



Commonwealth Multilateral Debt Swap for Climate Change Adaptation and Mitigation Proposal

An Exposition of the Operational Features

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Introduction

Since 2010, the Commonwealth Secretariat has been advocating for the implementation of a proposal that could see small states benefit from improved debt management, climate resilience and possibly debt relief.

However, a recurring question from Commonwealth members and international financial institutions (IFIs) has been - so exactly how will this mechanism work? The majority of the confusion around the mechanics of the proposal has arisen because explanations have primarily been of an advocacy orientation, catering to the fast paced environments of Commonwealth finance ministers, Heads of Government and Heads of IFIs.

This brief paper is an attempt to delve into the technical details and is geared towards senior technical personnel, both in Commonwealth member governments as well as in IFIs. It provides the definitions (section 2); main assumptions/ elements underpinning the Commonwealth's thinking (section 3); the detailed mechanics of the proposal using a funds-flow diagram and three scenarios (section 4); benefits of the proposal to prospective climate finance providers (section 5); and some key issues (section 6).

2. Agents in the Commonwealth Secretariat multilateral debt swap arrangement

The Commonwealth Secretariat debt swap proposal involves the following agents:

2a. A debtor government

Such a government is highly indebted and holds a portfolio of debt, including liabilities owed to multilateral lenders.

2b. Multilateral creditors (e.g. IMF and World Bank)

Such creditors are restricted from providing debt relief to debtor governments due to their legal statutes; they provide loan financing to debtor governments for economic stability and economic development.

2c. Climate finance providers (specifically bilateral donors)

Such providers have pledged a pot of resources to tackle climate change. Providers' programmes range from bilateral interventions to contributions to multilateral initiatives such as the Green Climate Fund (GCF).

2d. A trust fund

This trust fund is set up to manage, invest and disburse resources for climate

change adaptation projects. The fund is financed by the debtor government's payments of debt service, which are diverted away from multilateral institutions through the swap arrangement.

3. The key assumptions and elements

3a. Climate finance motivations

Although data on climate finance is sparse and in many cases fragmented, available data for key climate finance providers indicates a significant gap between climate funds pledged and climate finance disbursed. The Commonwealth Secretariat debt swap proposal is based on the assumption that donors would wish to increase the sum of their climate finance disbursements to close the climate finance gap. This is in line with the spirit of the Paris Climate Change Agreement of December 2015, where major climate finance providers committed to significantly increasing levels of climate finance.

Available data for key climate finance providers indicates a significant gap between climate funds pledged and climate finance disbursed

3b. Climate finance beneficiaries

Another assumption in the proposal is that climate finance providers are indifferent to the choice of climate finance recipients. That is,

climate finance providers do not have funds earmarked for particular recipient countries. This assumption is especially true in the case where provider funds are delivered through the GCF.

3c. Environmental plan

The arrangement also assumes that the debtor government has an environmental plan in place containing identified adaptation projects, which are ready to be implemented once financed. This assumption seems fairly reasonable given the submission of more than 160 intended nationally determined contributions (INDCs) in the run-up to COP21 (UN climate change conference in Paris, the 21st Conference of the Parties), which expressed country plans towards both climate change adaptation and mitigation.¹

3d. Trust fund

There is the assumption that a trust fund is already set up either nationally, by way of a Central Bank, for example, or via a regional entity such as the Caribbean Biodiversity Fund (CBF). The trust fund can invest received resources in risk-free securities to augment investment in climate adaptation projects.

3e. Legal agreement

There is a legal agreement between climate finance providers and the debtor government, which stipulates that providers will write-down the debtor government's liabilities held at multilateral creditors on the condition that the debt service previously owed by the debtor government to multilateral creditors is paid into the trust fund to deliver climate change adaptation projects.

