

CTF Trust Fund: Interim Proposal related to the Use of Local Currency Loans for Private Sector Projects

April 2013

Background

- Use of Local Currency in CIF projects was discussed by joint meeting in November 2012 in Istanbul.
- Prior discussions of this issue took place in:
 - November 2011 (Climate Investment Funds: Lessons Learned from Private Sector Interventions through MDB Intermediaries)
 - May 2012 (Proposal for Additional Tools and Instruments to Enhance Private Sector Investments in the CIF)

Criteria for projects to use local currency presented in November 2012 *

- a) The swap market in the relevant developing country is insufficiently developed or mature to meet the project's need; or
- b) More than (50%) of the debt financing for the project/program will be arranged in local currency;
or
- c) The costs of arranging a swap would be more than (1%) higher than minimum lending margin under the CTF guidelines.

*/ Option 2 presented in the paper entitled Use of Local Currency in CIF Projects,
CTF-SCF/TFC.9/7

In November 2012, MDBs requested that losses on LC lending be borne by the CTF TF

- Most MDBs have restrictions when arranging local currency loans so that any foreign exchange risk must be adequately hedged
- While swaps are available for most middle income countries, hedging instruments are often limited in tenor and amount for other small markets that results in MDBs facing certain foreign exchange risks
- Local currency loans are not allowed by some MDBs given potential exposure to foreign exchange fluctuations risk, and due to unavailability of long-term hedging instruments in certain markets

** Proposal for Additional Tools and Instruments to Enhance Private Sector Investments in the CIF (document CTF-SCF/TFC.8/8)*

The objective of the May 2013 paper

- Pending the development of the Enterprise Risk Management Framework, the Trustee was requested to conduct quantitative analysis to allow the Committee to take an informed decision on an interim proposal on :
 - The maximum amount that can be allocated to the MDBs to use for local currency lending
 - The amount of foreign exchange reserve to cover potential foreign exchange losses
 - Taking into account that the CTF Trust Fund would bear the related losses
- This paper presents initial analysis of the risks
- It is expected that a Risk Response (other than the suggested reserve) would be developed as a part of the ERM work

MDB Estimates of Local Currency Needs

*(for the next **24 months** in approved CTF private sector programs)*

Country	Ccy	Local Currency Needs for Already Approved Programs (in USD millions)					
		ADB	AfDB	EBRD	IDB	IFC	Total
Colombia	COP	-	-	-	5.00	-	5.00
Mexico	MXN	-	-	-	42.00	-	42.00
Philippines	PHP	-	-	-	-	10.00	10.00
South Africa	ZAR	-	42.50	-	-	-	42.50
Thailand	THB	44.00	-	-	-	50.00	94.00
Vietnam	VND	-	-	-	-	28.00	28.00
Total							221.50

- MDBs expect to be in a position to start negotiating the use of local currency loans with clients in these countries immediately and to conclude financing agreements within the next 24 months
- The figures represent a portion of the programs approved

About **4.6%** of the total CTF Pipeline

Local Currency Lending: *impact on the CTF Trust Fund*



- Meeting strategic goals

- Potential gains from the foreign exchange rates fluctuations

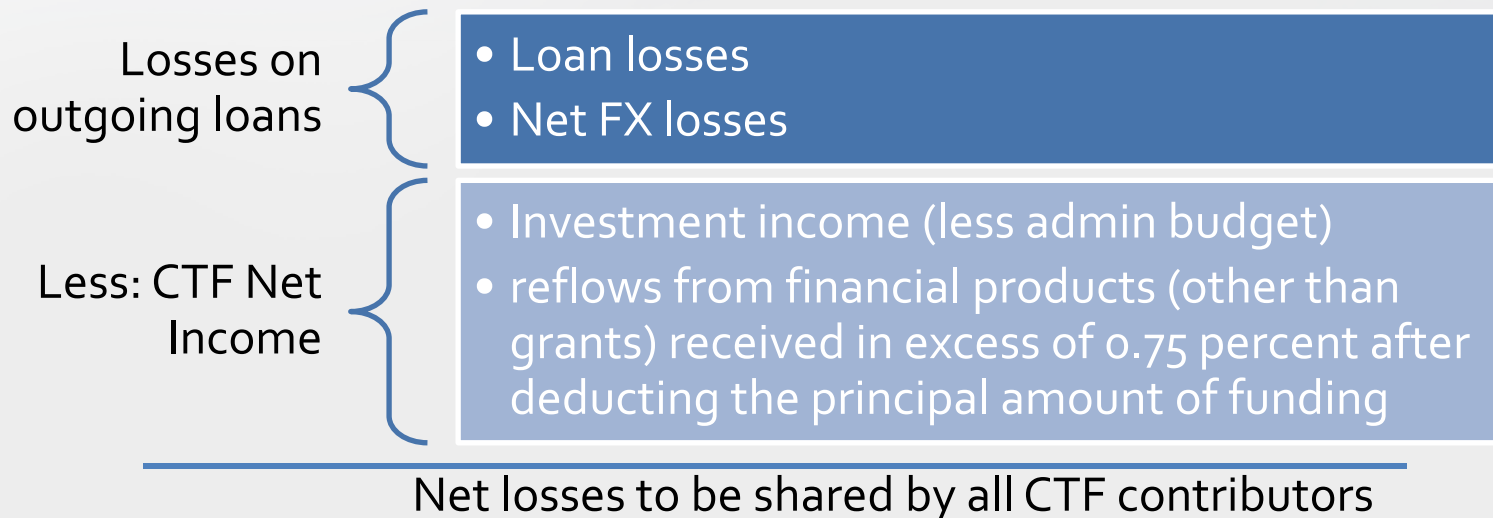
- Enhance the ability of the projects/borrowers to repay the loans

- Potential losses due to foreign exchange rates fluctuations *in addition* to the potential loan losses to be shared by CTF contributors

Principles regarding Contributions to the CTF:

Holistic approach in the Quantitative Analysis

- No cross-subsidy among the contributors
- Losses on outgoing loans to be shared by all contributors as follows:



