# Why the Net Interest on External Debt Weighs Double on LDCs** 

## By

Bernard Schmitt*

## What this paper purports to prove: <br> the sum of net interests paid by developing countries to the rest of the world runs to a total cost equal to twice its value

Our aim is to show that less developed countries (LDCs) are rid of their external debt burden only after they have paid interests twice.

Let us first state the reason why the double cost of interest burdens developing countries as opposed to richer countries; this is due to the fact that LDCs sustain the weight of an interest debt which is positive after deduction of all interest (not much) owed to them by the rest of the world.

World Bank statistics, elaborated over 16 consecutive years and for 133 countries, show up the double payment of interest.

It is not up to the residents, the bearers of the interest debt, to pay it twice; debtors are exempted as soon as they have paid up the interest once.

The second payment is charged to the international reserves of the developing countries.
If interest were paid only once, its burden would be carried by LDC residents (e.g. by the governments) or by their international reserves; even in the event half of it were paid by the residents and the other half out the reserve funds, interest would still be paid only once.

Within the imperfect system of international settlements such as we know it today, any interest is paid in the first place by the residents who bear the principal of the external debt and, additionally, by their country's international reserves; the total cost of the interest on x dollars amounts therefore to ' x dollars times 2'.

Needless to say this conclusion is totally unexpected, surprising, not to say implausible and, let's be candid, 'mad'.

[^0]However, if we examine facts objectively (2,128 cases have been collected, for 133 countries over a 16 year period) and conduct a brief and to-the-point theoretical analysis, we find that interest payments have indeed been made twice.

We shall follow the same method throughout, based on the factual and logical distinction between the two debts created by net interest owed to foreign countries; we shall refer to them as $\mathrm{D}^{*}$ and $\mathrm{D}^{* *}$. Magnitude $\mathrm{D}^{*}$ is the debt servicing itself, such as it is defined between borrower and lender. Magnitude $\mathrm{D}^{* *}$ is the logical consequence, whose existence is borne out by facts, of the payment of interest $\mathrm{D}^{*}$.

The proof we offer in this brief study has never been made known before. In the first place, interest equivalent to $x$ billion dollars defines debt $D^{*}$, that much is straightforward and requires no explanation; on top of it, however - and this is as yet unknown - an equivalent debt $D^{* *}$ is unavoidably created, in such a way that the total amount of interest ends up being multiplied by 2 .

This result does no harm and is of no consequence to those countries whose creditor interest matches interest which they owe. Things are dramatically different in the case of developing countries, which pay net interests every year. Developing countries have thus spent over 1,300 billion dollars in interest credited to the rest of the world over the period 1984-99; by servicing D* these countries have been deprived of an equivalent real wealth, in domestic output; a 'dual debt' $\mathrm{D}^{* *}$ has deprived them, a second time, of an equivalent value in foreign currency transferred to the rest of the world; payment of $\mathrm{D}^{*}$ is absolutely 'normal' and does not lend itself to criticism; on the other hand the supplementary debt burden, $\mathrm{D}^{* *}$, is dramatically unfair, unjust. The very countries which should be enabled to develop their economies, have to put up, besides the interest paid on their external debt, with a supplementary and equivalent loss of foreign currency. This means that an interest to the value of 1,300 billion dollars has cost them twice that amount, a net loss of an enormous magnitude.

## Preliminary notes

We consider solely payments between the group of 'rich' countries, R , and the group of developing countries (LDCs), and we pay no attention to relations inside each group.

We examine solely interests paid to non residents.
We assume that interest owed by LDCs is net (difference between interests spent and interets claimed).

The figures indicating the amounts of currency are to be read as billions.
Key to symbols:
P, the four-year period from 1994 to 1997;
p, any year whatever when interest falls due, from 1984 to 1999 ;
D*, interest debt;
$\mathrm{D}^{* *}$, debt elicited by the payment of interest;
ID (interest debtor) stands for the resident or the group of residents of the developing countries which carries the burden of the interest debt;
Debt $\mathrm{D}^{*}$ is microeconomic, while debt $\mathrm{D}^{* *}$ is macroeconomic.
The interest debt as such is 'debt no. $1^{\prime}\left(D^{*}\right)$; the debt elicited by the payment of interest is 'debt no. 2' (D**).

## A.I. An interpretation of the statistics issued by the World Bank: <br> Figures show that the cost of interest is twofold

Let us have a look at the statistics published by the World Bank for the four-year period 1994-97, P.

Interest paid over period P amounts to 398,519 .
In period $P$ the current transactions deficit amounts to 428,281 . Give or take 29,762, this deficit equals the interest paid out.

If interest paid had actually been nil, current deficit would have been reduced by 398,519.
Statistics highlight the existence of two debts.
Debt no. I, D*, is the net interest of LDCs' due in period P; if we measure $\mathrm{D}^{*}$ by its actual payment, it amounts to 398,519 .

Debt no. 2, D**, is defined by the current-account transactions deficit in P , to the extent that it is equal to 398,519 .

What can statistical data tell us on the precise relation between these two debts?

## Precise relation between debt no. 1 and debt no. 2 <br> as evidenced by official statistics

Since debt servicing is part of current-account transactions, the current deficit generated by interest payment amounts to 398,519 .

Official statistics openly apply the rule according to which interest payment is part of current-account transactions; thus they evince that debt no. $2\left(D^{* *}\right.$ is generated by the payment of debt no. 1 ( $D^{*}$ ).

> Normative logic would be complied with provided debt no. 2 were included in debt no. 1

The following diagram is normative for it shows the inclusion of $\mathrm{D}^{* *}=398,519$ within D* $=398,519$.


Figure 1
'Form' D**, like a test tube, is introduced into 'form' D*, i.e. another test tube of equal capacity.

In accordance with this diagram, one can pay debt $\mathrm{D}^{*}$ only if one simultaneously pays D** in one and the same transaction.

