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Interest at concessional rates

DEBT CONCESSIONALITY

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Executive Summary

Debt concessionality has gained increasing importance in the development arena especially on discussions relating to debt relief to the heavily indebted poor countries (HIPCs). However, there is no consistent definition or measure of debt concessionality in economic accounts. The 1993 *System of National Accounts (SNA)* hardly discusses this issue. The *Balance of Payments Manual, fifth edition* in paragraph 104 recognizes that concessional loans encompass a transfer element that needs to be imputed but falls short of providing guidance on how such transfers should be measured or recorded. Similarly, the *External Debt Statistics: Guide for Compilers and Users (Debt Guide)* in paragraph 6.22 recognizes debt concessionality, but offers no definition.

The issue of defining and measuring debt concessionality was discussed by IMF Committee on Balance of Payments Statistics (BOPCOM) in June 2005.

Arising from this discussions, the paper considers five possible treatment of debt concessionality:

a) to continue recording concessional debt in nominal value without accounting for the transfer element interest rate. This option has the weaknesses of failing to recognize the significance of transfers arising from concessional lending which is a key development issue in the Millennium Development Goals.

b) to record concessional debt in nominal value but account for the difference between the market interest rate and the contractual interest rate on the debt as an on-going current transfer. While this option is consistent with nominal valuation of loans, its key weakness is that it uses an interest rate that is likely to be out of line with evolution of market interest rates.

c) to record the concessional debt in nominal value but account for the concessional interest by recording a capital transfer at the point of loan origination equal to the present value of interest cost savings. This option is consistent with nominal valuation

[1] The views expressed in this paper are those of the author and should not be attributed to the International Monetary Fund, its Executive Board, or its Management.

of loans , simple to implement and avoids the pitfalls of option (b) as capital transfers are computed at the point of loan origination. Its key weakness, however, is that it assumes that transfers arise from interest concessionality only.

d) to record concessional debt in nominal value but record, as a supplementary item, one-off transfers at the point of loan origination equal to the difference between the nominal value of the debt and its present value using a relevant market discount rate. This option has the advantage of considering all the possible sources of transfers in debt concessionality—maturity period, grace period, frequency of payments as well as the interest rate—and is consistent with nominal valuation of loans.

e) to record concessional debt at market-equivalent value but account for the concessionality element by recording one-off capital transfer at the point of origination. This option while internally consistent is contra to the principle that loans are valued at nominal and not at present/market value.

The paper asks the Advisory Expert Group (AEG) to consider the following:

- *Is the approach of defining debt concessionality based on the intention of the creditor to convey a benefit in a noncommercial setting, such as government-to-government loans acceptable?*

- *Would option d) be an acceptable outcome?*

- *Does the AEG consider that further work should be encouraged to obtain better measures of appropriate market equivalent rates to be used as the discount factor, but regard the Commercial interest reference rate (CIRR) as an acceptable proxy in the absence of other information given its wide use in debt reorganization?*

Introduction

1. At the June 2005 BOPCOM meeting the Fund presented two papers discussing the treatment of debt concessionality—Balance of Payments Technical Expert Group (BOPTEG) issue paper 29 and BOPCOM paper 05/10. Following the discussion it was agreed that a revised version of the debt concessionality paper be prepared for presentation to the AEG meeting in January 2006.

Background

2. Debt concessionality has gained prominence in discussions on assessing the amount of capital transfers to developing countries. A creditor's decision to lend below market terms derives an element of transfer to the debtor similar to a subsidy in production[2]. There are many reasons why creditors lend at below market terms. Government or its units may provide loans at low or zero interest terms with the aim of providing a benefit to the recipient or to encourage some action by the recipient. Industrialized countries lend or reschedule their claims to developing countries below market terms for development reasons. Claims extended below market terms generates economic transfers to the debtor.