Assumptions on losses in the overall portfolio

Public sector

- 5% loan losses as used in IDA modeling and confirmed in the analysis using GEMs data

Private sector

- Based on the GEMs ^{1/} data projected loan losses on the CTF private sector loans = 11%

No actual losses on CTF outgoing loans reported by MDBs to date

^{1/} Global Emerging Markets Risk Database

Scenarios

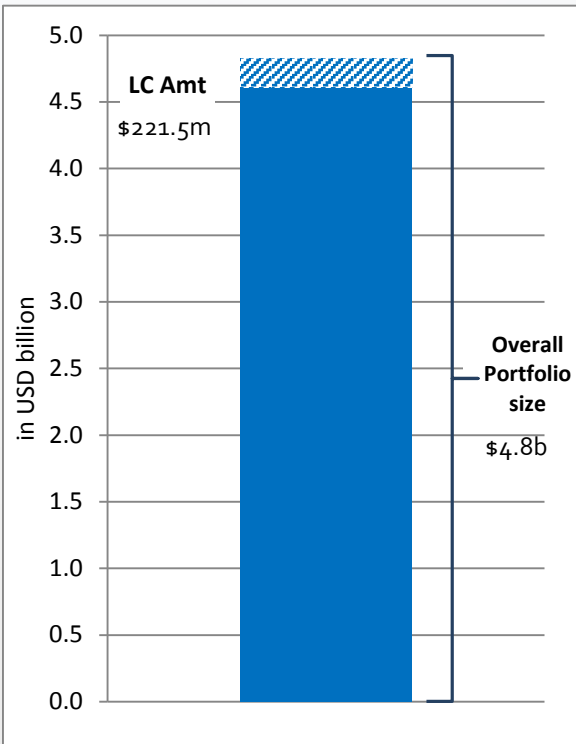
- **Purpose:** to demonstrate the total potential loss amounts and the resulting impact on the loss sharing across CTF contributors

All scenarios use the same assumptions

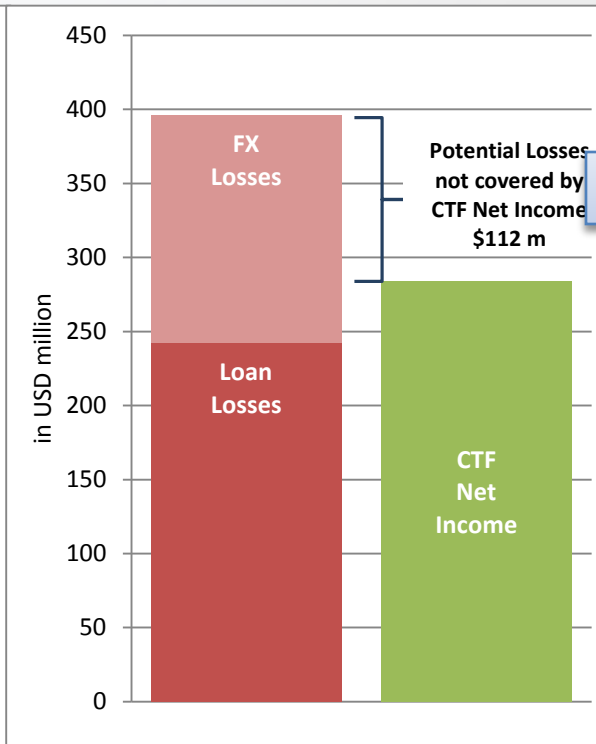
Loan loss rates on public sector loans based on loss rate used in IDA models	5%
Loan loss rate on the private sector loans based on the GEMs database	11%
Assumption on the foreign exchange loss rate based on historical average worst case losses on local currencies in the reference portfolio	66%

If \$221.5 million is allowed to be used in local currency...