If this is so, the payment befalling LDCs amounts to 398,519 in one fell swoop.
Facts, however, differ from the norm.

$$
\text { In fact: debt no. 2, } D^{* *} \text {, is not included in debt no. 1, } D^{*}
$$

If debt no. 2 were included within no. 1 , current-account transactions would not be affected by the payment of interests. Now, in the real world the exact opposite is true: the balance of current transactions incurs a deficit of 398,519 as a result of the payment of a net interest to the value of 398,519 .

True to the facts the next diagram shows the separation between the two debts; though equivalent, they exist side by side.

0


Figure 2
Not only are the two debts separate, instead of being conflated, but debt no. 2 springs from the payment of debt no. 1 .

If debt no. 1 were left unpaid, a quantity of currency equal 398,519 would remain available; it is indeed because the reserve currencies 'sucked into' interest payment are spent by the LDCs that their current transactions experience a deficit in $P$, to the value of 398,519.

In 'positive economics', what matters is respect for the facts, such as they are numerically observed and measured in the real world.

It is certainly unwarranted that the two debts, $\mathrm{D}^{*}$ and $\mathrm{D}^{* *}$, should add up to twice the value of each; yet since this is a fact, whoever studies the payments effected by LDCs to the rest of the world must concede, true to experiential knowledge, that the very same transaction which unburdens these countries of an interest debt of 398,519, burdens them all over again with an induced debt of an equal value.

Now, do facts truly warrant the conclusion according to which debt $\mathrm{D}^{* *}$ is additional to debt $\mathrm{D}^{*}$ ?

> According to World Bank statistics, the total burden
> of the two layers of debt, $D^{*}$ and $D^{* *}$, resting on the developing countries, amounts to 398,519 times 2

An interest of 398,519 has indeed been paid during period P by LDCs; these countries
have thus redeemed $\mathrm{D}^{*}$.
Yet repayment of D* has brought about an equivalent deficit in the current-account transactions balance of LDCs.

This deficit, $-398,519$, is debt $\mathrm{D}^{* *}$.
In order to pay for their deficit, LDCs have borrowed abroad a sum of foreign currency; they have therefore increased their external debt.

Debt $\mathrm{D}^{* *}=398,519$ has not been paid in period P .
One might harbour the false impression that repayment of debt $\mathrm{D}^{*}$, too, has been postponed. An objective reading of the statistical flows shows however that this is not at all what happened, for the developing countries did actually pay debt $\mathrm{D}^{*}$ in period P .

## Actual payment in period $P$ of interest debt $D^{*}$

During the four-year period P , some capitalisation of interest has taken place (capitalised interest $=38,246$ ) and a net change in interest payment arrears $(=13,901)$ has been registered. The total amount of interest actually paid out over this period by LDCs is 398,519 .

Very often it is governments that bear the burden of developing countries' external debt.

The relevant flows are as follows: in order to pay interest, debtors, say governments, spent out of their domestic income (tax revenue) a sum of national money equal to 398,519 in purchasing a sum of foreign exchange from exporters.

It would be plainly wrong to conclude that interest paid $(398,519)$ has been fed simultaneously by a 'domestic income' of the developing countries as well as by currencies accruing from their exports; as a matter of fact, only a single expenditure has thus been imposed, namely the outlay of a domestic income converted into an equivalent amount of dollars.

In period P developing countries have withdrawn 398,519 billion dollars from their export incomes and have paid out this amount in interest to the rest of the world. Total exports for period $P$ have yielded 6,280,090 to LDCs, out of which they substracted 398,519 to pay interest. For each year the World Bank computes the proportion of such withdrawals out of the total value of exports; for example $6.3 \%$ in 1994, $6.6 \%$ in 1995, $6.3 \%$ in 1996 and $6.2 \%$ in 1997. Note that interest is always funded by a sum offoreign currency accruing from exports; if the debtor pays interest by contracting a new foreign loan, this ultimately means that he is putting off payment. World Bank statistics are therefore perfectly correct in establishing the above mentioned ratios, withdrawal of interest from export incomes.

After interest has been paid, we realise that the debtor has given up an equivalent fraction of the domestic income of his country. It would clearly be wrong to say that ID is holding on to the income paid out as interest. The amount of 398,519 is in fact taken out of LDCs' economy as a whole since it is acquired by the rest of the world.

If we examine facts closely, we are faced with the following conclusion; debt $D^{*}$ has in effect been redeemed in period P; its payment has by no means been deferred.

We might think once more, again mistakenly, that the payment of $\mathrm{D}^{*}$ implies the payment of $\mathrm{D}^{* *}$. This would mean heeding a normative logic (Fig. 1) rather than positive facts (Fig. 2). True, even in actual fact, $\mathrm{D}^{* *}$ is but the consequence of $\mathrm{D}^{*}$. Yet it would be absolutely wrong to claim that $\mathrm{D}^{* *}$ is cleared on payment of $\mathrm{D}^{*}$. Let us state it once again: statistics prove exactly the opposite: when trade is balanced, the payment of interest causes an
equal deficit in current transactions. The bottom line of 'Major Economic Aggregates' sums up all deficits from current-account transactions; if cancelling $\mathrm{D}^{*}$ meant the cancellation of $\mathrm{D}^{* *}$, the World Bank would have deducted from these deficits all paid interests. No doubt that in this way the Worl Bank would have turned its back on facts because in the real world interests are paid like imports; so much so that the current transactions balance is inevitably affected by interest payments.

In a word, debt $D^{* *}$ continues to exist and remains outstanding even after debt $D^{*}$ has already been redeemed.

A close examination of facts thus brings to light a shocking truth: the burden of net interest on their external debt weighs twice on the developing countries.

This is fully borne out by statistics.
Faced with this outrageous claim, no wonder that the argument may falter. But let us keep straight on course.

