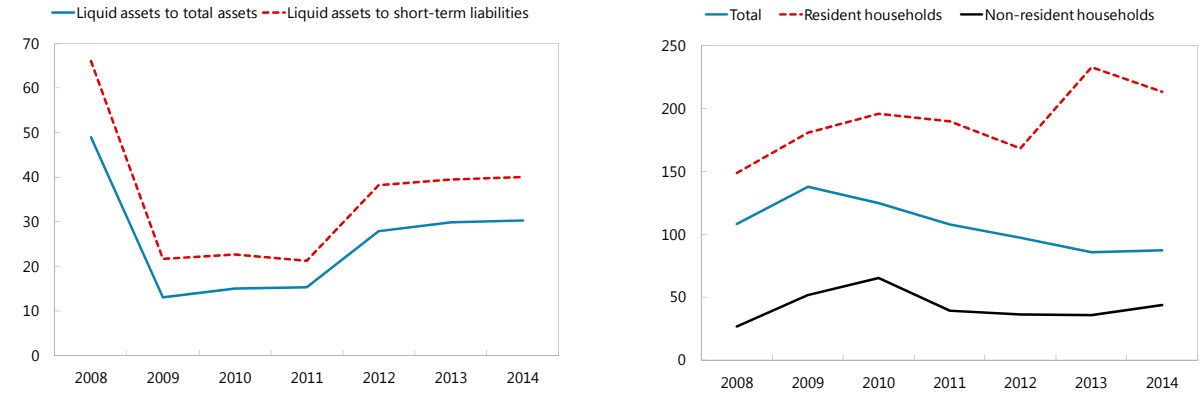


Figure 4. Bank Soundness (concluded)



Sources: The Financial Services Commission and IMF staff calculations.
CAR = capital adequacy ratio; WM = wealth management.

Insurers

20. Soundness of domestic insurers is hard to assess. With the exception of one insurer, the solvency ratios are high, over twice the regulatory requirements. However, the solvency definition is weak compared with international standards. The reported profitability is high, but does not reflect the total operational costs incurred by the home office. Moreover, the life insurance sector is under stress with BAFSL's liquidation, which could affect the credibility of the sector to provide long-term savings options.

21. The health of TCI banks and global reinsurers could affect domestic insurers. Over 90 percent of insurers' assets are held in bank deposits due to the lack of other investment opportunities in TCI. Property insurance dominates the non-life business, and 90 percent are reinsured, mainly by major global reinsurers through the home office.

C. Bank Stress Test

Framework

22. The FSAP team evaluated the soundness of the banking sector's solvency and liquidity with top-down stress tests. The FSC did not have the capability to undertake its own stress testing, but was involved in the process and provided granular supervisory data. The tests covered the four D-SIBs with a market share of nearly 90 percent and used end-June 2014 data. The data include both domestic and offshore exposures and cross-border intragroup transactions. See Appendix Table 4 for the details of the stress-testing framework.

Solvency stress test

23. The solvency test relied on a series of single-factor sensitivity stress tests. Banks' solvency was assessed against provisioning adequacy, various credit shocks (including shock to

intragroup claims), interest rate shocks, and exchange rate shocks. Limited macroeconomic data and long-term supervisory data constrained developing fully fledged macroeconomic scenarios and a macro-financial linkage model. Instead, assumptions were chosen based on expert judgment and experiences during the global financial crisis. The reported capital adequacy ratios were adjusted for under-provisioning and misclassification of loans as equity investments.

24. The results show that most banks have the capacity to write off legacy NPL (Table 4).

- The system has sufficient capital to absorb the effects of adjusting for under-provisioning. The system's CAR declines only moderately, even with a 100 percent haircut on collateral and higher required provisioning rates in line with other economies. However, one bank's CAR declines substantially once investment is reclassified as loss loans. Overall, these adjustments reduce the system's CAR by 7.9 percentage points, but CAR is still over 20 percent, and the effect is concentrated in the smaller banks.

- The deterioration of existing NPLs reduces the system's CAR by 0.7-4.7 percentage points. Although all banks can absorb the impact, the effect is concentrated in one bank with a high stock of NPLs.

25. Bank capital is sensitive to severe credit shocks, concentration risks combined with real estate collateral valuation, and intragroup credit risks, though there are substantial differences across banks.

- Generalized credit shocks reduce system CAR by 2.3-10.2 percentage points. The largest increase of NPL ratio, by 20 percentage points, corresponds to TCI's experience in 2009. This could reduce system CAR below regulatory minimum, though the likelihood of such an event is currently small because of the strong near-term U.S. growth outlook. Canadian banks are affected more, because most of the other banks' loans are already nonperforming. One bank is also vulnerable to the performance of the construction and property sectors.

- As for concentration risk, default of the largest five borrowers, with a 50-100 percent haircut on collateral, reduces system CAR by 2.3-27.1 percentage points and below the regulatory minimum in some cases.

- Credit risk from intragroup assets would reduce one Canadian bank's CAR below the regulatory minimum, as it up-streams liquidity to head offices substantially.

- Foreign currency and interest rate shocks are of minor importance for all banks.

Table 4. Solvency Stress Test Results

	Aggregate (Top 4 banks)		Banks below regulatory minimum CAR		Capital shortfall
	Level	Change	Number	Share in total assets	Volume
	In percent	In percentage points	Number	In percent	In percent of GDP
Baseline situation (mid-2014)					
Capital adequacy ratio, actual	29.0	...	0	0	0.0
Share in total assets	87.0	...	...	...	...
NPL ratio	17.9	...	...	...	...
Adequacy of provisioning requirements					
Provisioning and asset classification					
Adjustment for under-provisioning 1/	21.1	-7.9	0	0	0.0
Raising provisioning requirements to match international practices					
Higher minimum provision levels with collateral 2/	20.6	-8.3	0	0	0.0
Higher minimum provision levels without collateral 3/	19.4	-9.6	0	0	0.0
Adjusted CAR 1/	**21.1**	-7.9	0	0	0.0
Single factor stress tests, applied to adjusted CAR					
Credit risk					
Worsening of existing NPLs within current provisioning requirements					
Migration of substandard to doubtful, 30% collateral haircut	21.1	0.0	0	0	0.0
Migration of substandard to doubtful without collateral	18.5	-2.6	0	0	0.0
Downward migration of one bucket of all NPLs, 30% haircut	21.1	0.0	0	0	0.0
Downward migration of one bucket of all NPLs, w/o collateral	16.4	-4.7	0	0	0.0
Increase in NPLs					
NPL-ratios increase by 20 ppt, equal distribution of new NPLs 4/	10.9	-10.2	3	83	4.0
NPL-ratios increase by 20 ppt, system-wide provisioning rates 5/	13.9	-7.2	2	40	1.6
NPL-ratios increase by 20 ppt, bank specific provisioning rates 6/	13.8	-7.3	2	51	1.2
NPL-ratios increase by 20 ppt, 25% provisioning rate 7/	16.6	-4.5	1	8	0.3
Bank specific increase in NPL ratio and provisioning rate 6/8/	18.2	-2.9	0	0	0.0
Bank specific increase in NPL ratio 7/8/	19.3	-1.8	0	0	0.0
Proportional increase in NPLs by 90 percent 7/	17.5	-3.6	1	8	0.0
Sectoral shock to construction and property 7/9/	18.8	-2.3	1	8	0.2
Credit concentration					
Largest exposure defaults 10/	12.4	-8.7	1	33	0.3
5 largest exposure default 10/	-6.0	-27.1	4	100	15.9
Largest exposure defaults 11/	18.8	-2.3	0	0	0.0
5 largest exposure default 11/	14.5	-6.6	0	0	0.0
Intragroup credit exposure					
Inability of group affiliates to repay intragroup loans	-0.6	-21.7	1	43	24.0
Interest rate risk					
Increase in interest rate 12/					
Nominal interest rate increase by 1.5 percentage points	21.1	0.0	0	0	0.0
Nominal interest rate increase by 3 percentage points	21.2	0.1	0	0	0.0
FX risk					
Appreciation of USD					
20 percent (2 stdev for USDGBP, 20 years)	21.2	0.1	0	0	0.0
29 percent (3 stdev for USDGBP, 20 years)	21.2	0.1	0	0	0.0

