

# WORLD MONETARY DISCREPANCIES: A NEW MACROECONOMIC ANALYSIS

By  
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## *Introduction*

A historical record of the transactions between residents and non-residents, the balance of payments is constructed according to the principles of double-entry book-keeping, and should therefore guarantee the necessary balance between debits and credits. In particular, a country's net entries in its current account being necessarily matched by equivalent net entries of opposite sign in the current account of the rest of the world, the current account of the world considered as a whole should always be equal to zero. Now, as clearly stated by IMF experts, this actually is not the case. In fact, available statistics show that the world current account is marked by a large negative discrepancy. Defined by Krugman and Obstfeld as the mystery of the 'missing surplus', this discrepancy has not found yet a satisfactory explanation. Numerically far too important to be simply due to errors and omissions in statistical data collection and compilation, the world current account imbalance has usually been correlated to misreporting of international investment income transactions and to capital flight. Moreover, since the IMF study on international capital flows it is apparent that the world current account discrepancy is closely related to a world capital and financial account discrepancy deriving from a substantial difference between world capital inflows and outflows.

In this paper we suggest that the two discrepancies are indeed the twin result of a common cause, which is to be identified in the payment of net interests on debt. Re-interpreting the World Bank's definition of capital flight, we will show that both discrepancies can be consistently accounted for by Schmitt's analysis of the double charge of net interests' payments. As strikingly confirmed by statistical evidence, the pathological payment of net interests between countries explains away the mystery of the 'missing surplus' while accounting for what has been considered so far as an understatement of international capital flows.

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### *The balance of payments*

As stated in the *Balance of Payments Manual* edited by the International Monetary Fund (IMF), the balance of payments is essentially ‘a statistical statement that systematically summarizes, for a specific time period, the economic transactions of an economy with the rest of the world’ (International Monetary Fund 1993: 6). A wider instrument than the simple record of foreign payments, the balance of payments is concerned with all sorts of international transactions, included those that do not involve any payment. Thus, ‘despite the connotation, the balance of payments is not concerned with *payments*, as that term is generally understood, but with *transactions*’ (ibid.: 8). According to the fifth edition of the *IMF Manual*, the standard components of the balance of payments are classified in two major accounts: the current account, and the capital and financial account (itself made up of a capital account and a financial account). Transactions entered into the current account relate to goods and services, income, and current transfers. Exports and imports of real goods and services, compensation of employees, investment income (dividends, profits, reinvested earnings, and interests), workers’ remittances, and gifts are among the transactions entered in the current account. The major components of the capital account are capital transfers (transfers of funds linked to, or conditional upon, acquisition or disposal of fixed assets), and acquisition/disposal of non-produced, non-financial assets (patented assets, leases or other transferable contracts, goodwill). Finally, transactions relating to direct, portfolio and other investments, and to reserve assets are entered into the financial account.

#### *The balance of payments identity*

Often referred to as the balance of international transactions, the balance of payments is a historical record of the transactions taking place between the *residents* of one country and the rest of the world, constructed according to the rule of double-entry book-keeping. ‘The basic convention applied in constructing a balance of payments statement is that every recorded transaction is represented by two entries with equal values. One of these entries is designated a credit with a positive arithmetic sign; the other is designed a debit with a negative sign’ (ibid.: 6). Generally speaking, it may be claimed that the necessary balance between debits and credits is obtained only at the global level (once all the accounts making up the balance of payments of a country have been taken into consideration), and not at the level of each single account. Thus, for example, ‘the receipts and payments arising from merchandise and service exports and imports shown in the current account may have their counterpart debits or credits recorded in one or more of the remaining accounts. The balance of payments must accordingly be looked at as a whole rather than in terms of its individual parts’ (Stern 1973: 2). The traditional textbook example of balance of payments double-entry refers to an export of commercial goods (recorded in the current account) being balanced by a (monetary) payment recorded in the capital account. This does not mean, however, that compliance with double-entry book-keeping is attained when only at least two different (though related) accounts are taken into consideration. The rules of double-entry book-keeping must be respected for each international transaction. In the case of a country’s unilateral transfers, for example, the amount of capital transferred abroad is instantaneously balanced by an equivalent capital inflow defining the increase in foreign claims on the country’s banking system. As claimed by Salvatore, a US unilateral transfer is a payment made to foreigners and ‘the payment itself is the U.S. bank balance given to the government of the developing nation. This represents an increase in foreign claims on, or foreign assets in, the United States and is recorded as a capital inflow, or credit, in the U.S. balance of payments’ (Salvatore 2001: 436).