## Rejection of specious arguments, which deny facts

1. One might be tempted to believe that debt $D^{* *}$ replaces debt $D^{*}$, which would thus remain unpaid in period $P$; that is erroneous
As official statistics show, interest of 78,208 in 1994 withdrew $6.3 \%$ from the payment of LDCs' current exports. The fact that in 1994 these countries contracted new loans disbursements equal to 113,570 excluding principal repayments - means that they had to cover the deficit in their current-account balances, to the value of 90,036 , the balance being an increase of their international reserves.

We notice that for each of the three remaining periods, interests falling due were likewise paid by dollar-incomes derived from exports.

Thus facts speak for themselves: interest worth 398,519 was paid out of net exports; if interest had not been paid in dollars, developing countries would have been able to pay in period P , all else being equal, a supplement of imports worth 398,519 .

Interest is always funded by exports except when the value of total exports is lower than interest paid out. Let us remember that this was not at all the case in $P$, when export earnings of developing countries amounted to 6,280,090 against interests paid to the value of 398,519 .

## 2. Second fallacy: interest is generated only once, at the moment it falls due, and could not possibly, therefore, give rise to two separate payments

Here again we have normative logic rearing its head against positive science.
Undeniably, interest payment occurred only once, at $100 \%$ - and not at $200 \%$ - of 398,519. It would therefore be foolish to claim that statistics show a multiplication by 2 of interest falling due according to contracts.

But this is absolutely not the lesson we draw from reading the figures published by the World Bank, which depict an altogether different reality.

Debt $\mathrm{D}^{*}$ arises at the rates per annum fixed by contract.
Debt $\mathrm{D}^{*}$ is redeemed by the expenditure of a sum of foreign currencies earned from exports.

It would be ludicrous to claim that debt $\mathrm{D}^{*}$ is multiplied by 2 .

Yet official statistics demonstrate, for all to see, that the payment of $\mathrm{D}^{*}$ calls forth a new debt of an equal value, debt $\mathrm{D}^{* *}$, which can ultimately be settled only when an equivalent amount of foreign currency is withdrawn from the international reserves of developing countries.

Debt $\mathrm{D}^{*}$ is 'one' and not double; it is 'multiplied by $1^{\prime}$ '; similarly, debt $\mathrm{D}^{* *}$ is 'multiplied by 1' because payment of interest does not burden current transactions twice. The double load of interest is merely the result of adding up together debts $D^{*}$ and $D^{* *}$.
3. Final fallacy: World Bank statistics seem to show that the burden of interest is 'simple'; now, the very opposite is true: figures show very clearly the double cost of interest
An interpretation of the statistics painstakingly assembled by the World Bank reveals that interest was paid twice by LDCs over the four years, 1994 to 1997.

If interest had been paid only once, the net inflow of foreign currency would have been reduced by the value of interest and that would be that.

We notice in fact that the net foreign exchange intake has been reduced by the value of interest multiplied by 2 .

Let us follow closely, for period P, the table on page xxi of Global Development Finance, A World Bank Book, The World Bank, Washington DC, 1997: ‘Aggregate net resource flows and net transfers (long-term) to developing countries'.

Net transfers amount to 715,321 (billion dollars). Consequently, were it not for the second interest payment, international currency reserves would in 1997 be higher by this amount than their 1993 value.

However, reserves increased only by 285,161 .
The figure for missing reserves easily accommodates the value of long-term interests $(305,931)$. This result is so striking that it is pointless to refer to any 'subtleties of accountancy' such as 'cross-currency valuations'; besides, it will be corroborated, more accurately, by figures relating to the 16 years (1984-99), when LDCs realised some trade surpluses.

## A.II. A brief theoretical analysis confirms the double cost of interest in period $P$

Let us first recall a few facts.
Interests proper arise from the passing of time; we know that the principal of the debt owed to foreign countries is net exactly to the extent of excess imports; now the principal bears interest only once.

In each period, interest accrues irrespective of all current-account transfers because it is the increase in value of the initial deficit or 'principal'.

In other words, interest debt is positive even before any expenditure is considered.
Fig. 2 represents interest such as it exists in reality, a debt that subsumes no currentaccount deficit.

In order to pay interest and, hence, to redeem debt no. $1, \mathrm{D}^{*}$, developing countries spent an equivalent sum of foreign exchange derived from their exports, 398,519 billion dollars for period $P$.

As a consequence of the very payment of $\mathrm{D}^{*}$, LDCs incur a debt in their current-account
balance; the paid amount of 398,519 is an outflow of foreign currency; in the event, which obtains more or less in P , when trade is balanced, the final deficit in the current-account balance is equal to the interest paid.

Statistics, as we have noticed, show that the payment of the current-account deficit demands a second payment on the part of LDCs, namely the payment of 'debt no. 2', D**.
'Debt no. $2^{\prime}$, $\mathrm{D}^{* *}$, i.e. the positive difference between current outflows and current inflows of foreign currency, is the second burden of interest, whose total weight equals $\mathrm{D}^{*}$ $+\mathrm{D}^{* *}$, that is twice the value of interest, $2 \times 398,519$.

Debt $\mathrm{D}^{* *}$ is not strictly speaking an interest debt, since the total interest debt, stricto sensu, is $\mathrm{D}^{*}$.

Nevertheless $\mathrm{D}^{* *}$ is the unavoidable consequence of payment of $\mathrm{D}^{*}$. It is no wonder, then, that statistics show that the burden of interest extends to include $\mathrm{D}^{* *}$; indeed figures bear witness to the fact that LDCs were saddled with a total cost of twice 398,519 (D* + $\left.\mathrm{D}^{* *}\right)$. Let us say it once more, in P interest payment brings their current-account balance into the red, a deficit amounting to 398,519, which increases the burden of interest, through the sheer mechanics of its payment.