1/ Adjustment to comply with FSC guidelines on minimum provisioning levels. 100% haircut on collateral assumed. One bank's investment is classified as loss loans.
2/ Provisioning requirements are increased to match practices in other countries (substandard 30% and doubtful 70%) 75% haircut on collateral assumed. Includes adjustments for under-provisioning.
3/ Adjustment as above but collateral is not allowed to be deducted before provisions are applied. Includes adjustments for under-provisioning.
4/ New NPLs are assumed to be equally distributed in the three NPL loan buckets.
5/ Provisioning rate for new NPLs is assumed at the actual rate of 39 percent.
6/ Provisioning rate for new NPLs is assumed at the actual bank specific rate.
7/ New NPLs assumed at 75% substandard, 15% doubtful and 10% loss loans. Large exposures do not include credit to government, statutory bodies and other banks.
8/ NPL-ratio increase similar to the change during 2008 to 2010.
9/ 20% of sectoral loans become NPLs.
10/ Large exposure (100% provision rate, 100% haircut on collateral).
11/ Large exposure (100% provision rate, 50% haircut on collateral).
12/ Parallel shift of yield curve. Maturity structure used as data on repricing is not available.

Liquidity stress test

26. The IMF has conducted two types of liquidity stress tests. First is a cash-flow test. Two types of hurdle rates are applied: (i) a bank fails when cash outflows in 30 days are larger than available liquid assets plus cash inflows and (ii) a bank fails when it breaches the liquidity ratio set by the FSC. Last, the IMF calculated the Basel III Liquidity Coverage Ratio (LCR) as a reference, though the FSC has not adopted it and the Basel rule is generally applied at a group-consolidated level. The LCR measures high-quality liquid assets (HQLA) over total net cash outflows.

27. Except for the definition of liquid assets, test assumptions broadly follow the LCR framework (Appendix Table 4, Table 5).

- The baseline runoff rates for both tests are either LCR assumptions that incorporate the lack of a domestic safety net or more conservative ones (for instance, the assumptions for nonresident deposits). In the cash-flow stress scenarios, additional stress is imposed on top of the LCR baseline assumptions, ranging from a dry-up of wholesale and/or intragroup funding, to a deposit run focusing on nonresident and/or demand deposits, and to a broad-based funding shock.

- In cash-flow tests, liquid assets are as defined by the FSC and include all assets with a maturity less than 30 days. However, the LCR excludes intragroup claims—the biggest component of banks' liquidity per the FSC definition—from HQLA. Although cash inflows from maturing intragroup claims can offset some of the cash outflows, the LCR caps its use at 75 percent of outflows.

28. The cash-flow test highlights vulnerabilities to shocks to intragroup funding and, to a lesser extent, customer deposits (Table 5). The results are sensitive to the availability of cash inflows from illiquid assets.

- Generally, Canadian banks—especially those relying more on intragroup funding—are more vulnerable to funding shocks (scenarios 2 and 3). The same banks are affected more severely upon a generalized funding shock (scenario 7), and total liquidity shortfall amounts to over 7 percent of GDP.

- A generalized deposit run (scenario 6) causes distress to one bank, primarily because of the run by resident depositors. Only one bank relies visibly on nonresident deposits, but even their near dry-up (scenario 5) does not yield a liquidity shortfall (though the bank breaches FSC's requirement).

- The domestic interbank market has limited activities, and its complete freeze-up poses no stress to the system (scenario 1).

Table 5: Cash Flow Liquidity Test: Assumptions and Results

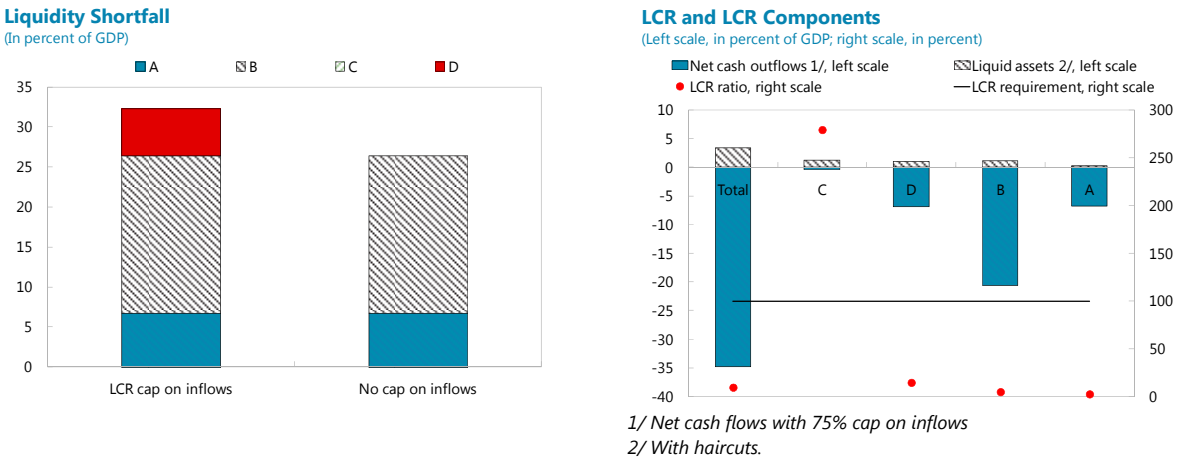
Assumptions | **Results**

	Run-off factors per month (in percent, red cells indicate stress)						With cushion from illiquid assets (95% of liquid assets available per day and 1% of non-liquid assets available per day)					Without cushion from illiquid assets (95% of liquid assets available per day)				
							Net cash flow > 0			FSC regulation		Net cash flow > 0			FSC regulation	
Scenario	Demand deposits Residents	Demand deposits Non-residents	Time deposits Residents	Time deposits Non-residents	Intra-group fund	Inter-bank funding (excl. intra-group)	Failed banks	Liquidity gap	Survival period	Banks in breach	Period above 12%	Failed banks	Liquidity gap	Survival period	Banks in breach	Period above 12%
								Millions of USD	Min./ max		Min./ max		Millions of USD	Min./ max		Min./ max
1	11.3	40.2	5.8	21.4	0.0	100.0	-	0	30/30	-	30/30	B, C	16.4	17/30	A, B, C	6/30
2	11.3	40.2	5.8	21.4	56.0	56.0	A	0.3	27/30	A, B	6/30	A, B, C	103.2	6/30	A, B, C	2/30
3	11.3	40.2	5.8	21.4	100.0	100.0	A, B	25.4	1/30	A, B	0/30	A, B, C	177.4	1/30	A, B, C	0/30
4	11.3	40.2	11.3	40.2	0.0	0.0	-	-	30/30	-	30/30	B, C	18.7	13/30	B, C	4/30
5	11.3	92.6	5.8	72.4	0.0	0.0	-	-	30/30	C	6/30	A, B, C	53.7	1/30	A, B, C	3/30
6	51.8	51.8	51.8	51.8	0.0	0.0	B	3.8	21/30	B	30/30	A, B, C	181.4	4/30	A, B, C	2/30
7	40.2	40.2	40.2	40.2	63.5	63.5	A, B	58.3	6/30	A, B	2/30	A, B, C	235.9	3/30	A, B, C	1/30

Notes
Scenario 1: dry-up of interbank market.
Scenario 2: shock affecting interbank and intragroup funding (medium stress).
Scenario 3: complete withdrawals of interbank and intragroup funding within a month.
Scenario 4: bank run affecting call and time deposits (no penalties on early withdrawals).
Scenario 5: nonresident bank run with higher shock on demand deposits.
Scenario 6: general bank run without enforced penalties for term deposits.
Scenario 7: shock to interbank market and bank run by depositors.
Letters A, B, C, D are randomly assigned to indicate each of the top four banks. Liquidity gap equals the sum of capital needed at the end of the stress period. The first set of results "with cushion from illiquid assets" assumes that 1 percent of illiquid assets can be liquidated each day. Liquid assets according to FSC definition. The column "Period above 12%" excludes bank B which started already below the regulatory minimum.