¹ 'The COP, by its decisions 1/CP.19 and 1/CP.20, invited all parties to communicate to the Secretariat their INDCs well in advance of COP21 (by the first quarter of 2015 by those parties ready to do so) in a manner that facilitated the clarity, transparency and understanding of the INDC. In decision 1/CP.20 the COP also invited all parties to consider communicating their undertakings in adaptation planning or consider including an adaptation component in their intended nationally determined contributions.'

3f. Debt swap process

There is the assumption that the write-down of the debtor government's debt held with multilateral creditors will be undertaken incrementally over a period agreed between the debtor government and the climate finance provider.

3g. Exit clause

Failure of the debtor government to honour debt service obligations to the trust fund, as agreed with the providers, will result in the cessation of the debt swap agreement.

3h. Burden sharing

Participating climate finance providers (CF_i) agree their contributions to the debt swap initiative based on a simple contribution function that takes into account the relative share of their climate finance pledges and the total value of the debtor government's liabilities held at multilateral institutions. This formula can be expressed as:

$$C_i = \lambda_i X \quad (1)$$

$$\text{Where, } \lambda_i = \frac{p_i}{P} \quad i=1,2,\dots,j \quad (2)$$

$$\text{And, } P = \sum_{i=1}^j p_i \quad i=1,2,\dots,j \quad (3)$$

C_i is the total contribution of climate finance provider i to the debt swap initiative; λ_i is the relative share of provider i 's climate pledges calculated as the ratio of a climate provider's total pledges – p_i – to the sum of pledges of all participating providers P ; X is the total outstanding stock of the debtor government's multilateral debt.

3i. The transfer of funds

Contributions from climate finance providers are transferred to multilateral creditors (M_i) directly for the purpose of extinguishing the debtor government's liabilities. The frequency of such

transfers is determined by the agreement on the length of the debt write-down contract N , such that

$$C_{it} = \frac{\lambda_i X}{N} \quad t=1,2,\dots,N \quad (4)$$

The contribution of provider CF_i in year t will be equal to the provider's average contribution. The debtor government equivalent transfer to the trust fund is undertaken in domestic currency.

3j. Debt relief

Lastly, the decision to provide debt relief is up to climate finance providers. If no debt relief is agreed, then the debtor government will simply owe outstanding debt to the trust fund, and benefits from the debt swap will be derived through foreign currency savings (assuming multilateral debt in \$US), increased employment, growth and climate change adaptation progress.

However, climate finance providers can decide to provide debt relief to the debtor government by way of a reduction in outstanding debt service or through a 'principal haircut,' that is, a reduction in the face value of debt owed. For example, climate finance providers can agree to:

- a) a debt swap process of length $N < K$ where K is the longest maturity on the debtor government's outstanding multilateral debt;
- b) debt service payments to the trust fund at a lower interest rate i_A ;
- c) debt service payments to the trust fund on a lower principal repayment by a factor α , where α represents an agreed percentage haircut.

4. The mechanics

On the basis of the assumptions and elements provided above, the mechanics of the Commonwealth debt swap proposal is illustrated using an ordinary funds flow diagram.

Take for example a simplified case where **Country A** (the debtor government) has a total multilateral debt stock valued at \$US100 million

and owed to three multilateral creditors – M_1 , M_2 and M_3 – where the ratio of the debtor government’s liabilities held at these institutions is 1: 2: 2.

Also let us assume a situation where there are three climate finance providers – CF_1 , CF_2 and CF_3 – interested in the Commonwealth debt swap proposal with total climate finance pledges of US\$50 million, US\$40 million and US\$90 million, respectively.