These are the facts; and no positive, descriptive, analysis will hold water if it betrays such facts.

Now, correct analysis is exceedingly simple and it unmistakably confirms the double burden of interest.

Let us further examine the situation of the developing countries for P , the four-year period 1994 to 1997; in each of these years the trade balance was approximately at equilibrium, the current-account deficits arising from the payment of interests.

Payment of interest within the trade balance equilibrium requires that LDCs borrow from foreign countries twice the value of interest; official statistics aver this strange fact.

The cost of interest would be simple only if its value were met by one single loan of 398,519.

The Global Development Finance figures reveal that in actual fact LDCs contracted a net loan with the rest of the world, over the four years while their trade was balanced, amounting to twice 398,519 .

Let us once more consider the relevant figures made available by the World Bank.
Net transfers less the payment of short-term interest $(92,588)$ amounted to 622,733 . The sum of foreign currency thus transferred to LDCs from the rest of the world (essentially by direct or portfolio investments) flows into their reserves, which have risen by 285,161 . The difference between 622,733 and 285,161 , namely 337,572 , is a sum of foreign currency newly available in the domestic economy of LDCs; this sum is a claim on the economy of the rest of the world. If interest payment were not double, LDCs' net external debt would have decreased by this amount. In reality, it has grown by 548,928 . Adding this figure on to 337,572 we obtain 886,500 , a total which integrates the second payment of interest, since $398,519 \times 2=797,038$ is less than 886,500 ; the remaining difference may be explained using the World Bank's own criteria, as 'cross-currency valuation', 'debt forgiveness or reduction', 'residual'. The main figures, constantly checked between creditors and debtors, are a shining proof of the second payment of interest.

Now, how is theoretical analysis to explain this fact? If the theoretician wilfully decided that the second payment of interest did not exist, on the grounds that it is inconceivable, he would deny or repudiate confirmed facts and would thus cut himself off reality to take
refuge in the comforts of an ideology or a doctrine. Ours is an experimental science and, when it contradicts the real world, facts prevail.

To insist that there is no second payment of interest is to make a mistake to begin with, since it is clear and incontrovertible that the interest debt growing with the flow of time ( $\mathrm{D}^{*}$ ) includes no current-account deficit; as soon as net interest is actually paid, a second debt arises, quite separate from $\mathrm{D}^{*}$; the additional debt, that is $\mathrm{D}^{* *}$, is generated, as we well know by now, at the precise moment when debt D* is made good. One should bear in mind that $\mathrm{D}^{* *}$ is the necessary outcome of the repayment of debt $\mathrm{D}^{*}$ and that this second debt must by all accounts be paid in its turn, just like any debt.

To be on the right path in this matter, a theoretician must base his thinking simultaneously on statistical data and on the conceptual distinction between the two debts, $\mathrm{D}^{*}$ and $\mathrm{D}^{* *}$.

Provided these precautions are taken, the correct reasoning is not arcane. Let us use simple round figures; in period P , where the value of LDCs' exports as well as imports are 40, interest paid is 10 .
'Real' interest payment. LDCs export for 40 and import for 30 ; their imports nevertheless amount to 40 for they borrow 10 from R.

If interest were directly paid in kind, that would be the end of the matter, interest being paid once only.

But in the real world interest is first paid via the expenditure of a sum of foreign currency.
Monetary payment of interest. In exchange for its exports, LDCs' economy has gained 40 in a foreign currency. The monetary payment of interest, D*, takes 10 out of this amount of 40 . Since this payment substracts 10 billion dollars from the 40 billion dollars earned by LDC's exports, current-account transactions suffer a deficit of 10 in terms of foreign currency. The monetary payment of this deficit, debt $\mathrm{D}^{* *}=10$ caused by the payment of debt $\mathrm{D}^{*}=10$, is met by a supplementary sum of net borrowing ('disbursement') of 10 .

Analysis thus accords with observable facts: two new loans of 10 from R are required in order to allow LDCs to pay an interest of 10 when their trade balance is at an equilibrium.
> A.III. A final reading of statistics regarding period $P$, when trade between the LDCs and the rest of the world is balanced

Let us propose a final reading of statistics for the four years of periof P, 1994-1997. Loans granted and repaid within each of these years belong to the short term, according to World Bank's usage. Pay attention to long term interest payments and to the corresponding new loans, or "disbursements".

The sum total of the new net loans ("net flows on debt") is 582,770 over the four years; the whole debt forgiveness or relief for the same period is 50,221 ; the new loans contracted by LDCs with the rest of the world thus reach 632,991 for that period, that is to say twice the long-term interest, $2 \times 305,931$.

## A.IV. Conclusion of the balance of trade equilibrium case

During the four-year period under scrutiny, LDCs' current transactions are at equilibrium, so long as interest payments have not yet been taken account of.

The interest debtor, ID, withdraws the sum of 398,519, and spends it; as a result, debt $\mathrm{D}^{*}$ is cancelled.

As a consequence, there arises a current-account deficit to this amount.
Debt $\mathrm{D}^{* *}$ would not exist if debt $\mathrm{D}^{*}$ had not been redeemed.
Now that statistics have been read and the situation analysed, one is no longer entitled to believe that LDCs cannot help deferring interest payment in periods when their trade is balanced; this is disproved on two counts, by facts and by pure logic. It is certain that the interest that fell due in P has in effect been fully paid without delay, during this same period. Now, despite the 'actual' transfer in P of 398,519 in interest, amounting to the cancellation of debt $\mathrm{D}^{*}$, the debtor countries remain saddled with the burden of interest matured in P; indeed, interest is still entirely outstanding; true, it no longer appears as debt $\mathrm{D}^{*}$ but inescapably as $\mathrm{D}^{* *}$, a debt which is the logical and factual consequence of the cancellation of debt $\mathrm{D}^{*}$. Let us not tire of repeating the essential point: it is precisely because the interest has been paid that an equivalent deficit emerges in the current accounts of LDCs.