29. The LCR reveals a structural shortage of HQLA (Figure 5). Most banks' LCR falls below the 100 percent hurdle rate, and the liquidity shortfall for the system is about 35 percent of GDP. Removing the stipulated cap on inflows reduces the shortfall somewhat, to 30 percent of GDP. This is because of the lack of eligible assets for HQLA, given that currently only cash qualifies for it.

Figure 5. Basel III Liquidity Coverage Ratio, June 2014



1/ Net cash flows with 75% cap on inflows
2/ With haircuts.

Source: IMF staff estimates.
Note: Letters A, B, C, D are randomly assigned to indicate each of the top four banks.

D. Overall Stability Assessment and Recommendations

30. Most banks—the key sector for financial stability—seem to have the capacity to write-off legacy NPLs and to withstand a range of likely adverse scenarios in the near-term.

- Despite large legacy NPLs, stress test shows high capital can absorb substantial write-offs without breaching the minimum capital requirement, partly owing to conservative provisioning practice. The marked recovery of the real estate market should also limit overall losses from write-offs including collateral sales receipts. This should limit the possibility of negative feedback loop from the banking sector to credit and economic growth. Nonetheless, the FSC should remain vigilant in monitoring banks' asset quality.

- Credit and loan concentration risks are the most relevant sources of potential risk. A severe recession similar to that of 2009 may push the system's CAR below requirement, though it is unlikely in the near-term with the strong U.S. economy. Loan-concentration risk could be damaging, especially with real estate market distress. Therefore, it is important to value real estate collateral adequately and gather data in this area, including loan-to-value ratios.[10]

[10] Such data could include the value of collateral per loan, loan-to-value ratios, haircuts applied by banks for provisioning purposes, and realized recovery rates in the real estate market.

31. However, the FSC should closely monitor broad intragroup transactions. This is particularly important when there is a concern over the financial institutions' governance.

- For both banks and insurers, the intragroup transactions are significant. Substantial amounts of assets are kept at foreign head offices, making them vulnerable to the distress of group entities (although such likelihood seems low for Canadian banks, which constitute the majority of the system).

- Banks keep most of their liquid assets as deposits at parent banks—these are not counted as HQLA in LCR—, and some banks also rely on parent-bank funding. While TCI—as a host economy—is not required to adopt LCR, ensuring the continuing liquidity support of parent banks is critical for managing liquidity risk.

- The FSC should ensure consolidated supervision of complex financial groups, examining the solo performance of their TCI operations as well as that of their relevant affiliates, using the power to request necessary information stated in the FSC Ordinance (FSCO). The FSC should also liaise with external auditors and closely collaborate with other key supervisors by establishing a "supervisory college."

- The FSC should ensure that the bank capital remains dedicated for TCI operations. High capital is the key buffer, but there have been cases where dividend payouts to parent were larger than retrained earnings. This is particularly worrisome because the FSC currently does not have the explicit power to restrict or stop dividend payments. Indeed, the current Banking Ordinance does not even require banks to notify the FSC in advance about any kind of dividend payouts.

32. On the other hand, domestic contagion risk is limited. The lack of domestic interbank and capital markets caps interconnectedness. Linkage between insurers and banks is limited to insurers' exposure to banks through restricted deposits.

33. The FSC should strengthen capacity for offsite risk analysis, including stress testing. More attention should be devoted to comprehensive financial statement analysis. Regular stress tests on systemically important banks would help identify weaker banks that should have priority in the onsite inspection process.

FINANCIAL SECTOR OVERSIGHT

A. Financial Regulation and Supervision: Financial Services Commission

34. The FSC has strengthened its staffing and oversight framework since the previous assessment (Appendix Table 1). The FSCO was overhauled in 2007 and gave the FSC financial independence, ample financial resources, and strengthened its supervisory power. Staff complement—a critical bottleneck at the time of the 2003 IMF assessment—has increased from 17 persons in 2003 to 70 in 2015. The qualifications of professional staff have improved, and training is provided to staff. Nonetheless, there are areas requiring further improvement.

Governance

35. Board oversight should be strengthened to ensure effective and accountable management of the FSC. The Board is below strength, missing an insurance expert since 2013. Implementing the FSC's 2012–2016 Action Plan, which includes much needed overhaul of the outdated Banking and Insurance Ordinances, has been slow. Much of the FSC's management work is currently falling on one Managing Director (MD), without qualified Deputy MDs. To strengthen FSC governance, the Board should first undergo a self-assessment and should appoint at least one director with insurance expertise. Second, the Board should ensure execution of the FSC's-medium-term Action Plan. Third, the Board should expedite an organizational review of the FSC and authorize and then appoint key FSC senior managers. Fourth, the Board should meet with the Minister of Finance and industry representatives regularly. The Board should also rotate the FSC's external auditors periodically.

Operational independence

36. Overall, the FSC's independence is strong, but there are areas that need care. The FSC is accountable to the U.K.-appointed Governor, and the current financial services legislations allow the Governor to make Regulations. However, the legal protection for members of the FSC's Board and staff is strong, as is the FSC's financial independence. The Governor's Regulation-making power is a common feature of financial-services legislation in the U.K.'s smaller Caribbean overseas territories, and has rarely been used. One area of concern is that, for both the IO and the BO, certain technical areas remain for outright decision by the Permanent Secretary, Finance, or the Governor. In particular, the IO allows the Permanent Secretary, Finance, to grant a licensee place a particular risk with an unlicensed insurer (dispensation). Such a decision requires technical knowledge, and the IO should be amended so that only the FSC can make such a decision.

Communication

37. The current practice lacks continuous and constructive dialogue between the FSC and the financial industry. Current financial-services legislations do not explicitly require consultation before a Regulation is passed, though, as a practice, the FSC has consulted with the private sector

for Regulations passed in the past 12 months. The FSC should develop a continuous relationship with the industry and formalize a consultation process for new Regulations.

Cross-border collaboration

38. Close collaboration with foreign supervisors is critical for the FSC with a foreign-dominated financial system, but the relationship with a key supervisor is still missing. While the current MoUs cover all jurisdictions relevant for domestic insurers, this is not the case for one bank with parallel-bank structure. The FSC should establish a "supervisory college" for close cross-border collaboration and ensuring consolidated supervision for parallel banks.

B. Financial Regulation and Supervision: Banks

Legal and regulatory framework

39. The FSC has legal power to set Regulations and conduct supervision, though not all the power has been fully used.

- The FSC has used its Regulation-making power only sparingly. The FSC Board's power to issue a regulatory Code has also remained unused.[11] Instead, the FSC has extensively used Guidelines, which can be issued without the consultative process required for a regulatory Code, covering key risk-management areas, among others. While Guidelines are less stringent than Regulations and Codes, failure to follow Guidelines could still lead to various enforcement actions (such as issuing a directive and revoking a license) and disciplinary actions (such as fines).