4a. Debt swap scenario 1 ($N=1$; $\alpha=0$; $i_T=0.05$)

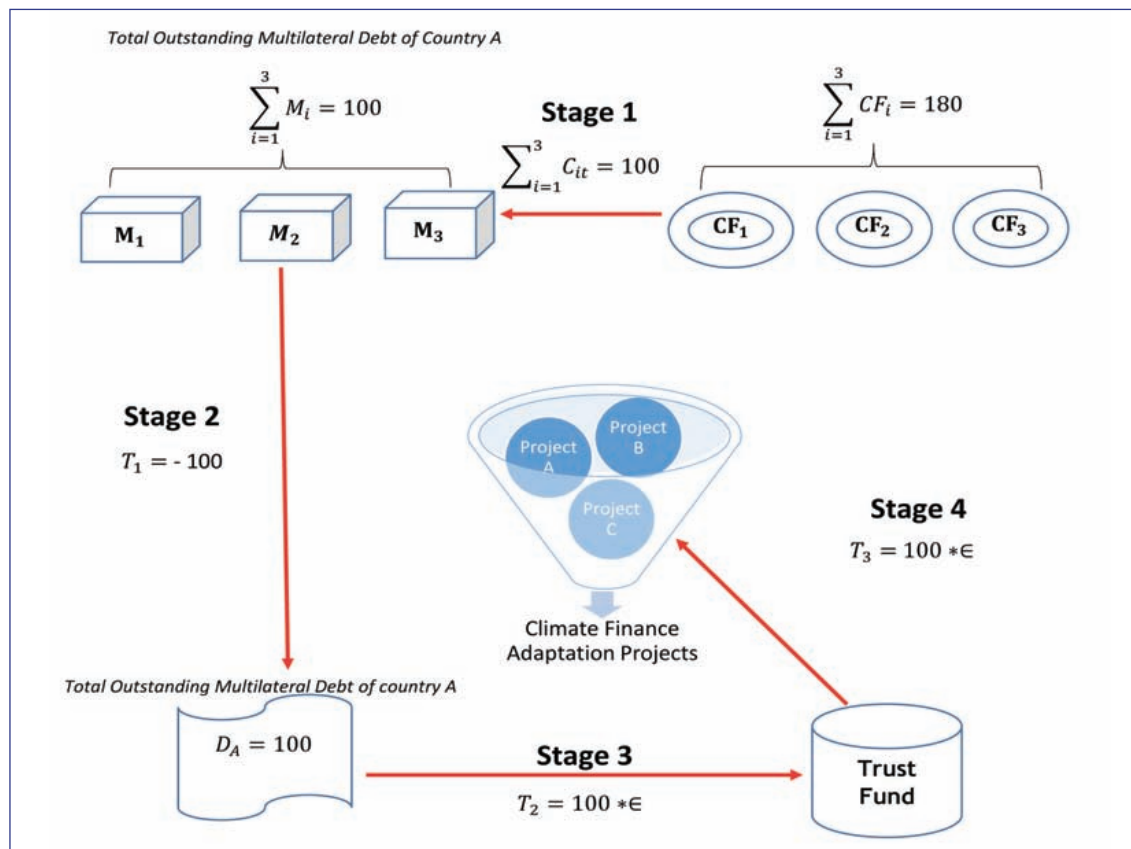
The illustration in Figure 1 depicts the simplest scenario. That is, where climate finance providers CF_1 , CF_2 and CF_3 do not offer debt relief ($\alpha=0$) and trust fund receipts are not invested ($i_T=0$). In this scenario, climate finance providers contribute $C_{1t} = \left[\frac{50}{180}\right]*100$, $C_{2t} = \left[\frac{40}{180}\right]*100$ and

$C_{3t} = \left[\frac{90}{180}\right]*100$, respectively, in the debt swap initiative and transfer in total US\$100 million to the multilateral holders of Country A’s debt for write-down of the debtor government’s liabilities. Multilateral creditors then write down the amount $T_1 = 100$ on their balance sheets, extinguishing Country A’s debt. This is equivalent to a negative transfer of US\$100 million, as depicted in Figure 1.

At the same time, in honouring the legal agreement, Country A pays the equivalent debt stock in local currency, converted by the spot exchange rate ϵ to the trust fund, which is then used to finance climate adaptation projects. This scenario is true when $N=1$; that is, when the debt write-off process is completed within a year.