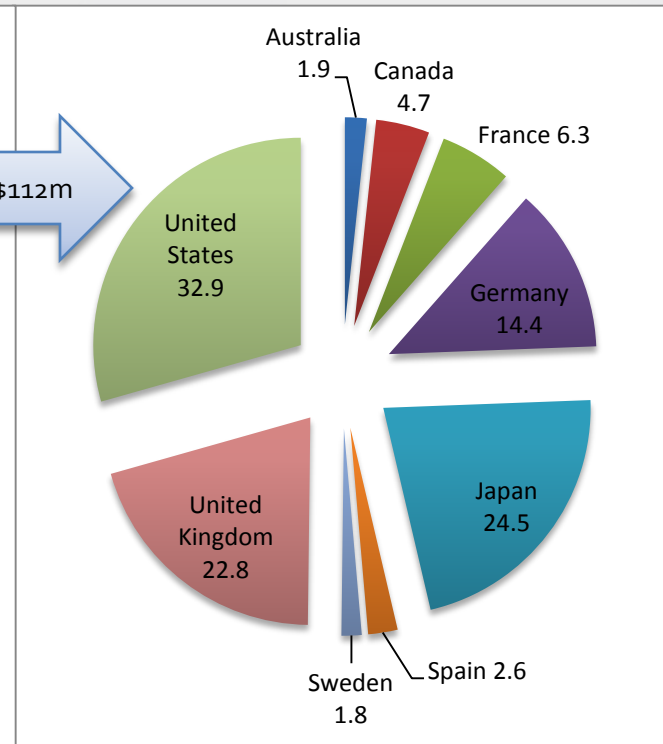
Portfolio



Potential Losses

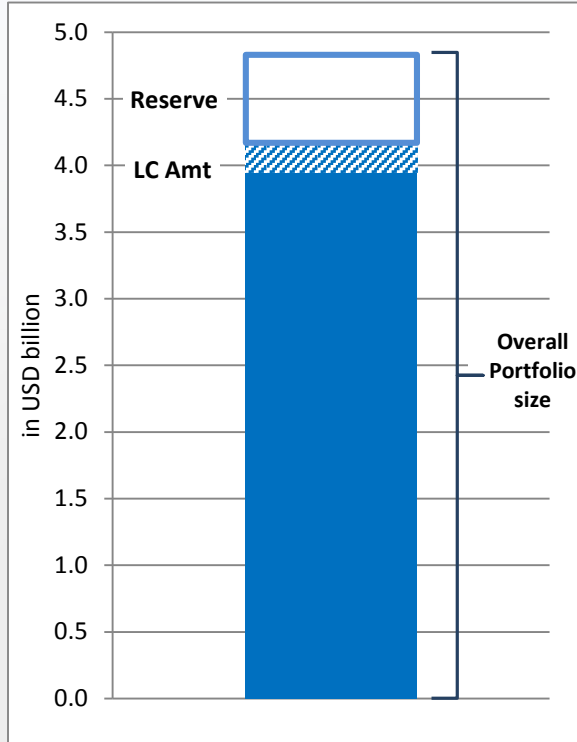


Loss Sharing

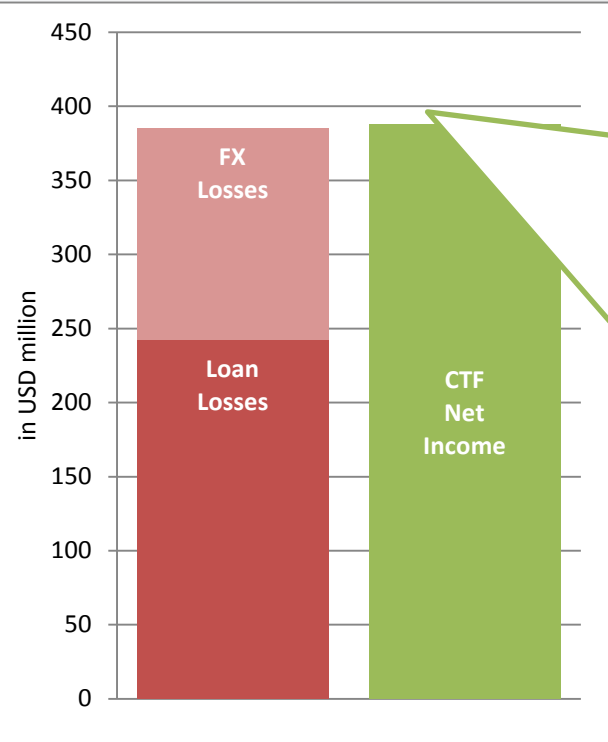


Option to reserve a cash cushion of \$660m

Portfolio



Potential Losses



- Cash cushion helps to generate additional investment income to cover losses
- As less funds are used for programming, overall potential losses are reduced in the model
- As a result – no losses have to be shared by CTF Contributors

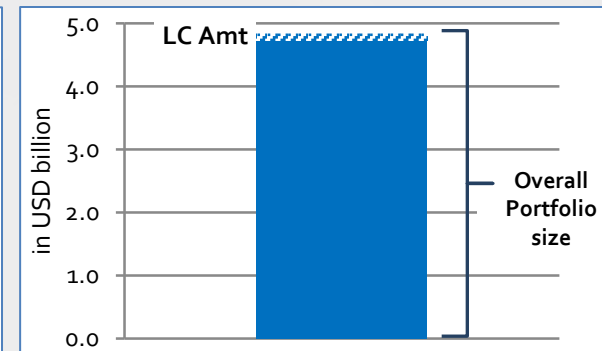
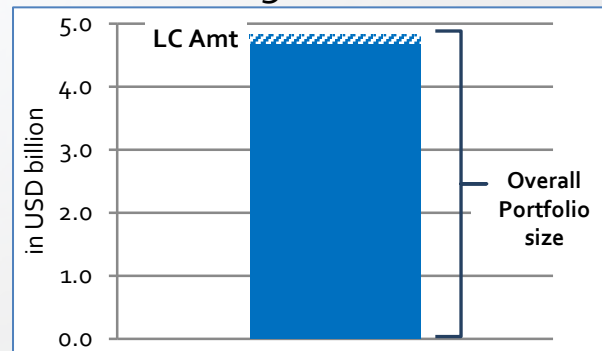
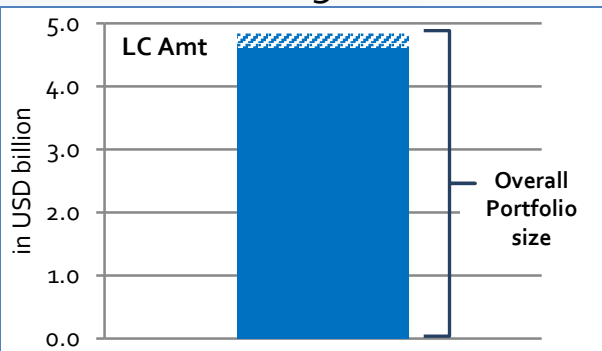
Summary of Scenarios for Local Currency Lending