- The FSC has powers for conducting standard onsite and offsite supervision. The FSC is equipped with the power to require information, including regarding a person connected to a licensee, and to conduct compliance visits to both the holding company and the subsidiary of a licensee.

40. However, the BO has long-recognized deficiencies, some of which impede managing ongoing financial stability risks. Most important, there is no requirement that the FSC receive prior notification of a licensee's payment of a dividend so that it may be stopped. This is a serious deficiency, as there has been a case where a bank paid dividends to its parent bank well beyond current-year profits. Other deficiencies include (i) an imprecise definition of related and connected parties, (ii) an insufficiently stringent cap on equity holdings of other undertakings, and (iii) the lack of the requirement for a bank auditor to inform the FSC of matters affecting the wellbeing of the bank.

41. Preparation and enactment of the new BO should be completed urgently. The current draft, widely circulated in 2014, addresses many deficiencies, including those on the definition of related and connected parties, advance notification of dividend payments, and the role of external

[11] The use of regulatory Code and Guidelines is similar to the practices in some of the other British overseas territories.

auditors. The draft would also provide the FSC the power to make rules, including general rules on the conduct of the banking business, prudential rules, and rules on banks' involvement in nonregulated activities. These rules should remain in the final draft. In addition, rules could also be made to require banks to prepare and keep up-to-date recovery plans satisfactory to the FSC, and to obtain the approval of the FSC before making material changes. The supervisory instruments of a regulatory Code and Guidelines now in the FSCO would also be included in the new BO. IMF review, separate from this FSAP, of the next revised draft is strongly recommended.

Operational performance

42. The current practices of onsite and offsite supervision have limitations. With ample financial resources, staffing has been sufficient, and the FSC has been extensively using experienced short-term consultants for onsite credit reviews. However, there are some weaknesses.

- Onsite supervision is sporadic (three in the past five years). It has also narrowly focused on credit and AML/CFT defenses, despite the fact that going beyond credit exposures and examining the whole balance sheet of a bank is essential as indicated in the stress test. Moreover, the reports are issued with substantial time lag (5-6 months). Knowledge transference from external consultants engaged in past inspections seems to have been limited. Offsite analyses appear to be backward-looking and narrowly focused. As a result, key issues may be overlooked, as well as the opportunity to use all supervisory tools, particularly if supervision is conducted in an insufficiently intrusive manner. In addition, the perimeter of analysis appears limited to the intermediate entity just above TCI's branch or subsidiary, without expansion to performance of the entire banking conglomerate.

43. The effectiveness of supervision should be further improved.

- The FSC should develop capacity for comprehensive risk assessments and onsite and offsite inspections with additional staff training. For offsite supervision, the object would be to develop a more sharpened investigative attitude and a more forward-looking perspective in those performing analyses. For onsite supervision, the object would be to increase the knowledge transference from external consultants. The FSC should expand the ambit of its onsite supervision to all areas of material risk and its management for better observance of the BCPs.

- An annual plan of onsite inspections should be drawn up, and the Board should be informed of the progress of the plan. In all cases, the inspection report should be issued within 21 days of exit.

C. Financial Regulation and Supervision: Insurers

Domestic insurers

44. The prevalence of branches in the insurance sector poses special challenges to regulation and supervision. The insurance branches have only an insurance manager and the assigned brokers or agents domiciled in TCI. The bulk of the operation and control is carried outside

the jurisdiction. This market structure requires a regulatory framework as a host supervisor with (i) a strong collaboration of the foreign home supervisors; and (ii) adequate policyholder protection.[12]

45. The FSC insurance department has strengthened and improved its staffing and established a supervisory framework, yet implementation remains a major challenge. Insurance supervision was dormant until 2008. Since then, the FSC has issued several key Guidelines and internal procedures for offsite supervision and begun issuing penalties. Both onsite and offsite supervision has started. Going forward, the large amount of Guidelines issued need to be sufficiently implemented, which will take significant effort from both the supervisor and the industry. The FSC should develop manual and internal procedures for the onsite inspection and supervisory process incorporating the host nature of supervision. In particular, the FSC should further develop its staff's capacity for onsite and offsite supervision of branches, as it requires special procedures, especially when the business is carried out without a physical presence through agents or brokers. The training should include the analysis of the home office risk management and internal controls structure, or the conditions of the distribution agreements.

46. Regulatory framework also has important weaknesses, and the new domestic IO should be enacted urgently as it will remove some deficiencies. First, many of the central supervisory requirements are specified as Guidelines that have weaker enforcement power than Regulations. Enacting the new domestic IO can strengthen these requirements' enforcement power by incorporating them into the legislation. Second, the framework for policyholder protection is not sufficient (see "Policyholder protection" section). Third, Regulation is silent on the type and amount of insurers' technical reserves, which are critical for protecting policyholders. Fourth, there is no Regulation on reinsurance, and its quality fully depends on that of the reinsurance programs of the home office. The FSC should require a minimum level of credit standing for the reinsurers allowed to protect the branches. Last, licensees are not required to notify the FSC of dividend payments in advance, and the FSC does not have the explicit power to suspend dividend payments in light of solvency concerns.

Policyholder protection

47. The FSC needs to strengthen its ability to realize assets to pay out liabilities owed to policyholders. The lack of adequate policyholder protection was painfully felt with the BAFSL case. There is no protection scheme for policyholders, making it important to pay policyholders out of insurers' assets. The FSC has a Guideline requiring local insurers to hold restricted deposits, though it does not have the same enforcement power as a Regulation. The insolvency law provides only lower priority to policyholders just above shareholders, reducing their recovery at liquidation. Policyholders should be given higher preference. In addition, the new domestic IO should require setting up a segregated statutory fund in TCI earmarked for policyholder payout in case of insolvencies or liquidations.

[12] There are no insurance groups for which the FSC is the lead supervisor.

48. In regard to BAFSL, the TCI government should consider financial support for policyholders.[13] BAFSL should not have been given a license to operate with an initial capital shortfall. Critically, TCI policyholders were not properly informed of the transition from BAICO to BASFL and were not given opportunity to opt out at the time of acquisition (Box 1). BAICO's restricted deposits that should have been kept for policyholders were used to pay fees to the liquidator. Credibility in developing long-term saving through insurance is at risk without financial support for a better payout to policyholders. Currently, the government appears to have sufficient fiscal space: even if all policyholders were to recover dollar for dollar, total funding needed is only US$ 8 million—about one percent of GDP—compared to the average annual fiscal surplus of about US$ 48 million for three years since 2012.

49. Ensuring the quality of insurers, agents, and brokers is another element to enhance policyholder protection. Insurance intermediation requires a license, but there is no qualification required other than demonstrating insurance experience. The FSC should evaluate the requirements of certification for brokers and agents to be licensed, such as passing an exam. The offsite supervision is limited to an annual re-registration, and brokers are not inspected. A new Guideline requires brokers and agents to submit audited annual financial statements. The FSC should also initiate onsite inspection of brokers.

50. A new Guideline issued in March 2015 sets market conduct requirements. The Guideline provides details on the best practices for all domestic insurers and all insurance intermediaries. The FSC should develop its implementation plan. At the same time, the FSC should develop an awareness program for insurance consumers. Given that market conduct supervision will be fairly new for the FSC, it should analyze the best structure and needed resources for that task.

Offshore insurers

51. Offshore insurers do not receive extensive monitoring, but are deemed low-risk for TCI, except for reputational risk. The offshore insurers are mostly low-risk PORCs. U.S. supervisors require collateral to allow the reinsurance to be placed in TCI and also extensive reporting for tax purposes. The FSC, as home supervisor, has responsibility and as such should maintain a sufficient level of due diligence on AML/CFT and properness of offshore insurers' key persons. Data produced for the U.S. authorities should be collected and statistics created. Training for the supervision of captives, protected cells, and PORCs would be useful.