It should be noted that this is quite an unrealistic scenario, but it is useful for

Figure 1. Mechanics of the Commonwealth multilateral debt for climate swap proposal



capturing the flow of funds. In essence, it implies monetisation of the debt by County A, which in such proportions would have deleterious effects.

4b. Debt swap scenario 2 ($N=10$; $\alpha=0.10$; $i_T=0.05$)

In this scenario, the debt swap term agreed is ten years, $N=10$, and climate finance providers together decide to provide debt relief of 10 per cent ($\alpha=0.10$) to Country A. Additionally, the trust fund achieves an investment return per annum of 5 per cent on the transfers received. Climate finance providers would have to contribute $C_{1t} = \left[\frac{50}{180}\right] * 100/N$, $C_{2t} = \left[\frac{40}{180}\right] * 100/N$ and $C_{3t} = \left[\frac{90}{180}\right] * 100/N$, in year t respectively. This amounts to a total contribution of US\$10 million by climate finance providers in year t and each subsequent year until the debt is written off. With positive debt relief, T_2 is reduced by α/N per year, with less funds being transferred to the trust fund. With $\alpha=0.10$, Country A now has to pay US\$9 million per year over ten years to the trust fund, where $T_2 = \left[\frac{[(1-\alpha)D_A]}{N}\right] * \text{€}$. These resources are invested by the trust fund and earn $T_3 = (1+i_T)^N \left[\frac{[(1-\alpha)D_A]}{N}\right] * \text{€}$ by the end of the arrangement.

4c. Debt swap scenario 3 ($N=10$; $\alpha=0$; $i_A=0.07$; $i_T=0.05$)

If we keep everything from scenario 2 constant, with the exception of the haircut offered by climate finance providers, and assume that $\alpha=0$ but now providers offer liquidity relief through a reduction in the interest rate $i_A=0.07$, where $i_A(t) < i_A(t-1)$, the only transfers that change are T_1 and T_2 . If $D_A = (1+i_A(t-1))^W D_A(t=0)$, where $M-N=W$, and M is the years to maturity so that N is the remaining maturity on the total outstanding debt stock, then Country A now pays to the trust fund $T_2 = ((1+i_A)^N D_A(t=0)) * \text{€}$. The trust fund then earns and finances $T_3 = ((1+i_T)^N (1+i_A)^N D_A(t=0)) * \text{€}$ worth of climate adaptation projects.

5. Benefits of the debt swap mechanism to climate finance providers

The benefits of the proposed debt swap arrangement to debtor governments are obvious, as explained above: conversion of multilateral debt into local currency and foreign exchange savings; funding of important climate finance projects; and increased employment and growth through increased public investment or possible debt relief. However, the benefits of the debt swap arrangement to climate finance providers, bar the increase in climate finance disbursement ratios (ratio of disbursement to pledges), are less evident.

The benefits of the proposed debt swap arrangement to debtor governments are obvious

From the Commonwealth's perspective, the operational benefits for climate finance providers lie in the answer to the question: *What is the marginal benefit of disbursing climate finance through the Commonwealth's debt swap arrangement as opposed to bilaterally or through a mechanism such as the GCF?* The answer to this question in essence rests on a comparison of the amount of climate finance that would be disbursed through traditional vehicles versus that which could be disbursed via the Commonwealth Secretariat debt swap arrangement to country i .

Returning to Figure 1 and the earlier analyses, this reduces to comparing the total amount of project financing T_3 that would be extended to the debtor government in state S_{tv} , which represents climate financing using traditional vehicles, and state S_{ds} , which represents climate

financing using the debt swap arrangement. Hence, for each individual climate finance provider, the benefit of pursuing a Commonwealth debt swap arrangement, other than assisting with the debt burden and climate change progress of country i , depends on C_i^{Stv} and C_i^{Sds} , as well as on T_3^{Stv} and T_3^{Sds} . Recall that T_3 is the actual amount of financing made available to fund climate adaptation and mitigation projects in country A.