3. The demand for data on transfers has increased tremendously since the publication of *System of National Accounts (SNA) 1993* and especially after the Millennium Development Goals (MDGs) declaration in 2000. The MDGs sets the level of concessional lending to developing countries as one of the indicators of monitoring the development targets. The HIPC debt sustainability discussions focuses on a specific amount of debt concessionality. However, while it is recognized that lending at concessional terms derives a transfer to the debtor, there is no consistent definition or measure of debt concessionality. The *External Debt Statistics: Guide for Compilers and Users* (*Debt Guide)* does not provide a unique definition of concessionality nor recommend one (see *Debt Guide* paragraph 6.22). The need for clear guidance on debt concessionality has been highlighted in some quarters. The lack of a unique definition of concessionality, was highlighted as a key difficulty[3] in the discussions leading to the replenishment of the World Bank's IDA 14.

4. Debt concessionality was accorded less attention in *1993 SNA*. The *1993 SNA* recognizes the subsidy element of concessional loans to employees as being in wages and salaries in kind (see paragraph 7.42), but offers no explicit explanation of the adjustment to interest required by a double-entry accounting system. While *Balance of Payments Manual, Fifth Edition (BPM5)* recognizes that concessional loans encompass a transfer element that needs to be imputed (see paragraph 104), neither *BPM5* nor the *Debt Guide* has a definitive framework for recording these transfers either in flows or positions. *The Government Finance Statistics Manual (GFSM)* 2001, like the *1993 SNA*, recognizes the subsidy element

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[2] See 1993 *SNA* paragraph 7.76 (b)

[3] See IDA 14 (November 2004). Debt Sustainability and Financing Terms in IDA14: Further consideration on Issues and Options, paragraph 17.

of concessional loans to employees as being in wages and salaries in kind in paragraph 6.14 of the manual.

5. There is need, therefore, to provide a consistent definition and measurement of concessionality and to possibly account for these transfers explicitly in national accounts. The key issues in debt concessionality are therefore the measurement of the transfers arising from debt concessionality—irrespective whether the debt is new or is being rescheduled—and the recording of these transfers in economic accounts.

Recent discussion on debt concessionality

6. In December 2004, BOPTEG discussed the issue on debt concessionality presented in issue paper 29 and supported the argument in the issue paper that the concessional interest element of a debt should be recognized as a current transfer and that the interest costs to accrue should be adjusted upwards by this amount. BOPTEG also recognized that while there is no agreed definition of concessional loans, the existing guidance in the *Debt Guide,* and features such as an intention of the creditor to convey a benefit in a noncommercial setting, such as official loans,[4]could be drawn upon in drafting the revised *BPM5.* The need for further investigation was recognized.

7. Debt concessionality was further discussed by BOPCOM in June 2005 when IMF staff presented the results of their further work. While BOPCOM generally agreed with the proposal of accounting for concessionality, there was no consensus to include transfers arising from concessionality in the core accounts. BOPCOM was also divided as to whether such transfers should be current or capital. Among those in favor of presenting data on transfers noted that users expect to see a transfer element in government-to-government loans and such transfers should be recorded separately. Some members expressed reservation on the measurement of transfers arguing that it would be difficult to find agreement on such things as definitions or conditions regarding concessional debt. They noted, for example, that it would be difficult to obtain a relevant market reference rate especially if the debtor was unable to access capital markets. BOPCOM, however, agreed that where the transfer element was considered important, it could be provided as supplementary item. Moving forward, BOPCOM asked the Fund to revise the paper on the issue of concessionality for presentation to the AEG.

8. The BOPCOM paper was presented in October 2005 to the OECD's Working Party on Financial Statistics and Working Party on National Statistics but few comments were received. The BOPCOM paper was also reviewed by the internal Statistics Department Methodological Task Force, which encompasses all topical statistical domains, including government finance, and by relevant Fund policy departments.