52. The significance of offshore insurers on the FSC budget needs to be managed. About 50 percent of the FSC annual budget is from the fees paid by the offshore insurers, which could lead to lean regulation to attract and maintain the activity. Regulation should be maintained at the proper level to avoid possible criminal activity while retaining the attractiveness of TCI as a location

[13] The Eastern Caribbean branches of BAICO received funding from the Eastern Caribbean Currency Union governments that allowed the business to be transferred to a different life insurer without losses for the policyholders.

for offshore insurance activity. The international IO should be adopted following modern principles for offshore insurance business**.**

D. Macroprudential Policy Framework

53. The FSC has started to develop a macroprudential policy framework, but its focus should be geared more toward real estate markets. The FSC has identified systemically important financial institutions (SIFIs, top four banks), and is considering capital surcharges. However, capital surcharges may not be binding given the high capital ratios. Instead, caps on loan-to-value ratios could be a highly effective micro- and macroprudential policy tool, given that TCI's economic and loan performance largely depends on real estate market fluctuations.

54. The FSC should devote staff capacity to the areas more directly related to financial stability. The FSC has started to compile its own macroeconomic data, and its quarterly economic review provides a wealth of information and is highly appreciated by the industry. However, there should be better synergies with FSC's oversight work if it devotes its staff capacity to financial stability analysis, including monitoring real estate market and stress testing. Such analysis eventually could be published in a financial stability report, which could further facilitate the FSC's communication with the industry and other public officials.

E. Bank Resolution and Safety Nets

55. Current options for TCI to manage a distress bank and a systemic financial crisis are limited. On one hand, using U.S. dollar and the borrowing limit of local government imposed by the United Kingdom anchor economic policies. Nevertheless, this implies that the territory does not have a central bank, which can provide emergency liquidity. Public bail-out of a systemic bank will be difficult if it hits the borrowing limit set by the United Kingdom. Still, there are other tools that can be effective for managing a bank distress and a crisis.

Bank resolution framework

56. TCI currently lacks a quick, effective, and legally certain framework to deal with non-viable banks. The FSC, for instance, does not have sufficient powers for effectively taking control of a non-viable bank and exercising key resolution actions. A bank can be wound up only through court-directed liquidation, slowing down the process.

57. Therefore, a Special Bank Resolution Regime (SBRR) should be introduced by law.[14] Such law should provide the legal basis for the FSC to develop indicators to determine the viability of a bank and to start taking resolution actions before the bank becomes insolvent. The law should empower the FSC to directly take a whole array of resolution actions (such as removing senior managers and restructuring) and resolution tools (such as (i) transfer or sell selected assets and

[14] Financial Stability Board, *Key Attributes of Effective Resolution Regimes for Financial Institutions,* October 2014, especially Attribute 3.

liabilities, (ii) establish a bridge bank, and (iii) override rights of existing shareholders). As a fundamental element of the SBRR, resolution actions by the FSC should not be overridden by the court, though the court may award monetary compensation for any aggrieved parties.

Protection of small depositors

58. Protecting small depositors is important, but TCI is not currently positioned to introduce a deposit insurance scheme (DIS). A DIS can function properly when key preconditions are met, including (i) a strong supervisory framework and (ii) an SBRR.[15] Although progress has been made in the supervisory framework area, little has been done with the SBRR.

59. However, there are other tools that can protect small depositors even without DIS, and these tools should be urgently introduced.

- **Depositor preference:** The first line of protection is to modify the Companies Ordinance and introduce depositor preference in a bank liquidation. That should be a "tiered" depositor preference that provides additional preference for small depositors.

- **Special Purpose Reserve Fund (SPRF):** An SPRF holds a portion of total customer deposits in high-quality liquid assets, with an independent, highly rated, non-TCI third party[16] with the exclusive purpose of protecting small depositors in cases of failure of the particular bank. The bank must not be allowed to withdraw money from the fund SPRF for reasons other than paying out to small depositors.

- **Funding commitments from parent banks:** Considering that most TCI banks are foreign banks, efforts should be made to ensure TCI banks obtain firm commitments for support from their parent banks in case of financial distress. If the parent entity is not a well-established bank, the financial commitments should be backed by specific liquid assets as specified by the FSC.

F. Crisis Prevention and Management

60. Although the FSC is in charge of the oversight of all financial institutions, it needs to coordinate with other agencies to prepare for and manage systemic financial crisis. A systemic financial crisis casts broad impact on the economy, affecting the functioning of other government agencies. For this, a Financial Stability Committee should be created to share relevant information, to discuss views, to coordinate actions on a regular basis, and to coordinate actions and communications with foreign regulatory authorities. The Committee should include the Governor, the Minister of Finance, and the MD of the FSC or their representatives, with support from more technical-level groups. The Committee should establish a Crisis Management Strategy that sets

[15] Other preconditions include stable macroeconomic environment and the banking sector and strong and effective legal framework.

[16] The FSC could establish this Fund using its power to issue guidelines under Section 43 of the FSCO. In case a stronger legal support is needed, a regulation by the Governor, issued under Sec. 53 of the FSCO, could be used.

general tasks and protocols for crisis prevention and management. In case of an actual crisis, the Committee should design and approve a specific crisis-management plan to deal with the crisis.

61. MoUs with foreign regulators and supervisors should ensure an effective implementation of the crisis management strategy. Existing regional and bilateral MoUs with foreign supervisors should address crisis prevention and management strategy. The MoUs should provide a legal basis for the performance of resolvability assessments at the group level, taking into account cross-border actions and effects.

62. At individual institution levels, recovery and resolution plans would provide the key elements for preventive strategies coupled with resolvability assessments prepared by the regulatory authorities. The FSC should require all SIFIs to prepare recovery programs and present them to the FSC for consideration, comments, and approval. In addition, the FSC should prepare SIFI resolution plans that specify actions in case the institution needs to be resolved.

63. The TCI should consider identifying the last-resort alternatives for official financial assistance for cases of systemic crisis. TCI lacks typical lender-of-last-resort facilities without a central bank. Local government borrowing is also subject to the ceiling imposed by the U.K. government. It is important that the authorities start exploring funding alternatives as a last resort for emergency funding, including the creation of a Fund with industry participation and access to lines of credit.

G. Anti-Money Laundering and Combating the Financing of Terrorism

64. TCI has recently made substantial progress in improving its AML/CFT framework since it was last assessed by the Caribbean Financial Action Task Force (CFATF) in 2007. TCI is currently undertaking a national assessment of its ML/TF risks with the assistance of the World Bank, to be completed in 2015. The authorities are encouraged to use the findings of that assessment to guide their national AML/CFT policies.