Scenario A - \$221.5 m

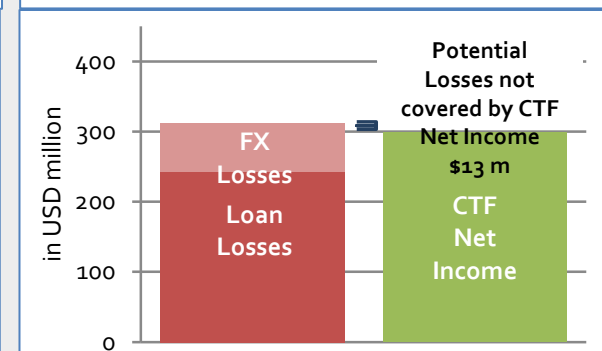
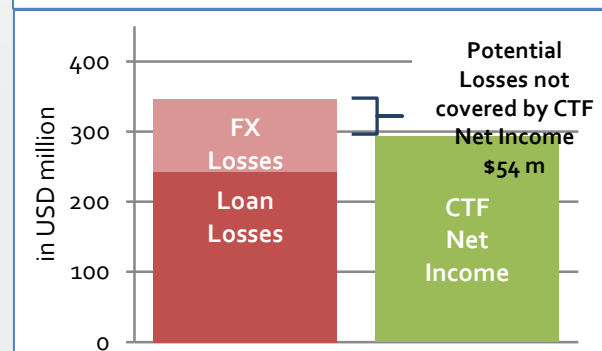
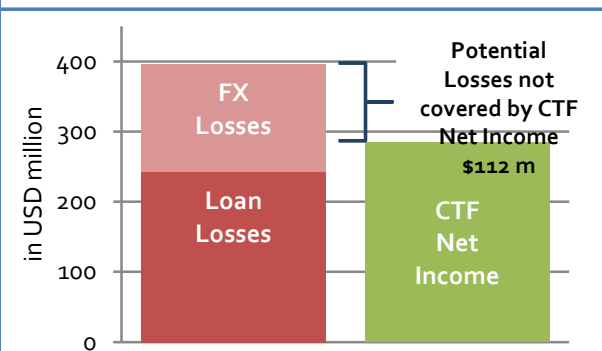
Scenario B - \$150 m

Scenario C - \$100 m

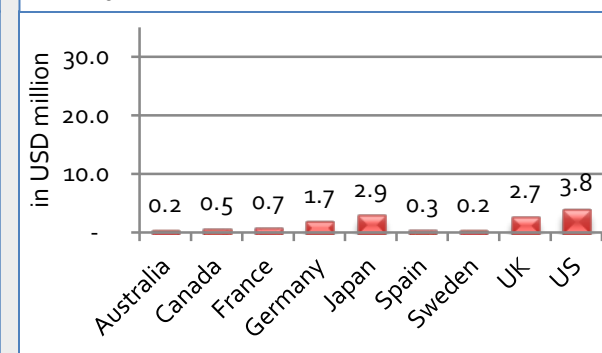
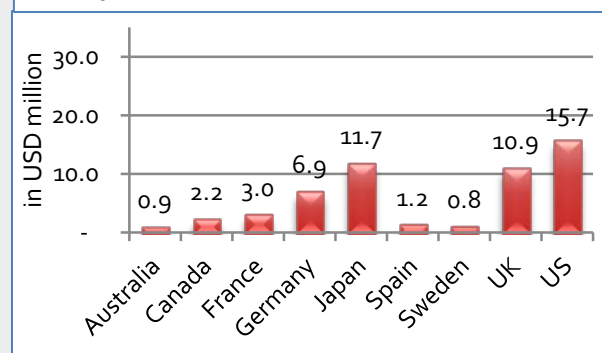
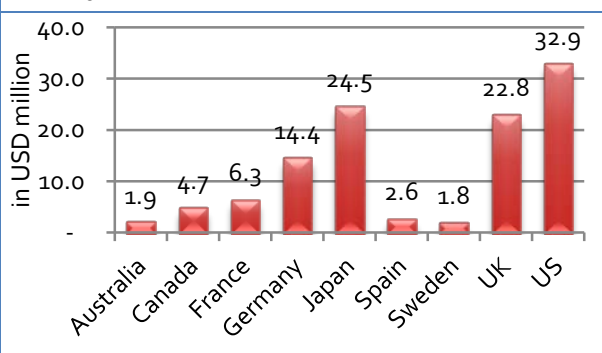
Portfolio



Potential Losses



Loss Sharing



Back-up slides

What does 11% projected private sector loan losses rate mean?

1. Probability of Default = 42%
(Average default rate for a loan over 14 years maturity)



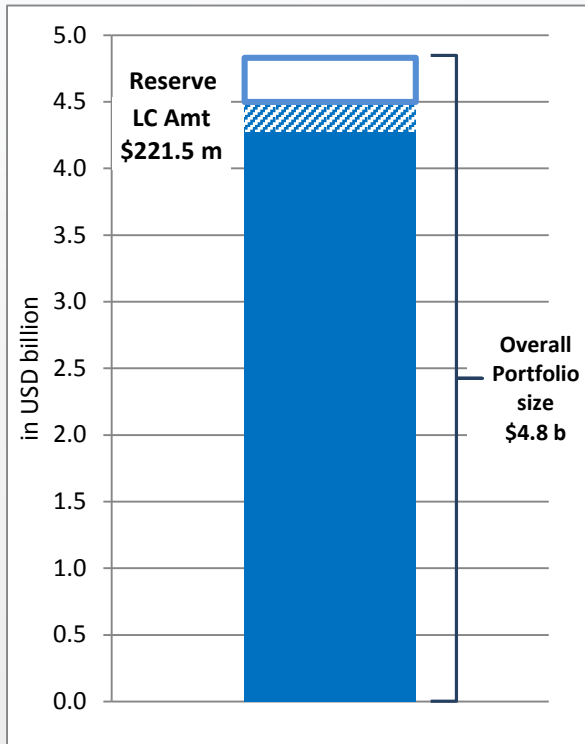
2. Recovery rate = 74%,
i.e. loss given default = 26%



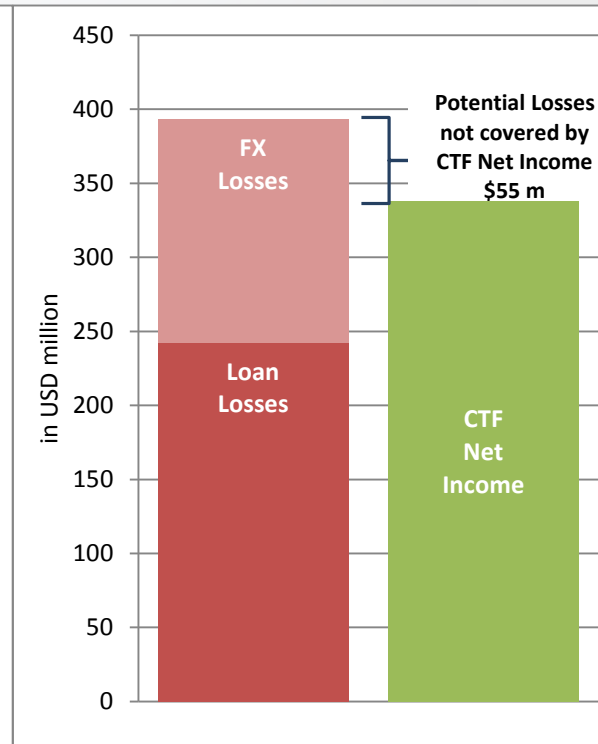
3. Expected loss = 11%

If \$221.5 million is allowed to be lent in LCY and a \$330 million reserve is used...