[4] Official creditors are defined in paragraph 6.5 of the *Debt Guide.*

Need for consistent definition and measurement of concessionality

9. The demand for measuring transfers arising from concessional debt has given rise to many definitions. The Development Assistance Committee (DAC) defines concessionality level as a measure of the "softness" of a credit reflecting the benefit to the borrower compared to a loan at market rate. DAC calculates the difference between the nominal value of tied Aid credit and the present value of the debt service as of the date of disbursement based on a discount rate applicable to the currency of the transaction and expressed as a percentage of the nominal value.[5] In the MDGs concessional debt is defined as loans with an original grant element of 25 percent or more. The MDGs grant equivalent of a loan is its commitment (present) value less discounted present value of its contractual debt service.

10. In debt re-organization through the Paris Club, such as the HIPC Initiative and similar arrangements, debt reduction in present value terms is calculated using a market-based interest known as the OECD's Commercial Interest Reference Rate (CIRR).[6] The difference between the nominal value of the applicable debt and its present value is the amount of capital transfers derived from Paris Club debt relief arrangements.

11. The Ministry of Foreign Affairs of Finland defines concessional loan as " a financial arrangement where an export credit is supported by an interest subsidy". The interest subsidy is paid out of the development cooperation funds of the Ministry for Foreign Affairs of Finland and includes the lenders administrative fee. The recipient of the credit pays either zero interest or the interest rate is clearly below the market reference rate of interest. The Finish practice highlights an important point in accounting for debt concessionality—in particular, the transfers to the debtor are determined upfront at the point of contract where there are no further conditions attached to the terms of the contract. In this regard, the interest differential covered by the Ministry for Foreign Affairs is similar to a separate contract with the lender valued at market rate at the point of contract. Further, this arrangement underscores the need to exclude administrative fees in the discount rate.

12. The World Bank recognizes that other variables could influence the level of concessionality and thus the transfers. In IDA 13[7] it states that " softening IDA's lending terms to increase concessionality can be achieved by increasing the grace period and/or maturity on IDA credits, and /or by reducing the service charge.

13. From the above, it is evident that transfers arising from concessionality are important and cannot be limited to interest rate alone—the grace period, the frequency of payments and the maturity period are equally important in estimating transfers. It is also worth noting that in estimating transfers, care should be taken to exclude administrative fees arising in lending.

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[5] The discount rate is the commercial interest reference rate (CIRR) plus a quarter of (10 percent-CIRR). The current OECD threshold for concessionality is 35 percent.

[6] These rates are determined on the 15 day of each month for applicable currencies on the basis of secondary market yields on government bonds with residual maturity of five years, and additionally three and seven years for the Canadian dollar, the U.S dollar and the Euro.

[7] Grants and Concessionality in IDA 13, IDA (November 2001).

Box 1

Possible Treatment of concessional debt

a) Record concessional debt in nominal value without accounting for the transfer element in interest rate.

b) Record concessional debt in nominal value but account for the difference between the market interest rate and the contractual interest rate on the debt as an on-going current transfer.

c) Record the concessional debt in nominal value but account for the concessional interest by recording a capital transfer at the point of loan origination equal to the present value of interest cost savings.

d) Record concessional debt in nominal value but record one-off transfers at the point of loan origination equal to the difference between the nominal value of the debt and its present value using a relevant market discount rate as a supplementary item.

e) Record concessional debt at market-equivalent value but account for the concessionality element by recording one-off capital transfer at the point of origination.

Possible options for treatment of concessional debt

Box 1 identifies five possible options for accounting for transfers in concessional lending.

a) Record concessional debt in nominal value without accounting for the transfer element in interest rate

14. Given the international commitment under the MDGs to provide concessional debt to developing countries and the growing share of this debt, there is a need to present data on transfers symmetrically—in both creditor and debtor accounts. Failure to account for these transfers could provide misleading information about the movement of financial assets across countries and economic sectors.

b) Record concessional debt in nominal value but account for the difference between the market interest rate and the contractual interest rate on the debt as an on-going current transfer.