In particular:

- I. If $C_i^{Stv} < C_i^{Sds}$ and $T_3^{Stv} > T_3^{Sds}$, the benefits of using traditional vehicles **clearly outweigh** the benefits of the Commonwealth debt swap arrangement.
- II. If $C_i^{Stv} < C_i^{Sds}$ and $T_3^{Stv} < T_3^{Sds}$, the benefits of using traditional vehicles relative to the benefits of the Commonwealth debt swap arrangement from the perspective of this analysis are **inconclusive**, since the choice of mechanism will depend on the benevolence of the climate finance provider in this case.

The international community can help to secure an increased pool of funds readily disbursed to assist with much-needed adaptation investment

- III. A truly benevolent provider will care very much about the size of T_3 , while a less benevolent provider will likely care more about the size of total outlays on climate financing. The latter has consistently been a bone of contention among providers.
- IV. If $C_i^{Stv} > C_i^{Sds}$ and $T_3^{Stv} < T_3^{Sds}$, the benefits of using traditional vehicles **clearly do not outweigh** the benefits of the Commonwealth

debt swap arrangement. In this state, a climate finance provider contributes less and generates more climate funds for country A. V. Lastly, if $C_i^{Stv} > C_i^{Sds}$ and $T_3^{Stv} > T_3^{Sds}$, the benefits of using traditional vehicles relative to the benefits of the Commonwealth debt swap arrangement are also **inconclusive**, given the choice between a cheaper mechanism as well as because of the unknowns regarding the provider's degree of benevolence – as mentioned above.

The Commonwealth Secretariat predicts that (IV) is highly likely due to the small size of Commonwealth indebted countries' multilateral debt stocks and the investment potential of trust funds that would be set up to manage the diverted debt resources. Added to this, as mentioned before, is the benefit of fast-tracking disbursements and improving the economic viability of indebted countries through the conversion of foreign debt to domestic debt. Such a mechanism is therefore fit for both the benevolent and less benevolent climate finance provider.

Additionally, through the trust fund arrangement (investments of receipts) and the legally binding agreement between debtor governments and climate finance providers, the international community can help to secure an increased pool of funds readily disbursed to assist with much-needed adaptation investment.

6. Conclusion

The perceptive reader will recognise that providing debt relief embodies a trade-off for climate finance providers – since T_3 is less with debt relief under S_{ds} , regardless of the investment potential of the trust fund. Hence providing debt relief is only technically feasible for the climate finance provider when $C_i^{Stv} \geq C_i^{Sdsr}$; that is, when the costs/contribution of CF_i using traditional vehicles is equal to or greater than the

cost of providing climate finance through the Commonwealth Secretariat debt swap modality.

It is also pertinent to bear in mind that it will be important to cost climate adaptation and mitigation projects, and to ensure that beneficiary countries have solid plans and the capacity to implement.

Heterogeneous debt portfolios among the Commonwealth's indebted members implies that some countries stand to benefit more than others, with some benefiting very little from the arrangement. However, it should be reiterated that the mechanism, once tried and tested, could be applied to tackle commercial and bilateral debt.

The initiative is data intensive, especially in trying to work out the relative benefits of pursuing the Commonwealth debt swap proposal. The Commonwealth Secretariat and prospective climate finance providers will need specific information on the pledges and funds disbursed for each prospective provider to each country potentially benefiting from the arrangement in order to determine:

- disbursement gaps;
- planned climate finance contributions, both budgeted and unbudgeted;
- precise data on beneficiaries' debt portfolios inclusive of interest rates and terms of agreements;
- detailed climate investment plans/ environmental plans/ INDCs with attached costs; and
- estimates of potential returns on invested climate funds.



The Commonwealth