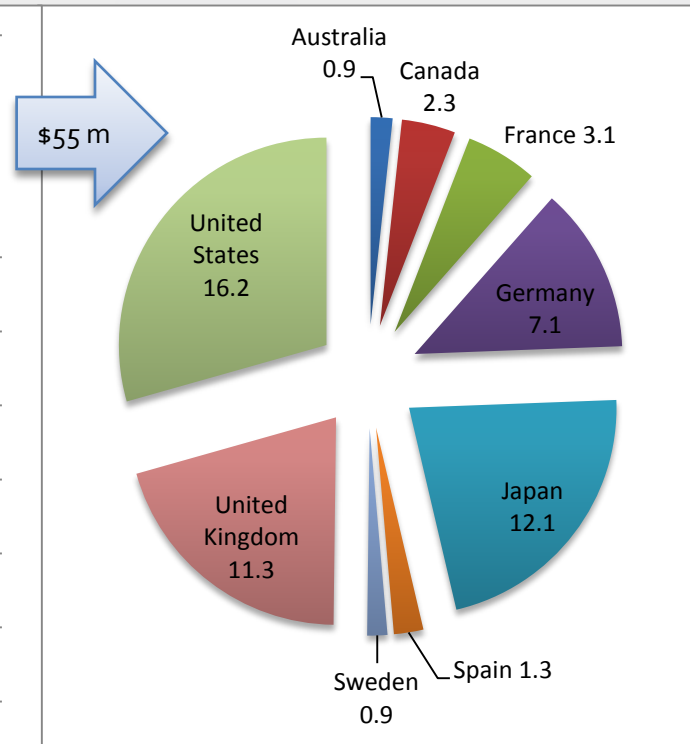
Portfolio



Potential Losses

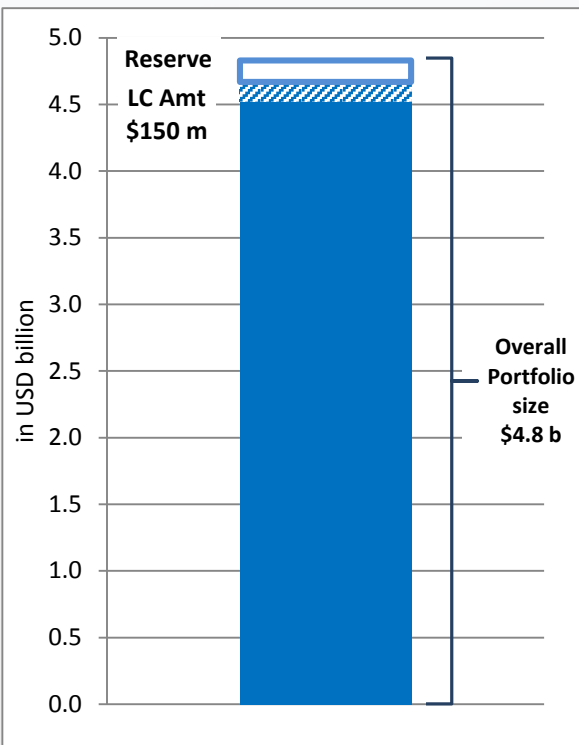


Loss Sharing

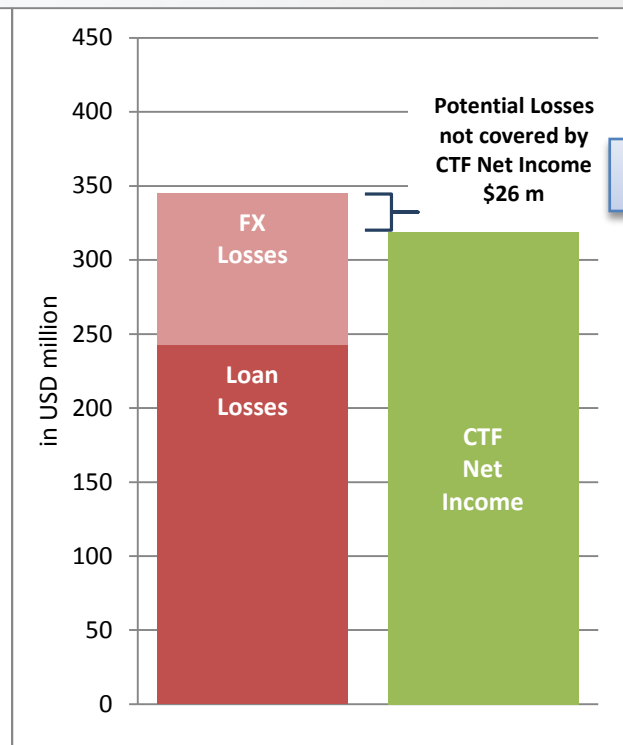


If \$150 million is allowed to be lent in LCY and a \$160 million reserve is used ...