It is appropriate to draw the distinction between the respective 'persons' carrying debt $\mathrm{D}^{*}$ and debt $\mathrm{D}^{* *}$.

## A.V. The interest debt, $D^{*}$, and the debt flowing from the payment of interest, $d^{* *}$, are not incurred by one and the same 'person'

Interest debtors, ID, shoulder D*; we hasten to add that ID does not carry even the smallest fraction of debt $\mathrm{D}^{* *}$. It would be absurd to claim that ID is obligated to pay twice the interest stipulated by contract.

The payment of debt $\mathrm{D}^{* *}$, which is nothing but a current-account deficit, is charged to LDCs' international reserves. In fact, $\mathrm{D}^{* *}$ is a trade deficit. This is so because interest payments diminish the sum of foreign currency available for imports. Debt $\mathrm{D}^{* *}$, a deficit in the current-account transactions balance, is therefore more precisely a trade deficit, just like the initial 'principal'. If LDCs had paid for their excess imports in the past by drawing upon their reserves, they would not have ended up with an external debt.

We observe that debt $\mathrm{D}^{*}$ is met by LDCs' domestic economy, whereas debt $\mathrm{D}^{* *}$ diminishes their international reserves.

The domestic economy (ID, to be precise) pays interest only once.
Equally, international reserves pay once only the debt caused by interest payments.
These two transactions, which take place concurrently, are not linked by the conjunction or but by the conjunction and: they add up one to the other, with the result that the interest payment is unfailingly redoubled.

Let us dwell briefly on a point that is incidental yet important: the growth of a deficit within the trade balance, equivalent to the paid interest, explains a curious phenomenon, which economists have known and accepted for some time, but which has remained shrouded in mystery: namely that the sum total of the current-account transactions of all the countries in the world is not nil but largely negative. This cannot be helped, because debts $\mathrm{D}^{* *}$ define the net deficits of all countries taken together.

## The double cost of interest: Statistical and analytical generalisation of the proof for the 16 years covered by World Bank figures

Debts $\mathrm{D}^{*}$ and $\mathrm{D}^{* *}$, each of which is equal to the net interest paid, are both present at all times, even during periods when the trade balance is not at an equilibrium. It cannot be otherwise, since debts $\mathrm{D}^{*}$ all arise irrespective of current-account transactions while debts $\mathrm{D}^{* *}$ are all induced by interest payments which, to the contrary, belong to these transactions.

It is also true that, without any exception, payment of debt D* leaves the corresponding debt $\mathrm{D}^{* *}$ unchanged. Invariably, therefore, debts $\mathrm{D}^{*}$ and $\mathrm{D}^{* *}$ are repaid by two separate expenditures, which add each onto the other.

This is enough to convince one that net interest relating to external debts is subjected to two distinct payments that should on no account be taken as one single payment. The double weight of interest is thus a true theorem.

Any lingering doubt can only derive from a logical flaw.
Having examined data for the four years, 1994-97, we know that they involve the double cost of interest. In theory it might be pointless to take the analysis any further, for it is already nearly complete since the balance of trade of LDCs for the 16 years has been near equilibrium. Let us nonetheless sound out all the figures for the whole of the 16-year period, 1984-99.

Certainly there would not be much point in restating the analytical and statistical study all over again, ab initio; it seemstherefore appropriate to keep the next section quite short.

## B.I. Proof based on official statistics

In point 8 of its tables, 'debt stock-flow reconciliation', the World Bank sets up the increase of LDCs' total debt stock against the flows of net loans extended to these countries over the same stretch of time.

Let us draw the same comparison, seeking however to justify, on the grounds of the actual level of their external expenditure, the new loans contracted by developing countries for the entire time span, 1984 to 1999.

The World Bank shows no curiosity as to the raison d'être behind these loans; it is taken for granted that the borrowed sums of currency always bring in an equal value in assets (imports, reserves, debt relief); the profession thus demonstrates that it is still unaware of the second payment of interests. If 'experts' had spotted the existence of magnitude $\mathrm{D}^{* *}$, namely the debt caused by interest payments, it would not have been hard for them to find within their own statistics the huge chasm affecting LDCs as a result of the second cost of interest: having been settled once, interests are still fully outstanding.

In a way, the World Bank and the IMF maintain a normative stance: the double payment of interest would be seriously immoral, iniquitous and devastating; therefore it does not exist. This means dismissing out of hand, without the least prior inquiry, the existence of any 'mechanical' pathology, which may affect the system of international settlements. This amounts to assuming that developing countries suffer only from evils that they inflict on themselves: they live 'above their means' and squander, often through corruption, the
funds which developed countries agree to lend them.
The moment the twin Institutions of $19^{\text {th }}$ Street, Washington D.C., alerted at last, start searching for the second payment of interest inflicted on the poor countries, they will readily find that it is in full view in the gaping hole that their own statistics reveal; by no means concealed, the 'black hole' hits home as soon as one puts on 'positive' instead of 'normative' (as they still are today) reading glasses.

The reconciliation between stocks and flows finds its true, fundamental meaning, only when the question is answered as to what LDCs actually receive in exchange for the borrowed sums of foreign currency; indebted countries are clearly cheated when - as it is invariably the case - they incur a new debt in order to meet the second cost of interest.

We can determine the value of interest due, debt $\mathrm{D}^{*}$, on the basis of the interest actually paid (the interest arrears amount to a mere 15,592 ).

Debt $\mathrm{D}^{*}$ contracted is thus $1,375,274$, which totals all interests due.
However, the debt incurred against the increase in official reserves, $+630,214$ must be added.