15. This option is consistent with the nominal valuation of loans and has the logic that the debtor is accruing less in interest than they would have under the market rate. However, a number of problems emerge. How is the market rate to be determined? Should it be fixed at the time of the contract and remain the basis of calculations for the length of the loan. From the viewpoint of the macroeconomic statistics framework, the difficulty with this approach is that the debtor would continue to record transfer based on market rates that are no longer relevant, and do not reflect current economic reality, if say in the meantime market interest

rates have changed significantly[8]. Or should the market rate to be used in the calculation change with market conditions. Then after a period of time the interest rate may not be concessional and indeed may switch between concessional or not as market rates fluctuate. However, the two parties are locked in to the same loan.

16. Rather, if there are no conditions attached to the stream of future interest payments—such as the requirement of the debtor to meet certain obligations before the concessional rate is applied as is the case with some form of debt rescheduling contracts (see paragraph 546 of *BPM5)*—it is plausible to say that transfers arising from interest concessionality occur only once, at the time of debt contract (see option c) below).

c) Record the concessional debt in nominal value but account for the concessional interest by recording a capital transfer at the point of loan origination equal to the present value of interest cost savings.

17. A third approach is to calculate the present value of the interest cost savings at inception. For a new loan this approach would require using two streams of interest payments—one based market interest rate and the other the contractual interest rate—with the market interest rate as the discount rate (see Table 1, row 4) and the difference is the value of the transfer. In the standard presentation of the balance of payments, such transfers could be recorded in the year they occur (i.e., when the contract becomes effective) as a memorandum item—perhaps as capital transfers. Under this approach, if the new loan was extinguished before maturity, the value of the transfer not yet received—based on the interest differential savings used to make the initial calculation of the transfer element—would be recorded as a negative transfer for the debtor, partially reversing the originally recorded transfer. If the concessional loan were replaced by a new loan, the interest cost saving of the new loan would be calculated using the current market rate.

18. This option is simple to implement in accounts and consistent with the concept of change of economic ownership. However, since transfers do not arise from interest rate alone but are determined by many variables including the grace period, frequency of payments and maturity period, it may not be the best option to use. A comprehensive definition of computing these transfers is important if it is to be consistently applied uniformly in all accounts.

[8] A variant of the market interest approach is to measure the savings from rescheduled debt, in which the interest rate is reduced (and is concessional), as the difference between the original and the new contractual rate. However, this suffers from the same concern that overtime the savings would not represent economic reality.

Table 1: Transfers arising from debt concessionality: loan of $1000								
		PV[1]		Year 1	Year 2	Year 3	Year 4	Year 5
1	Principal repayment	820		200	200	200	200	200
2	Interest at 7%	180		70	56	42	28	14
3	Contractual interest at 4%	103		40	32	24	16	8
4	Capital Transfers (row 2-3)	77						
5	PV based on market interest rate (7%) = (row 1+2)	1000						
6	PV based on interest of 4% = (row 2 +4)	923						
7	Capital Transfer ($1000-923)[2]	77						
8	Loan repayment schedule at market rate[3]			175.4	179.7	184.2	189.1	194.4
9	Interest accrues at market rate[3]			64.6	52.3	39.8	26.9	13.6

[1]Discounted present value (PV) = $\sum_{t-1}^{n}(Cash\ flow)_t/(1+i)^t$ where *(Cash flow)*$_t$ denotes the cash flow in a future period (*t*), *n* denotes the number of future periods for which cash flows are expected, and i denotes the interest rate that is applied to discount the future cash flow in period *t*.; In this case discount rate is 7%.[2] Since there is no change in the timing of payments, capital transfers based on interest are the same the difference between nominal value of the loan and its present value. [4] The market interest rate at the time of debt contract is used to estimate the stream of future interest payments.

d) Record concessional debt in nominal value but record one-off transfers at the point of loan origination equal to the difference between the nominal value of the debt and its present value using a relevant market discount rate.