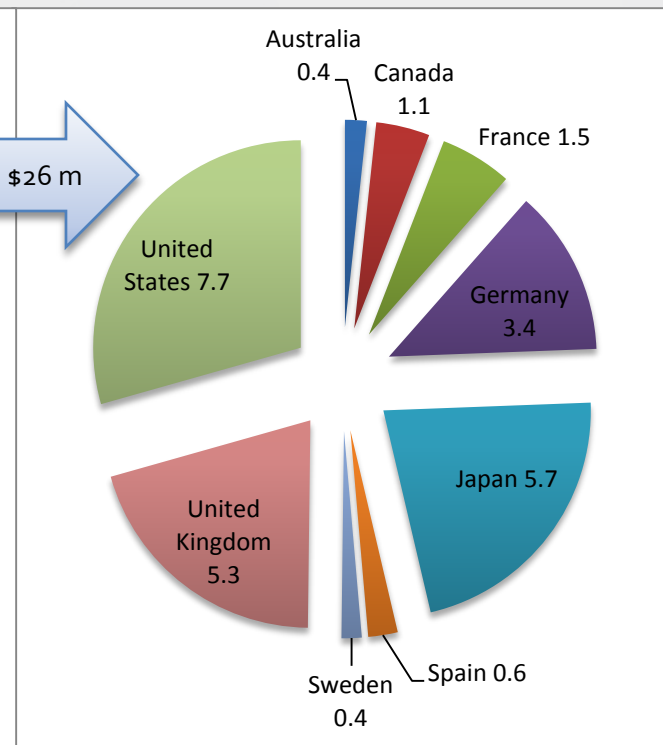
Portfolio



Potential Losses

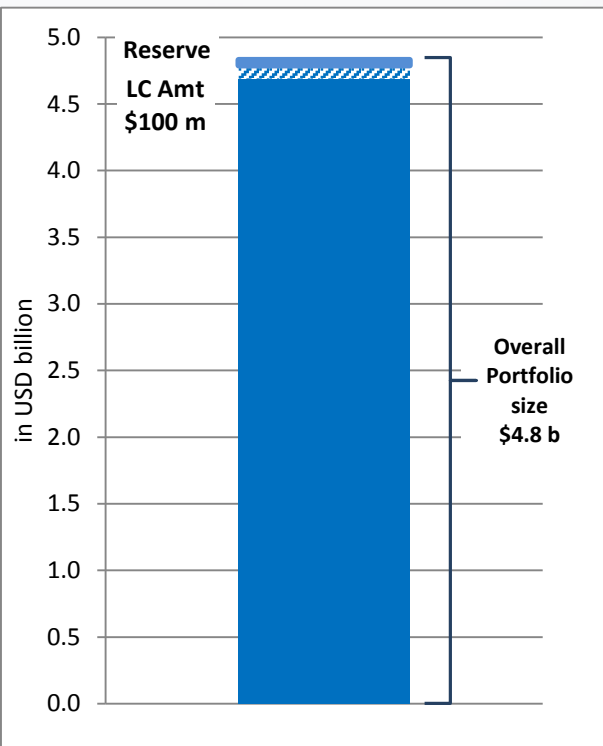


Loss Sharing

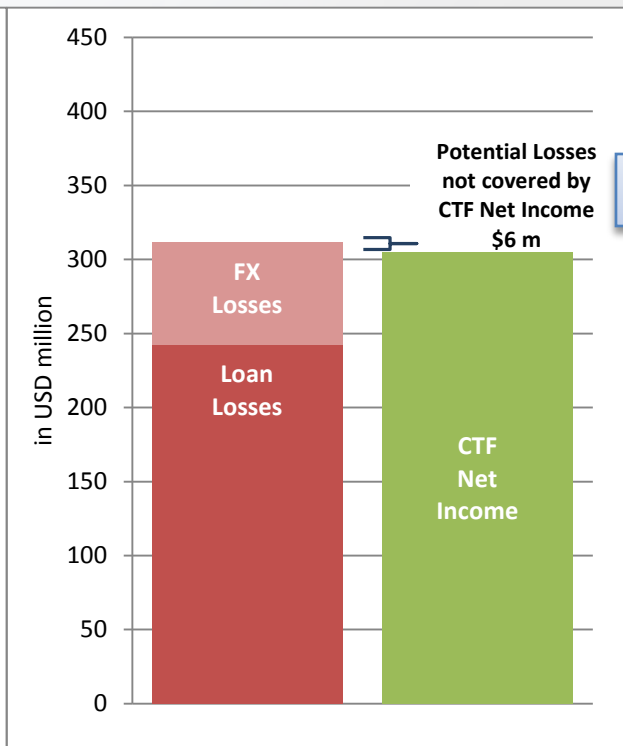


If \$100 million is allowed to be lent in LCY and a \$40 million reserve is used ...

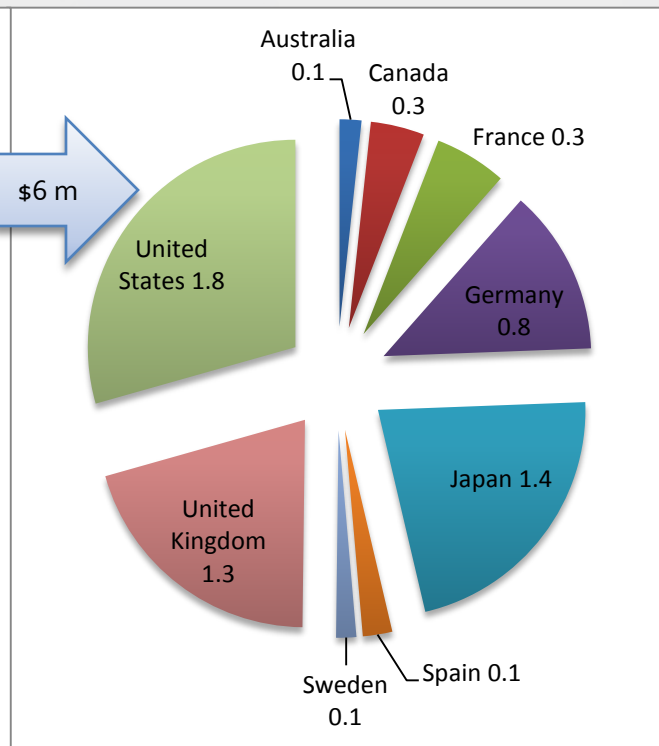
Portfolio



Potential Losses



Loss Sharing



Scenarios for Local Currency Lending

Overall Portfolio Size (\$ billion) a/	4.8		
Projected loan loss rates for public sector loans	5%		
Projected loan loss rates for private sector loans	11%		
Loan Losses on the overall portfolio (\$ million) (A)	242		
	Scenario A MDBs' Proposal	Scenario B	Scenario C
Amount to be used for local currency lending (\$ million)	222	150	100
Projected Local Currency FX losses	66%	66%	66%
Local Currency FX losses (\$ million) (B)	154	104	69
Total Potential Losses (\$ million) (A) + (B)	396	346	312
CTF Net Income (\$ million) b/	284	293	299
Losses not covered by CTF Net Income (\$ million)	112	54	13