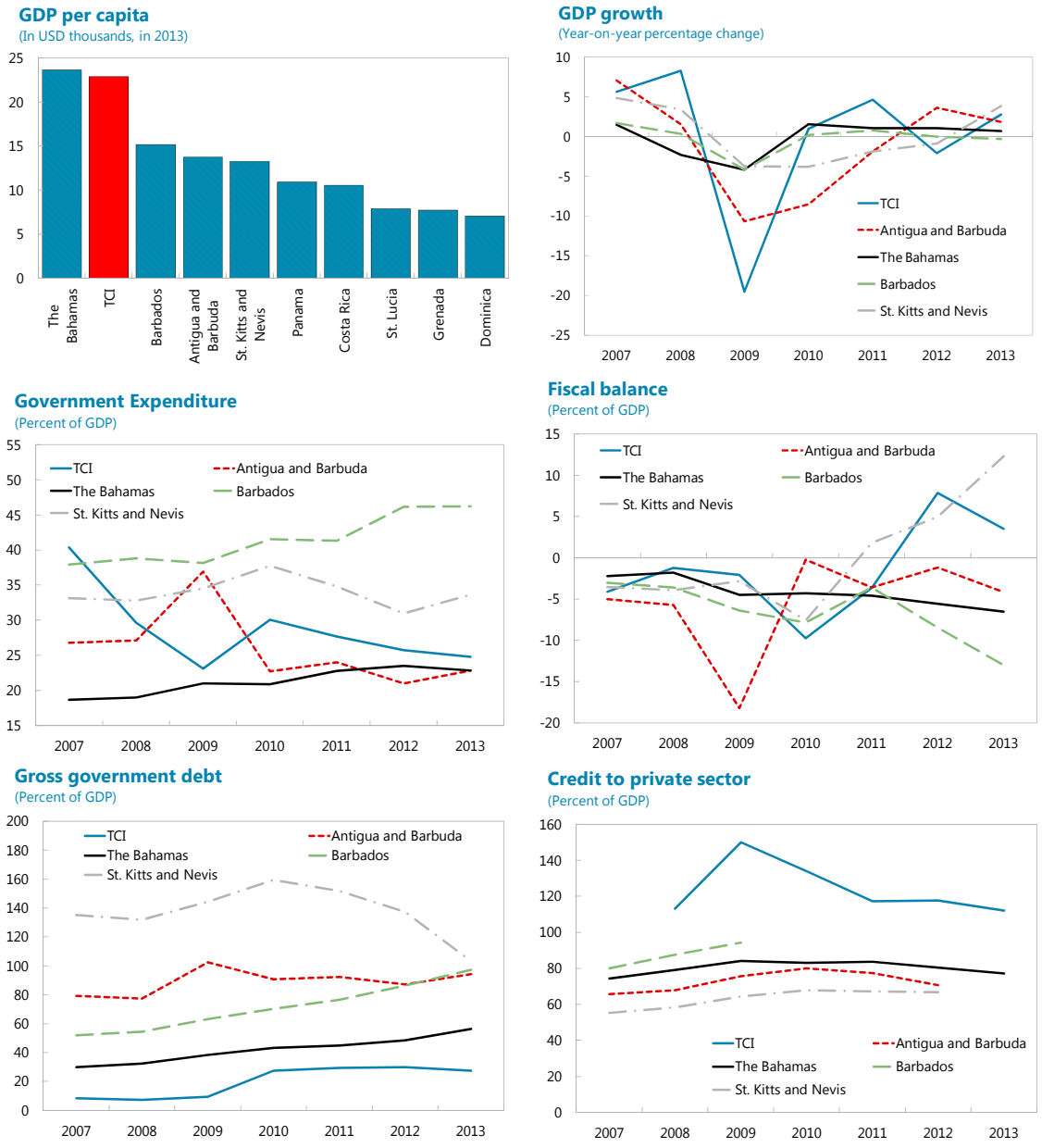
65. Concerns remain over the capacity of regulatory authorities to ensure compliance of customer due diligence (CDD) obligations. Only a handful of on-site examinations for AML/CFT compliance have been conducted over the past three years, and no sanctions have been imposed for violations of CDD obligations. Supervision over financial institutions as well as of designated nonfinancial businesses and professions (e.g., lawyers) should be enhanced, particularly with respect to obligations to identify and verify the identity of beneficial owners of assets.

66. The framework for the transparency of legal persons and arrangements appears inadequate and may facilitate an increase in ML/TF risks. Existing deficiencies include the lack of obligation on companies incorporated in the territory, but operating abroad to file information on legal owners with the company registrar. This and potential shortcomings in the implementation of CDD obligations may affect the ability of competent authorities to obtain relevant information and exchange it with foreign counterparts. The abolition of bearer shares and the discussions on the possible establishment of a registry of beneficial ownership are encouraging steps. The authorities

should continue to strengthen the framework to ensure that current and accurate information on the beneficial ownership of legal persons and arrangement established in TCI is available in a timely manner.

Appendix Figure

Appendix Figure 1. International Comparisons of Macroeconomic Conditions



Sources: IFS; World Economic Outlook database; S&P; TCI authorities; IMF staff calculations.
Note: Credit to private sector of TCI is only that to residents. The balances of the sinking fund to repay the debt guaranteed by the United Kingdom are counted to calculate gross government debt.

Appendix Tables

Appendix Table 1. Recommendations from 2003 IMF Review on BCP and ICP and Progress

Recommendations	Progress
Financial Services Commission	
The governance structure of FSC provides little operational independence to the supervisors.	
• The role of currently active private practitioners on the Board of FSC and on the Licensing Committee should be reduced. • Consider revising the FSCO to strengthen the legal basis for operational independence of the supervisors.	• ***Completed***: Active practitioners were removed from the Board and the Licensing Committee, and the Committee now solely comprises senior staff of the FSC. • ***Major, though not complete, progress made***: FSCO was overhauled in 2007 and gave the FSC financial independence and ample financial resources from company registration fees. The current FSCO continues to provide the Governor the power to make Regulations (a common feature of financial services legislation in the U.K.'s smaller Caribbean Overseas Territories), although this power has been rarely used. For both IO and BO, certain technical areas remain for outright decision by the Permanent Secretary, Finance, or the Governor.
Implementation of the regime for financial supervision is handicapped by inadequate staffing and insufficient enforcement powers.	
• Additional staff positions in banking, insurance, and AML/CFT compliance should be authorized with funding sufficient to recruit and retain qualified staff. • Financial ordinances should be amended to give FSC authority to impose graduated sanctions consistent with the severity of infractions.	• ***Completed***: With financial independence, staff complement has increased from 17 in 2003 to 70 in 2015, though 18 of them are dedicated to company registration, not related to supervision. • ***Completed***: In addition to revoking a license and pressing criminal charges, the FSC now has power to take various enforcement actions (such as issuing a directive and appointing an investigating examiner) and disciplinary actions (such as imposing fines).
Banking Supervision	
Scope and frequency of onsite supervision too limited for effective oversight of banking organizations.	
• With additional staff resources, increase the scope and frequency of onsite, risk-based examinations, focusing particularly on internal controls, credit risk, market risk, capital, consolidated supervision, and AML/CFT compliance. Synergies with external auditors should be exploited.	• ***In progress***: Although staff resources have increased and the FSC actively uses experienced external consultants, onsite supervision remains sporadic and narrowly focused on credit and AML/CFT defenses. Credit-risk inspections are dependent on engagement of short-term contractors. Synergies with external auditors are yet to be utilized fully.

Appendix Table 1. Recommendations from 2003 IMF Review on BCP and ICP and Progress (concluded)	
Supervisory policies and expectations not sufficiently developed.	
• Amend BO to give FSC authority to set prudential rules administratively. Issue expanded range of Guidelines and best-practice papers, making use of Basel Committee documents as appropriate.	• ***Completed***: The FSC has power to set prudential rules administratively through the use of its Board's capacity to issue a regulatory Code (a power never used) set out in the 2007 FSCO. However, since 2011, the FSC has issued various Guidelines, including management of liquidity, credit, and operational risks; loan classification and provisioning; controlling large credit exposures; minimum holdings of liquid assets and maximum mismatch limits; internal control; and the conduct of internal and external auditors.
Insurance Supervision	
Staff resources do not permit an effective program of onsite and offsite insurance supervision.	
• With additional resources, develop a fully documented, risk-based framework for onsite and offsite monitoring of the performance of licensed insurers.	• ***In progress:*** During 2014, the first risk assessment on individual insurers was completed. The FSC has also carried out three onsite inspections recently. A risk- based onsite and offsite manual is being developed.
Administrative practices are underdeveloped, with the result that many regulatory and supervisory practices are nontransparent.	
• With additional resources, develop and publish internal procedures establishing the criteria by which the IO will exercise his discretion to grant exceptions to norms for licensing, capital, solvency, and prudential rules. Expand range of supervisory Guidelines issued to industry.	• ***Major progress made***: The FSC developed a large number of internal procedures and issued several Guidelines including those on capital and solvency requirements, investments, restricted deposit, risk management, and licensing and financial reporting for brokers. The implementation of the numerous new Guidelines remains a challenge that will take significant efforts from both the supervisor and the industry to overcome.
No standards have been established for the valuation of liabilities.	
• Issue actuarial standards for valuation of liabilities.	• ***Not implemented:*** The IO requires an insurer to maintain assets in TCI sufficient to cover its liabilities; however, the level of the liabilities is not regulated by the FSC and insurers can freely determine the value of their liabilities
FSCO = Financial Services Commission Ordinance, BO = Banking Ordinance, IO = Insurance Ordinance.	