The increase in debt is justified to this amount, 1,375,274 $+630,214=2,005,488$.
Now, net transfers are to be deducted: $2,005,488-1,336,245=669,243$.
Another sum decreases the total debt stock, namely the trade surplus, equal to 294,502.
The total debt stock should thus increase by $669,243-294,502=374,741$.
In actual fact, total debt stocks grew by $1,899,573$ (allowing for reduction and cancellation of debts).

The difference between the value of debt as it stands and the value of debt determined by the logic of incoming and outgoing flows of foreign currency is huge, equal to $1,524,832$. This enormous discrepancy has gone unnoticed, even by experts of the World Bank and the IMF; the second payment of interest, $1,375,274$, accounts for $90,19 \%$ of the 'black hole'.

Let us stop here to comment briefly on the flight of capital.
As the flight of financial assets is by definition hidden, some economists take advantage of this fact by blaming it for any unexplained deficit. This is illogical, for capital escapes in two different ways, i.e. by a specious cut in the value of exports or by the blown-up value of imports; now neither trick increases the debt; the flight of capitals, therefore, does nothing to explain the $1,524,832$ deficit. We may think that capital runs away inside suitcases full of bank notes, as if across the Rio Grande. Sometimes this is indeed so, in the case of sums of foreign currency that, however, are relatively modest. The fundamental argument in this respect is that the 'exported' notes are immediately 'imported back in', and the flight of capital is thus cancelled out.

Moreover, capital theft is a misnomer for capital flight. Sums of capital in flight eschew exchange controls but they belong to the offenders; theft is a much more serious offence and we know that it exists.

For the 16-year period, we see (although not all relevant figures are known) that 'crosscurrency valuation' is almost down to zero so that there is no point in taking it into account. Discrepancy $1,524,832-1,375,274=149,558$ is an amount of foreign currency which may have been stolen, illicitly drawn from the bank coffers of developing countries. It is still a considerable sum; surely one cannot seriously claim that the siphoning-off may have been as high as $1,524,832$ billion dollars!

The second payment of interest is out of all proportion with the missing 149,558; it is
nothing short of a huge 'legal theft', a severe dysfunction of international payments which deprives developing countries of a sum of financial capital, 1,375,274 in our example, which is their rightful property, a loss of substance which considerably hampers or even stunt the growth of their economy.

## B.II. A brief theoretical proof of the double payment of interest throughout the sum of periods, from 1984 to 1999

## 1. Preliminary proof

To begin with, it is clear that up to the limit of $1,080,772$ (current account deficit) out of 1,375,274 (interests paid), no new proof is called for.

We already know what happens concerning the complementary amount, 294,502: it is a net foreign currency inflow by way of a net transfer.

## 2. Definitive proof

We might think that interest payment is double only when the balance of trade is at equilibrium.

It would be odd, nay worrying, if this were so, for the burden of interest would be double at times, at times simple: that would mean chaos.

In truth, the cost of interest is always double irrespective of the trade-account balance, whether it shows a deficit, an equilibrium or a surplus.

Let us dwell here on the second extreme case, LDCs' trade surplus equalling at least twice the value of interest paid during the period considered here.

In period $p$, for example, the value of LDCs' imports is 40 and their exports are 60. If interest payment suffered no malfunctioning, the developing countries would see their reserves grow by 10 billion dollars.

The burden of interest being double - a fact to be fully confirmed very shortly - LDCs suffer the loss of their entire surplus, equal to twice the value of interest due.

Let us follow the World Bank in volumes 1 and 2 of Global Development Finance, 1997.

On facing pages, xii and xiii, volume 1 , we see two tables, which, together and with great clarity, bear witness to the double payment of interest.

The table on page xiii specifies that current-account transactions include interest payments.

The table on page xii is the computation of net transfers, ascertained after deduction of the transfer of interest (for long-term debts) in the opposite direction.

Hence it is an incontrovertible fact that interest payment is counted twice, by the World Bank itself.

It is accounted for first under the heading of the current-account balance.
It is recorded once more for the computation of net transfers flowing into LDCs.
It is crucial to realize that the accounting method used by the World Bank is blameless; if it leads us to discover the double weight of interest, the duplication of its cost is to be found in the real world and not merely in the procedure adopted by the accounting experts
of the Washington Institution. In pure logic, both of the normative and of the positive kind, debt $\mathrm{D}^{* *}$ is included in debt $\mathrm{D}^{*}$, as in Fig. 1; accordingly, the double cost of interest reduces to one sole expenditure. The fact that debt $\mathrm{D}^{* *}$, in the seriously flawed "system" of international payments that continues to be practised today, fails to be subsumed under D* is no fault of the World Bank's. The second cost of interest derives entirely from the non-inclusion of $\mathrm{D}^{* *}$ within $\mathrm{D}^{*}$, a situation pictured in Fig. 2.

Let ex* = 10 and ex** $=10$ be the two surpluses of developing countries in period p .
The first of the two surpluses, ex*, is absorbed by the payment of interest, $\mathrm{D}^{*}=10$.
We would be wrong to infer that, this being the case, the cost of interest is simple, not double.

In actual fact, the World Bank says it in so many words: the payment of interest brings about an equivalent reduction in the net transfers accruing to the LDCs at the hand of the rest of the world.

The net transfers that R carries out to the benefit of LDCs, originally amounting to y billion dollars, are reduced by 10 as a result of interest payment $=10$; net transfers are finally limited to $(\mathrm{y}-10)$ billion dollars.

We see that interest imposes a first cost on LDCs, registered in their current-account balance and that interest imposes a second cost on these countries, precisely because its payment cancels an equivalent fraction of transfers granted by the rest of the world.

To conclude, the total cost charged to LDCs, for interest due and paid of 10 billion dollars, amounts to 20 billion dollars, the 'transfer effect' ( -10 ) and the 'current-account effect' ( -10 ) being additive to each other.