19. Another approach is to include transfers arising from concessional loans as a supplementary tem, with the transfer value calculated at the inception of the debt as the difference between its nominal value and its present value using the payment stream and the current market interest rate as the discount factor (see Table 1, row 7). If the loan is retired before maturity and replaced by a new loan, adjustment of the previously recorded transfers is required. This means that the value of any transfers not yet received on the original loan that is replaced would need to be subtracted from the original transfer value calculated otherwise the amount of concessionality recorded over time would be overstated. This can be done by recalculating the transfer at inception using the actual payment schedule outturn, including the retirement of the entire remaining loan at the time of rescheduling.[9] This recalculated value should replace the originally calculated value in the historical memorandum series, so the historic data reflects the actual transfers received and does not mix the new concessional transfer with the value not received on the original loan. Such calculation would also apply if the new loan was extinguished before maturity.

[9] This would include any amount that is forgiven because such forgiveness is recorded as capital transfer in the period given.

Table 2: Transfers arising from debt concessionality: rescheduled debt							
			Year 1	Year 2	Year 3	Year 4	Year 5
Retired loan in Table 1: $1000							
		Revised schedule of old loan at 4%					
		PV[1]	Year 1	Year 2			
1	Principal repayment	885.7	200	800			
2	Interest at 4%	65.3	40	32			
3	Revised PV of retired Loan = (PV row 1 + PV row 2)	951					
4	Capital Transfer ($1000-$951)	49					
New loan (b) derived from rescheduling of loan in Table 1: $600 [2]							
					Payment schedule of new loan at 2%		
				PV*	Year 3	Year 4	Year 5
5	Principal repayment			524.9	200	200	200
6	Interest rescheduled at 2%			21.2	12	8	4
7	PV of rescheduled loan = (PV row 5 + PV row 6)			546.1			
8	Capital Transfer ($600-$546.1)			53.9			

[1]Discounted present value (PV) = $\sum_{t-1}^{n}(Cash\ flow)_t/(1+i)^t$ where *(Cash flow)*$_t$ denotes the cash flow in a future period (*t*), *n* denotes the number of future periods for which cash flows are expected, and i denotes the interest rate that is applied to discount the future cash flow in period *t*.; In this case discount rate is 7%.[2] The loan amount is the remaining balance of old original loan rescheduled at end of the second year after two payments installments.* PV of loan B assumes market interest rate remains 7 %.

20. For example, in Table 1, the initial transfer value was calculated at inception at $77 (row 7). Subsequently, at the end of year 2, the loan was extinguished and the present value saving is recalculated at $49 (Table 2, row 4). The latter value should replace $77 as transfer value at inception.

21. One practical difficulty in measuring concessionality is determining the appropriate interest rate to use as a discount rate. As noted, several possibilities are available such as the CIRR used in HIPC debt sustainability calculations. One advantage of including these transfers as a supplementary item in the accounts as opposed to the main body is that while it allows these transfers to be measured and data disseminated, it would also allow compilers to develop their approaches overtime without impacting the main accounts. Nominal valuation of loans would remain in the main accounts.

e) Record concessional debt at market-equivalent value but account for the concessionality element by recording one-off capital transfer at the point of origination.

22. Finally, another approach is to record the loan at market-equivalent value.[10] In the standard presentation two credit entries for the debtor would need to be recorded—one under loans equal to the present value of the concessional debt, and another under

[10] A market interest rate for the loan would need to be found.

capital transfers[11] equal to the difference between the nominal value of the debt and its the present value using the market-equivalent rate as a discount factor. Interest on the loan would accrue at the market-equivalent rate as opposed to the contractual instrument rate.