Loss Sharing Calculation for CTF Contributors

<i>in \$ million</i>		Scenario A MDBs' Proposal	Scenario B	Scenario C
Amount to be used for local currency lending		222	150	100
Total Potential Losses		396	346	312
CTF Net Income		284	293	299
Losses not covered by CTF Net Income		112	54	13
Donor	% Share			
Australia	2%	1.9	0.9	0.2
Canada	4%	4.7	2.2	0.5
France	6%	6.3	3.0	0.7
Germany	13%	14.4	6.9	1.7
Japan	22%	24.5	11.7	2.9
Spain	2%	2.6	1.2	0.3
Sweden	2%	1.8	0.8	0.2
United Kingdom	20%	22.8	10.9	2.7
United States	29%	32.9	15.7	3.8
Total Losses not covered by CTF Net Income	100%	112	54	13

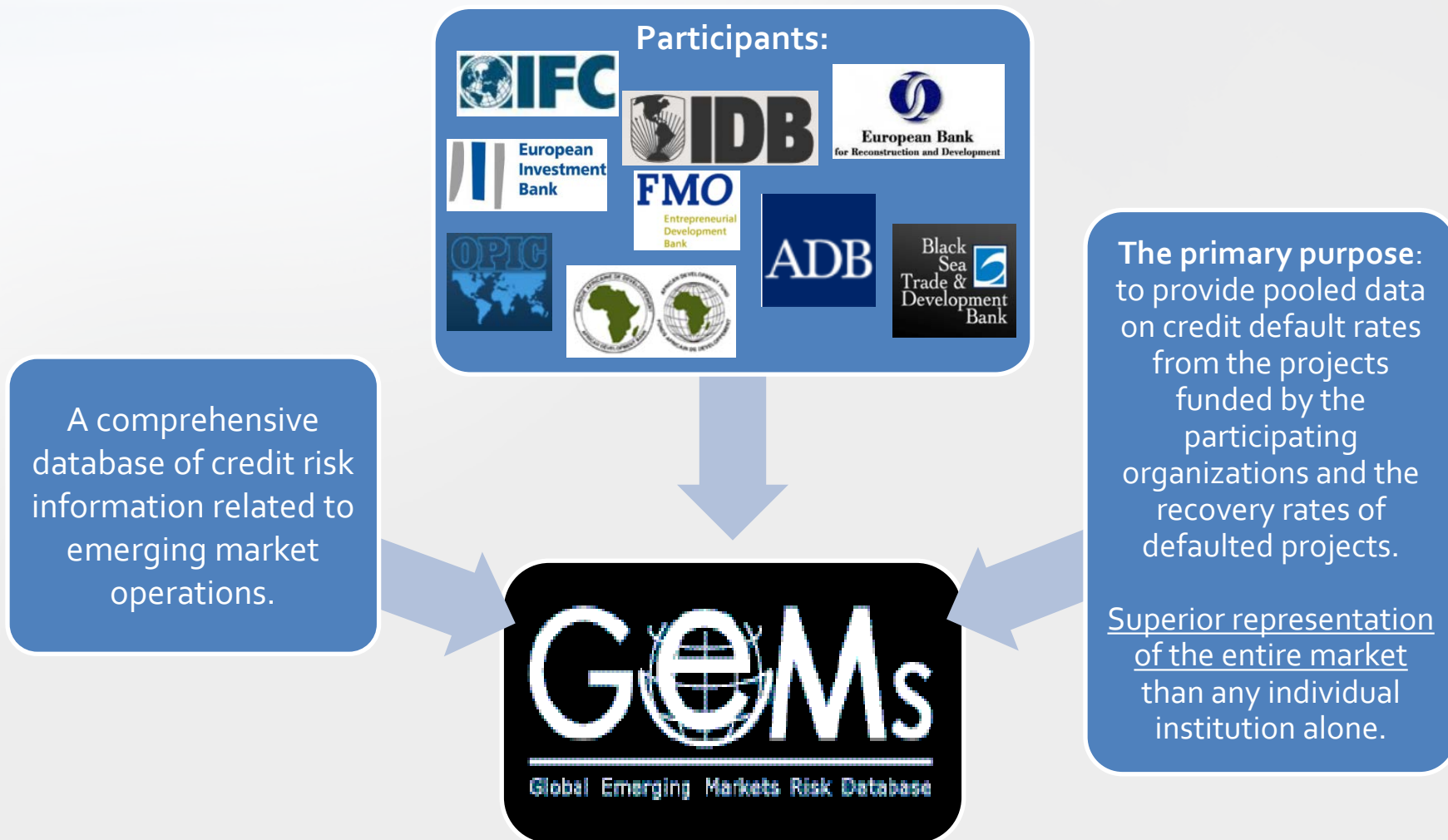
Option to offset Potential Losses

- Reserve a cash cushion that would help generate additional CTF Net Income.
- This reserve amount would be in addition to the existing foreign exchange reserve.

<i>in \$ million</i>	Scenario A MDBs' Proposal	Scenario B	Scenario C
Proposed amount to be used for local currency lending	222	150	100
Total Potential Losses	391	344	311
Proposed Reserve	660	320	80
CTF Net Income	392	345	312
Losses not covered by CTF Net Income	0	0	0

The potential investment income generated from this reserve will have to be weighed against the fact that reserving funds would decrease the amount of resources available to be committed and transferred to MDBs to finance projects and programs in the CTF Trust Fund pipeline.