We notice that both surpluses ex* and ex** are absorbed in the payment of interest.
This leads us directly to recognise fully that the interest burden has indeed been double - to repeat, according to the figures produced by the World Bank - for the whole series of years from 1984 to 1999.

The current-account deficit is $1,080,772$; the increase in reserves is 630,214 ; the corresponding result is a total outflow of foreign currency equal to $1,710,986$. Net transfers amount to $1,336,245$. If the long-term interest were paid only once, the long-term debt increase would be 374,741 . However, the long-term debt has undergone a growth of $1,437,000$. The resulting gap $(1,437,000-374,741)=1,062,259$ is close to the value of the long-term interest, 972,131 . Our proof is thus corroborated: the burden of interest is twofold.

$$
C
$$

The two payments of interest: microeconomic and macroeconomic. The basis for a solution, interest being reduced to one single payment

## Brief reminder of a few known facts

Time flow is enough for interest to grow. From the first time it falls due, an interest at the rate of $5 \%$ per annum demands a payment of 10 if the debt principal amounts to 200.

Therefore LDCs bear a new debt of 10 each year in the 1984-99 period.
One might think that the interest is charged solely to nations as a whole. This would be
the case only if no resident bore the principal of external debts.
In actual fact each instance of an external debt resting on developing countries defines the debt of at least one of their residents and, most frequently, a debt of their governments.

In what way can the indebted residents pay up?
To this effect they must have an adequate income, formed by production in their national economy.

But this is not sufficient since interest must be paid in a foreign currency.
It is therefore necessary that interest debtors obtain 10 billion dollars (in the chosen example). The required sum of foreign exchange can flow only from exports; if a loan were granted instead, it would make no difference, for only an equivalent amount of exports could pay off the new debt.

This is how it goes: the debtor (ID) pays the interest by means of a conversion of domestic income into a sum of foreign currency; the dollars thus bought derive from exports; the exports that feed the purchase of foreign currency by ID diminish the available sum of dollars for imports.

The conclusion of the present study is thus definitively confirmed: payment of interest creates an equivalent deficit.

Countries endeavouring to attain industrialisation are burdened with a sum of net interest, namely a positive difference between the sum of interest which they owe and the sum of interest which is owed to them. Inevitably, for this reason, by paying interest LDCs incur a second layer of debt, to an equal value.

The study coming to a close here shows, by a theoretical analysis based on official statistics, that the deficit elicited by the payment of interest redoubles the interest debt.

Let us state once again the gist of the argument. On each date when it falls due, interest debt, $\mathrm{D}^{*}$, comes into being quite independently of all current-account transactions; it would be undiminished even in the event that no transaction at all occurred in the given period. Developing countries are subject to debt $\mathrm{D}^{*}$ before any current-account transactions are taken into account. Consequently, it would be a serious mistake to ascribe debt D* to current-account expenditures. The "principal" certainly arises from excess imports, but interest debt is merely the increase in value of the initial excess imports, regardless of any new imports.

Any debt that is repaid is cancelled; D* is no exception. It would be absurd to claim that interest debt must be paid a second time; that would amount to the positive payment of a debt which is voided.

However, and our study brings no other information, payment of debts $D^{*}$ soaks up an equivalent amount offoreign currency reserves. Statistics show that much and theoretical analysis confirms it.

It is quite easy for any objective observer to understand that payment of debts $\mathrm{D}^{*}$ gives birth to an equivalent value of debts $\mathrm{D}^{* *}$.

Indeed, what is the exact definition of debts $\mathrm{D}^{* *}$ ? Such debts spring directly from the absorption of a sum of foreign currency into the payment of interest.

The total value of exports of goods and services of countries that are developing (or supposed to be) during the 16 years considered here is x billion dollars. If interest due and paid were zero, the amount of $x$ billion dollars would remain intact, available to LDCs to pay for their imports and to increase their international reserves. Everybody can see that the payment of interest scoops out an equivalent deficit, since the amount of foreign currency
received from exports is reduced by the sum of paid interest.
It would be naive to think that the deficit caused by the payment of interest may remain indefinitely outstanding. 'Nature abhors a vacuum'. The 'vacuum' created the moment an amount of foreign currency gets 'soaked up' by the payment of interest is of necessity made good, at some future time. In periods when their trade balance is at equilibrium or even negative, LDCs are burdened with the obligation to replace the missing sum of foreign currency when the interest debt was cleared. The cost involved when the 'vacuum' (or the 'black hole') is filled is less clear in periods when LDCs land a surplus. Nevertheless, in no conceivable circumstances could it be inferred that the payment of interest does not produce an equivalent deficit.

Economists are perfectly cognizant of debts D*.
Yet, with respect to net interest due by countries, the scientific community hardly ventures any further. This is a serious failing, for it means, eyes wide shut, remaining oblivious to debts $\mathrm{D}^{* *}$ which do emerge in the real world, the payment of debt $\mathrm{D}^{*}$ giving invariably rise to a second and equal debt, $\mathrm{D}^{* *}$.

The exact nature of debts $\mathrm{D}^{* *}$ is not hard to grasp.
We have taken good care to demonstrate, figures and theoretical analysis at the ready, that the two debts, $\mathrm{D}^{*}$ and $\mathrm{D}^{* *}$, should not be conflated into one and the same debt. Such a 'confusion' is absolutely impossible.

The only genuine difficulty in this matter is to understand that interest debt ( $\mathrm{D}^{*}$ ) is positively and definitively paid as soon as an export tout court - and not an amount of excess exports - is transferred abroad, by a transaction which both the World Bank and the IMF rightly refer to by the expression of 'unrequited transfer'. For interest to be actually settled within period $p$, rather than being carried over to a later period, one only needs to fund its payment by an export taking place right in p . This is what actually happens in each of the 16 years considered here, even in those periods when the trade balance of LDCs is not positive or sufficiently so. Interest annuities were regularly paid when they fell due as is indicated by the sums covered in 'Interest Payments, INT'.