23. The same approach would apply for rescheduled debt. In the standard presentation of the balance of payments a transfer would need to be recorded at the time of debt contract as a credit entry for the debtor under capital transfers, related to a reduction in the value of the loan, with two contra entries in the loans category: the present value of the new loan, using the revised payment stream and the current market interest rate as the discount factor, [12] as a credit item, and the value at extinction of the old loan as the debit item.[13] In the analytical presentation the entries are the same as in the standard presentation except that the capital transfer is credited under exceptional financing. Interest would accrue at the market rate on the new loan, so taking account of both the interest payments to be made along with difference between the present value of the principal at inception and the principal amount to be repaid over the life of the loan .[14]

24. While internally consistent, such an approach is contra to the principle that loans are valued at nominal value and not at present/market value. Indeed, if a mixture of nominal and present value is adopted it could be considered that there are uncertainties about the determination of the value of capital transfers. The logic of the approach set out here is that the valuation of loans is determined by the interest rate (or rates if there is a concessional rate) at the inception of the loan. Given the nature of these loans, after inception the two parties are locked in, unless they agree to renegotiate the contract at which time the current market rate represents the new opportunity cost of capital, not the market rate at the inception of the original loan.

25. If the rescheduled new loan was extinguished before maturity, under this approach, amount paid by the debtor to extinguish the loan would be recorded as a debit item under loans and a credit item under currency and deposits, with the change in the loan value between the end of the previous period and the amount repaid recorded as a valuation change in the position data because, for example, the debtor has paid more to extinguish the loan than the value in the position data. Alternatively, although not preferred in this paper, a capital transfer could be recorded from the debtor to the creditor.

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[11] In the *GFSM 2001*, all transfers are recorded "above-the-line" and so affect the net balance on operating revenue and expenditure. But *GFSM 2001* has no explanation of the treatment of concessional debt.

[12] This section does not discuss which market rate to use. This issue could be determined once agreement in principle is reached on the approach to adopt. One possibility is to use the CIRR rate.

[13] For a new concessional loan, that is a loan that is not replacing an existing loan, the capital transfer would be calculated by comparing the present value of the new loan with its nominal value.

[14] The approaches discussed in this section could also be extended to official development assistance lending as well as for domestic lending from government controlled lending facilities that provide loans at below market rates for targeted groups or purposes.

26. If, under a voluntary agreement, the debtor and creditor agreed to replace the original concessional loan with a new loan with a lower interest rate, then a calculation of the capital transfer, on the same basis as above, would again be required. In the highly unlikely circumstance of the debtor and creditor agreeing to replace the concessional loan with a new loan at the market rate, a capital transfer would be recorded from the debtor to the creditor.

Recommendations

The paper recommends that for loans:

- *Debt concessionality should cover only loans as discussed in paragraph 6.* The focus in this paper has been to consider cross-border loans given on a noncommercial basis because of the strong analytical and policy interest in measuring transfers arising from such loans especially under debt rescheduling.

- *Option d) be adopted for reasons set above*. The recording of transfers on government-to-government loans using this approach is consistent with the international practice by those involved in debt rescheduling operations in the Paris Club especially under the HIPC Initiative. This approach has no impact on GDP, as only a supplementary item is proposed[15].

- *While further work should be encouraged to determine appropriate market equivalent rates for use as discount factor, the CIRR could be regarded as an appropriate proxy rate.* The CIRR is presently used in debt rescheduling operations involving HIPC and non-HIPC countries, and is widely recognized by those involved in debt re-organization.

Questions for the AEG

- *Is the approach to defining concessional loans as set out in paragraph 6 acceptable?*

- *Would option d) be an acceptable outcome?.*

- *Does the AEG consider that further work should be encouraged to obtain better measures of appropriate market equivalent rates, to be used as the discount factor, but regard the CIRR as an acceptable proxy in the absence of other information?*

[15] Among the government finance experts there was some support for including (d) in the main accounts rather than as a supplementary item.

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