Appendix Table 2. Selected Economic Indicators

	2007	2008	2009	2010	2011	2012	2013	Preliminary 2014	2015	Projection 2016	2017
Output and Inflation					(Year on year percentage change)						
Real GDP	5.64	8.27	-19.55	0.98	4.62	-2.13	2.80	3.50	3.20	3.00	2.50
GDP deflator	1.43	3.01	1.32	-3.28	1.43	0.53	2.50	2.00	2.00	2.00	2.00
CPI	2.26	4.82	4.08	3.20	5.20	3.11	2.50	2.00	2.00	2.00	2.00
General government					(Percent of GDP)						
Revenue	40.11	30.94	26.33	25.16	28.15	38.15	32.77	32.61	32.2	32.1	32.03
Expenditure	42.00	31.13	26.77	32.33	30.62	28.74	26.39	27.49	27.94	28.2	28.37
Overall balance	-1.89	-0.19	-0.44	-7.18	-2.47	9.41	6.39	5.12	4.26	3.9	3.66
Primary balance	-1.23	0.34	0.47	-6.19	-2.17	10.46	7.33	6.01	5.05	4	3.72
Gross government debt	8.44	7.24	9.36	27.44	29.44	29.99	27.47	23.82	21.23	19.11	17.38
Net government debt	-8.13	-7.42	-10.11	2.56	5.25	-1.25	-7.56	-10.1	-11.71	-12.95	-13.98
External sector					(Percent of GDP)						
Trade balance	-72.96	-65.67	-50.44	-41.71	-41.63	-45.86	-44.03	-44.5	-44.5	-44.5	-44.5
Memorandum items:											
Nominal GDP (Bil. U.S. dollars)	0.77	0.86	0.70	0.69	0.73	0.72	0.76	0.80	0.84	0.88	0.92
GDP per capita (U.S. dollars)	22,187	23,567	19,533	19,907	21,755	22,800	22,873	23,790	24,672	25,538	26,305

Sources: TCI authorities, Standard & Poor's, IMF staff calculations.

Note: Data of TCI authorities are used when they are available. The balances of the sinking fund to repay the debt guaranteed by the United Kingdom are counted to calculate gross government debt. The IMF does not provide macroeconomic forecast of TCI.

Appendix Table 3. Financial Soundness Indicators and Bank Balance Sheet Structures

	2009	2010	2011	2012	2013	2014
Capital adequacy						
Regulatory capital as percent of risk-weighted assets	28.6	32.3	33.6	34.8	33.9	29.9
Regulatory Tier I capital to risk-weighted assets	26.5	30.5	31.7	33.7	32.8	27.8
Capital as percent of assets	21.3	22.3	22.5	20.9	20.2	18.4
Asset composition and quality						
Financial system assets excluding provisions						
Cash	0.9	1.0	1.1	1.0	1.1	0.8
Due from Financial Institutions outside of TCI	19.2	21.1	24.9	29.8	30.5	33.4
Due from Financial Institutions within TCI	0.3	0.2	0.1	0.1	0.1	0.3
Loans	75.0	68.1	62.3	58.0	56.7	53.9
Investments	2.5	5.7	8.0	7.5	7.2	7.7
Fixed Assets	1.1	1.2	1.1	0.9	0.8	0.8
Other Assets	1.0	2.7	2.5	2.7	3.6	3.1
Currency distribution of loans						
Loans in Foreign Currency (in millions of U.S. dollar)	3.2	4.8	4.7	5.9	5.8	4.4
Loans in Local Currency (in millions of U.S. dollar)	1,278.3	1,125.1	1,086.5	1,054.1	1,018.9	976.9
Sectoral distribution of bank credit						
Real estate	29.7	32.6	36.6	41.2	40.4	42.3
Construction	35.5	26.9	22.5	22.0	21.1	20.9
Manufacturing	0.1	0.6	0.9	0.1	0.2	0.2
Commercial	2.5	2.7	3.3	3.1	3.3	3.5
Transportation	0.3	1.0	3.7	3.0	3.1	3.4
Tourism	3.8	6.4	7.0	6.1	4.7	4.7
Other sectors	27.9	29.1	24.9	23.2	25.9	23.9
Other financial intermediaries	0.0	0.8	1.2	1.2	1.3	1.1
Asset quality						
NPL as percent of gross loans	11.2	17.3	18.0	17.4	18.7	18.2
Restructured loans as percent of total loans	8.6	0.1	1.9	0.1	0.1	0.2
Provisions + write-offs as percent of NPL	23.5	15.8	21.5	35.7	36.8	38.4
NPL net of provisions as percent of tier I capital	34.6	46.2	41.5	31.9	32.2	35.3
10 largest credit to net credits	36.8	36.9	34.6	32.1	43.7	35.4
Loan loss provision to NPL	18.3	15.5	21.0	35.6	33.0	38.2
Loan loss provision to gross loans	2.0	2.7	3.8	6.2	6.2	6.9
Earnings and profitability						
Gross profits as percent of average assets (ROAA)	3.1	1.6	1.6	0.9	0.9	1.0
Gross profits as percent of average equity capital (ROAE)	15.5	7.3	7.0	4.0	4.6	5.6
Net interest margin (net interest income as percent of interest- bearing assets)	5.3	3.4	3.4	3.3	3.6	3.3
Gross income as percent of average assets	3.1	1.6	1.6	0.9	0.9	1.0
Net interest income as percent of gross income	61.0	63.2	52.5	60.4	65.0	62.4
Noninterest income as percent of gross income	18.4	31.6	33.7	25.5	26.0	29.8
Trading and foreign exchange income as percent of gross income	0.9	2.4	1.8	2.8	1.7	1.7
Noninterest expenses as percent of gross income	29.8	50.5	57.2	65.0	73.5	69.6
Expense for provision to net financial margin	5.2	45.8	47.3	66.5	54.2	73.2
Noninterest expenses as percent of average assets	2.4	2.5	3.4	3.2	3.5	3.3
Staff costs as percent of noninterest expenses	38.6	25.3	20.8	23.2	19.4	20.6

Appendix Table 3. Financial Soundness Indicators and Bank Balance Sheet Structures (concluded)

Liquidity						
Liquid assets as percent of total assets	13.1	15.0	15.3	27.9	29.9	30.3
Liquid assets as percent of short-term liabilities	21.7	22.7	21.3	38.2	39.4	40.1
Foreign currency loans as percent of total loans	0.3	0.3	0.4	0.6	0.6	0.4
Foreign currency liabilities as percent of total liabilities	3.6	3.8	5.0	5.2	4.2	3.4
Deposits as percent of assets	54.4	54.6	58.0	59.7	59.4	61.8
Loans as percent of deposits	137.8	124.6	107.5	97.2	85.7	87.2
FX loans-to-FX deposits	3.0	2.2	2.8	3.5	4.3	3.8
Sensitivity to market risk						
Off-balance sheet operations as percent of assets	5.1	4.2	3.1	2.3	5.5	5.3

Source: FSC.