On the basis of this factual and logical observation, we are faced with a necessary inference: debt $\mathrm{D}^{* *}$ stemming from payment of debt $\mathrm{D}^{*}$ can on no account be merely a reproduction or repetition of the latter, or its 'alter ego'. Let us say it again: debt $\mathrm{D}^{* *}$ could replicate debt $\mathrm{D}^{*}$ only if the payment of $\mathrm{D}^{*}$ were deferred. Since debt $\mathrm{D}^{*}$ is actually repaid in any year included in the 16-year period, rather than being shifted to a later period, it is certain that debt $\mathrm{D}^{* *}$ caused by the payment of debt $\mathrm{D}^{*}$ is a new debt, distinct and separate from $\mathrm{D}^{*}$, in other words a debt that arises additionally.

The double payment of interest means nothing other: first the positive or actual payment of debt $\mathrm{D}^{*}$ takes place; debt $\mathrm{D}^{* *}$ then appears as a necessary consequence.

We have shown that the payment of interest debts is first charged to residents of developing countries, in most cases to their 'States' or 'governments'. Let us designate the interest debts in this strict sense, $\mathrm{D}^{*}$, by the expression 'microeconomic debts', borne by the domestic economies of LDCs, by some of their residents.

By contrast, debts D** are macroeconomic because they burden the international reserves of LDCs.

The microeconomic payment of interest, cancellation of debt $\mathrm{D}^{*}$, is fully justified. In this respect residents pay interest exactly as if the creditors were 'co-residents'.

On the other hand, the international reserves of LDCs incur the pure loss of an equal sum of foreign currency.

## A brief description of the effect of the macroeconomic <br> payment of interest in the creditor countries

It is not within the scope of this study to define the precise effect of the macroeconomic payment of interest. Let us simply say a word on this important matter.

The currency reserves are 'deposited' with foreign banks. It is true that they may also be converted into financial instruments proper, i.e. bonds, issued by governments or by other borrowers. Even the amounts that are purely and simply deposited are thereby lent. Let us call 'Emp' borrowers in economy R of reserves deposited by developing countries; as soon as the payment of interest makes an inroad into the developing countries' international reserves, it is as if Emp repaid their debt; the financial market of economy R, taken as a whole, may thus extend new loans for the same amount. It is therefore never the case that deposits (unfairly) taken out of LDCs' international reserves enrich any residents of $R$ : the relevant reserves are lost in favour of the macroeconomy of the rest of the world. 'Poor' countries are forced to give up two surpluses whose total value is twice x billion dollars when an interest of $x$ billion dollars is due; but the second payment of $x$ billion dollars in interest is in no way paid into the hands of the creditors.

## When the second payment of interest is done away with, both parties stand to benefit, rich countries as well as poor countries

A cynic might say that the loss of wealth suffered by LDCs, whose development is dramatically hampered as a result, profits powerful nations and is therefore very likely to go on indefinitely.

When reason and justice clash, it is by no means sure that reason stands to prevail.
It is certain that developing countries or, to be more accurate, those countries that should be able and allowed to develop, are hit the hardest because they are the poorest. On the other hand, we have just seen that wealthy countries are stricken with the same disorder in their domestic economies. Even for creditor countries it is highly desirable to relieve capital from a flaw that gnaws at his heart. In particular, it will not do - everyone agrees on this for the gap between rich countries and poor countries to widen, as it does, while it should lessen instead. Let us be a little cynical after all: rich countries need to sell their output worldwide. The scientific mind is in any case convinced that logic always wins in the end.

Have no fear, the second payment of interest will soon come to an end.
It has taken a sustained research programme, launched over twenty years ago, to bring to light the double cost of interest.

Surely it will not take as long for this fact to be acknowledged as true, and for a suitable cure to be applied.

Which kind of cure? We cannot really explain it in any detail in so short a study. Nevertheless, let us try to sketch out a solution, or at least its premise.

Logic prevents us from cutting the withdrawal of net interest from the international reserves of LDCs; we would be left with the sole impact of the interest payment on the formation of reserves. In fact, the two actions go together; they are not to be dissociated: the payment of one dollar in interest by the domestic economy is necessarily matched by the payment of another dollar in interest out of international reserves. This is absolutely unavoidable.

The only conceivable solution is to channel international flows of payment in such a way that half of the interest is paid by curtailing the formation of new reserves, the other half being settled by means of a withdrawal from existing reserves. The two complementary halves would thus accrue, fully owned, to the international reserves of LDCs. In the span of time extending from 1984 to 1999 - the only period for which the World Bank provides satisfactory data - interests paid by the 133 developing countries total $1,375,274$ billion dollars; this brief study has provided the proof that this sum of foreign currency is lifted out from the domestic economy of LDCs and is nevertheless taken out of their international reserves, which have suffered a corresponding and completely unwarranted loss of $1,375,274$ billion dollars. If the appropriate reform had already been in place, LDCs ' reserves would have been replenished by this huge amount of foreign currency.

Creditors will not be deprived of even one penny in interest; quite the opposite, they will stand a better chance of recouping the amounts due to them once the debtor countries are set free of the second payment of interest.

Let us say, by way of conclusion, that the solution is such that each country will be able to implement it by itself, without having to refer or resort to other countries or to any international organisation, such as the IMF or the World Bank. Acting by itself, the enlightened country will simply steer clear of the second payment of interest, which it will pay once, only once: creditors or creditor countries would hardly dare to object.


[^0]:    *Emeritus Professor of monetary economics at the Universities of Fribourg, Switzerland, and of Dijon, France; co-director of the RME Lab
    **English translation by Simona Cain, Università della Svizzera Italiana, Lugano