Assumptions on losses in the overall portfolio: GEMs Database



<http://gems-riskdatabase.org/Index.html>

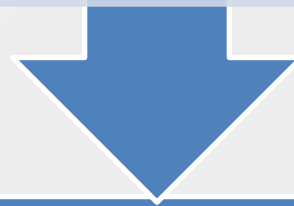
Assumptions on losses in the overall portfolio

Limited data available due to

Limited historical data on the CTF portfolio

Confidential nature of private sector projects

MDBs assess overall project risks without disaggregation by sources of funding



Need to use proxy:

GEMs database provides aggregated data across MDBs

GEMs default rates by ratings

	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca-C
Over 1 Y	0.6%	1.3%	2.5%	3.3%	4.3%	5.1%				
Over 2 Y	1.6%	2.5%	6.2%	6.8%	9.5%	10.5%				
Over 3 Y	2.8%	4.4%	9.7%	10.0%	13.9%	15.2%				
Over 4 Y	4.1%	6.6%	13.5%	12.4%	18.5%	20.3%				
Over 5 Y	5.6%	9.3%	16.5%	15.0%	22.4%	24.7%				
Over 6 Y	6.9%	10.9%	18.9%	17.5%	26.1%	28.2%				
Over 7 Y	8.4%	12.3%	21.8%	20.6%	28.5%	31.6%				
Over 8 Y	9.6%	13.4%	25.5%	23.3%	32.2%	34.7%				
Over 9 Y	10.2%	14.6%	28.4%	26.6%	34.2%	37.8%				
Over 10 Y	10.9%	15.2%	31.3%	29.2%	37.2%	40.6%	19.5%			
Over 11 Y	12.3%	15.2%	34.8%	32.4%	37.9%	43.7%	21.1%	19.5%	70.4%	50.1%
Over 12 Y	12.3%	16.3%	36.1%	34.4%	39.6%	48.0%	24.3%	44.3%	n.a.	53.6%
Over 13 Y	13.0%	17.8%	36.1%	38.2%	39.6%	53.8%	26.9%	44.3%	n.a.	58.7%
Over 14 Y	14.1%	19.9%	36.1%	44.0%	39.6%	57.0%	26.9%	53.6%	n.a.	66.2%
Over 15 Y	15.5%	19.9%	36.1%	46.6%	39.6%	59.6%	26.9%	69.1%	n.a.	76.3%
Over 16 Y	15.5%	19.9%	36.1%	46.6%	42.6%	64.1%	36.1%	69.1%	n.a.	84.2%
Over 17 Y	15.5%	19.9%	36.1%	46.6%	47.2%	64.1%	36.1%	n.a.	n.a.	88.7%
Over 18 Y	15.5%	19.9%	36.1%	46.6%	47.2%	64.1%	36.1%	n.a.	n.a.	96.2%

Average default rate for a loan over 14 years = 42% (probability of default)

Recovery rate

Region	Number of contracts	Recovery Rate	Standard deviation
Central Africa	80	78%	0.35
Central Asia	42	71%	0.42
Central Europe	32	77%	0.344
Latin America	78	68%	0.39
Middle East-North Africa	30	71%	0.41
Northern Central America-Caribbean	34	78%	0.36
Pacific	3	19%	0.18
Southern Africa	80	69%	0.40
Southern Asia	101	73%	0.36
Southern Europe	98	82%	0.27
Western Europe	2	50%	0.71
Others	11	90%	0.24
Total	591	74%	

Assumptions on local currency FX losses

Countries as proposed by MDBs

Private Sector loans tenure range from 10 to 20 years

Country	Currency	WCL 10y	WCL 15y	WCL 20y	Average
Colombia	COP	-76%	-68%	-62%	-69%
Mexico	MXN	-99%	-100%	-100%	-100%
Philippines	PHP	-57%	-50%	-44%	-50%
South Africa	ZAR	-77%	-83%	-92%	-84%
Thailand	THB	-47%	-57%	-55%	-53%
Vietnam	VND	-32%	-48%	n/a	-40%
					-66%

Historical observed worst case losses for respective time periods

Average FX loss rate used in the analysis

Assumptions on losses in the overall portfolio

- Losses on defaults or non-payments on the outgoing loans will first be covered to the extent available by CTF Net Income
- Any remaining losses will be shared by all contributors on a pro rata basis
- To date all outgoing loan repayments have been received by the MDBs as scheduled.

Looking forward, as a base case scenario, the following assumptions were used:

- (a) **a 5 percent loan loss rate** on public sector loans, which is the projected loan loss rate used for the IDA credits; and
- (b) **an 11 percent loan loss rate on private sector loans** based on data obtained from the GEMs risk database.

Potential impact on the ability to repay loan contributions in full

- If a decision is made to allow local currency lending in the approved CTF private sector programs, any losses due to the fluctuations of the local currency would have to be shared among all CTF contributors as it was initially agreed.
- In the analysis, the potential losses due to foreign exchange fluctuations on the local currency loans were added to the potential losses (from non-payment or defaults) on CTF Trust Fund funded loans

Current and projected private sector loan terms and pricing

- Private sector projects that are funded by the CTF Trust Fund do not have pre-defined loan terms and pricing
- financial products (e.g., loans, guarantees, etc.) and their “floor prices” are outlined and defined at the time of private sector country program approvals
- The MDBs report back to the Trustee on the final loan terms and pricing once the loan agreements are signed with clients.
- MDBs also provide the Trustee with the expected average loan terms for the projects in the pipeline.

Elements/Assumptions of the Analysis

MDB estimates of amounts and currencies of possible demand for local currency

current information as well as assumptions on loan loss rates on public and private sector loans (due to defaults or non-payment)

most current information from the MDBs on the current and projected private sector loan terms and pricing

updated information on inflows from contributors to the CTF Trust Fund

projected investment income

the potential impact of all losses on donors' shares