Note: End of period, September for 2014. Other sectors include Agriculture, Fisheries, Quarry Works, Public Utilities, Entertainment, Professional Services, Public Administration, Personal Loans (not related to property acquisition) and in some cases loans to overseas residents. Data are compiled following Basel I, and on unconsolidated basis, covering the TCI operations of foreign banks.

Appendix Table 4. Banking Sector Stress Testing Matrix

Domain		Top-Down by FSAP Team: Assumptions
Banking Sector: Solvency Risk		
1.Institutional Perimeter	Institutions included	• 4 largest banks (D-SIBS)
	Market share	• 90 percent
	Data and baseline date	• Supervisory data • Cut-off date as of Q2 2014
2. Channels of Risk Propagation	Methodology	• Balance sheet sensitivity analysis
	Satellite Models for Macro-Financial linkages	• None
	Stress test horizon	• Static (as of June 2014)
3. Tail Shocks	Scenario analysis	• None
	Sensitivity analysis	**Credit Risk:** • **Adjustment for under-provisioning.** Adjustments are made to determine the true value of capital because the current level of provisioning falls short of regulatory minima set by the FSC.[1] Moreover, minimum provisioning levels of other countries with similar banking systems are used to gauge the appropriateness of TCI's minimum levels. • **Worsening of existing NPLs.** TCI's loan classification framework follows a five-bucket system, with the last three buckets ("substandard, doubtful, loss loans") being considered NPLs. Current classification practices seem to create backlogs in buckets with lower provision requirements. This test aims at assessing the impact on capital of a downward migration of existing NPLs within the three NPL buckets. • **Shocks to performing loans.** Credit-risk shocks envisaged are up to 90% increase in NPLs and up to 20 percentage points in NPL ratios of banks' total loan portfolio. • **Sectoral shocks and loan concentration.** Loans are concentrated in a few economic sectors, in particular to (private) property and construction. Sectoral credit-risk shocks are applied to those sectors, increasing NPLs up to 20%. In addition, concentration risks in the loan portfolio are examined by assessing banks' resilience to defaults of the top 1 to 5 largest borrowers, using different levels of collateral haircuts. [2]

[1] See FSC Statement of Guidance: Loan Classification and Provisioning.

[2] There is no cap on large exposures, but a legal requirement for banks to obtain the prior approval of the FSC before granting a credit that will exceed 25 percent of their paid-up capital.

Appendix Table 4. Banking Sector Stress Testing Matrix (continued)

		Market Risk • **Foreign exchange risk.** Direct foreign exchange risk tests assess banks' resilience to appreciations of 20% and 30%, respectively, based on historical movements of the US$/GBP exchange rate (translating to two and three standard deviations). NPLs are not affected, as almost no loans in FX are outstanding. Interbank linkages are assessed by assuming the default of interbank loans. **Interest rate risk**: A parallel shift in interest rates of 150 and 300 basis points is assumed. Data on the re-pricing structure of assets and liabilities were not available; the maturity structure was used as a proxy instead.
4.Risks and Buffers	Risks/factors assessed	• Comprehensive coverage of solvency risks • Credit risk: credit losses in loan book (including provisions), including intragroup exposures • Market risk: interest rate risk, foreign exchange risk
	Behavioral adjustments	• None
5. Regulatory and Market-Based Standards and Parameters	Calibration of risk parameters	• Based on actual point in time (historical highs) and proxies in the region • Expert judgment due to data limitation for a macro modeling
	Regulatory/Accounting and Market-Based Standards	• Basel I (current standard) • Regulatory requirement (CAR) of 11%
6. Reporting Format for Results	Output presentation	• System-wide and bank-by-bank CAR

Banking Sector: Liquidity Risk			
		Cash flow test	***LCR***
1.Institutional Perimeter	Institutions included	• 4 largest banks (D-SIBS)	
	Market share	• Nearly 90 percent	
	Data and baseline date	• Supervisory data • Cut-off date as of Q2 2014	
2. Channels of Risk Propagation	Methodology	• Implied cash flow test for 30 days.	• Basel III liquidity coverage ratio (resilience for 30 days).

Appendix Table 4. Banking Sector Stress Testing Matrix (continued)

3. Risks and Buffers	Risks	• Short-term wholesale funding risk (interbank and intragroup) • Withdrawal of various types of customer funding (including nonresident deposits) • Maturity mismatch/rollover risk	
	Buffers	• FSC-defined liquid assets (stock and inflows of assets that mature within 30 days, which are mostly intragroup claims). • No central bank facilities or reserve requirements. • 95% of liquid assets are available each day and 1% of non-liquid assets can be liquidated per day; alternative scenarios assume non-liquid assets cannot be liquidated at all within 30 days.	• LCR-defined high-quality liquid assets (HQLA, which excludes intragroup claims). • Cash inflows within 30 days (including intragroup claim maturing within 30 days) only up to 75% of total expected cash outflows. This requires that a bank must maintain HQLA equal to at least 25% of gross cash outflows. • No central bank facilities or reserve requirements • LCR-set haircuts are applied to the liquid asset buffer.
4. Tail Shocks	Size of the shock	***Baseline runoff rates*** • Baseline run-off assumptions are mostly taken from LCR, which uses 10% for retail and SME deposits not covered by deposit insurance (assumed for resident demand deposits). • For some types of funds, more conservative assumptions than in the LCR standard are applied: (1) withdrawal of term deposits with a maturity greater than 30 days; (2) assuming higher run-off rates for non-resident sight deposits (40%, which is the same rate as unsecured wholesale funding provided by non-financial corporations not covered by a deposit insurance scheme; time deposits receive 20%).	***Baseline runoff rates*** • Baseline run-off assumptions are mostly taken from LCR, which uses 10% for retail and SME deposits not covered by deposit insurance (assumed for resident demand deposits). • For some types of funds, more conservative assumptions than in the LCR standard are applied: (1) withdrawal of term deposits with a maturity greater than 30 days; (2) assuming higher run-off rates for non-resident sight deposits (40%, which is the same rate as unsecured wholesale funding provided by non-financial corporations not covered by a deposit insurance scheme; time deposits receive 20%).

Appendix Table 4. Banking Sector Stress Testing Matrix (concluded)			
		Stress scenarios (see Table 4 for details) build on the tailored LCR assumptions as baseline and impose additional stress on various funding sources: 1: Complete dry-up of interbank funding within 30 days. 2: Medium stress on intragroup funding and interbank funding (56% funding withdrawal within 30 days). 3: Complete dry-up of intragroup funding and interbank funding within 30 days. 4: Bank run for demand and time deposits (time deposits are withdrawn at the same rate as demand deposits). 5: Run on nonresident deposits (demand and time)—over 90% of demand deposits and 70% of time deposits are withdrawn within 30 days. 6: General bank run on all type of deposits (52% are withdrawn within 30 days). 7: Deposit run + shocks on intragroup and interbank funding.	No scenarios are examined.
5. Regulatory and Market-Based Standards and Parameters	Regulatory standards/ hurdle rate	[1] Economic survival: a bank fails when cash outflows in 30 days are larger than available liquid assets plus cash inflows during the same period. [2] FSC liquidity requirement: a bank fails when its liquid assets fall below 12% of total deposits liabilities.	• Basel III LCR ratio (HQLA/total net cash outflows) with hurdle rate of 100%.
6. Reporting Format for Results	Output presentation	[1] Survival period in days (minimum and maximum); number of banks that fail the test. [2] Days until breach of regulatory liquidity requirement; number of banks below the liquidity threshold of 12%.	• LCR ratio and liquidity shortfall in percent of GDP.