The key principle is that ‘*every international transaction automatically enters the balance of payments twice, once as a credit and once as a debit*’ (Krugman and Obstfeld 2003: 314). This leads Krugman and Obstfeld to maintain that ‘this principle of payments accounting holds true because every transaction has two sides: if you buy something from a foreigner you must pay him in some way, and the foreigner must then somehow spend or store your payment’ (ibid.: 314). Superficially interpreted, this sentence means that the double-entry simply represents the obvious fact that transactions are two-sided, so the purchase of one country is the sale of another and vice versa. Looked at more closely, however, Krugman and Obstfeld’s quote discloses the presence of a fundamental law guaranteeing the necessary duality between each resident’s sales and purchases (see Schmitt 1975). In fact, if the foreigner from whom we buy *must* spend our payment – if he stores it, he spends it for the purchase of claims on bank deposits – this means that our purchase is necessarily matched by an equivalent sale and that, reciprocally, the sale of our foreign correspondent is balanced by a purchase of the same amount. Schmitt’s law does not state that our purchase is our foreign correspondent’s sale (which is a truism), but that our purchase implies our own simultaneous sale, and his respective sale a simultaneous purchase for him. When Krugman and Obstfeld claim that the foreigner must spend our payment, they implicitly confirm the fact that each economic agent, nationally and internationally, is simultaneously a seller and a purchaser on the labour, product, and financial markets. It thus follows that, when referred to balance of payments transactions, double-entry book-keeping works in two distinct stages. First it applies to every phase a single transaction, whether commercial or financial, can be subdivided into. Thus, for example, a commercial export is entered both as a debit (the decrease in domestic output available in the exporting country) and as a credit (the claim on the foreign importers). When the export is paid, there is another double-entry, defining an equivalent credit (a capital inflow) and debit (a capital outflow due to the increase in assets abroad deriving from the instantaneous deposit of the sum paid by the foreign importers). Second, it applies to the two phases of the transaction taken as a whole. In our example, the commercial export and its payment are entered as a debit in the current account (the outflow of goods) and as a credit in the capital and financial account (the inflow of claims on bank deposits held abroad).

As claimed by Stern, 'transactions are recorded in principle on a double-entry bookkeeping basis. Each transaction entered in the accounts as a credit must have a corresponding debit and vice versa. [...] It follows from double-entry bookkeeping that the balance of payments must always balance: total debits equal total credits' (Stern 1973: 2). The necessary equality of total debits and credits is recognized as a central feature of the balance of payments both by IMF experts and by academic economists, even though they do not attribute the same heuristic significance to it. In fact, IMF experts are pragmatically inclined to consider the equality more as a theoretical possibility than as a logical, necessary requirement. 'In principle, the sum of all credit entries is identical to the sum of all debit entries, and the net balance of all entries in the statement is zero. In practice, however, the accounts frequently do not balance' (International Monetary Fund 1997: 6). At the other end of the spectrum, the most rigorous experts define the equality as the *fundamental balance of payments identity* and claim that the overall balance of the current, capital and financial accounts is the logical consequence of double-entry book-keeping. 'Because any international transaction automatically gives rise to two offsetting entries in the balance of payments, the current account balance, the financial account balance, and the capital account balance automatically add up to zero:

Current account + financial account + capital account = 0' (Krugman and Obstfeld 2003: 310).

### *A neoclassical interpretation*

According to the mainstream analysis of the balance of payments, the equation relating to the current account ( $CA$ ) – that is, to exports ( $X$ ), imports ( $M$ ), and unilateral transfers ( $U$ ) – can be associated with the identity defining national income as the sum of consumption ( $C$ ), investment ( $I$ ), and public expenditures ( $G$ ) in order to express the value of national income in an open economy ( $Y$ ). The resulting equation takes the following form:

$$(1) Y = C + I + G + (X - M + U).$$

Since  $CA = X - M + U$  and  $Y - C = S$  (saving), equation (1) can be written as:

$$(2) CA = S - I - G.$$

If we include public expenditures in  $C$  and  $I$ , equation (2) reduces to:

$$(3) CA = S - I,$$

which states that the current account ‘reflects the difference between national savings and national investment or the rate of change in the nation’s holdings of foreign assets’ (Cumby and Levich 1992: 114).

The aim of this exercise is to show that ‘the current account balance mirrors the saving and investment behaviour of the domestic economy’ (International Monetary Fund 1993: 158), that is, that the consumption, saving, and investment behaviour in one country is closely related to ‘its payment balance versus the rest of the world’ (Cumby and Levich 1992: 114-5). Thus, a current account surplus would define a net saving, while a current account deficit would reflect a net investment. At closer examination, however, it appears that no difference can ever be found between a country’s saving – the difference between exports and imports – and a country’s investment – its net (positive or negative) foreign lending, because every current account deficit is necessarily financed ‘by borrowing from abroad or by running down the country’s previously acquired stock of foreign assets’ (ibid.: 114), whereas every current account surplus entails the financing of the rest of the world through a positive purchase of foreign assets. A country with a current account surplus saves part of its foreign income, it is true, but it also invests the very amount saved, through its net foreign lending. Analogously, a country whose net borrowings are positive – whose saving is negative – is a country benefiting from positive foreign investment and, therefore, whose own foreign investment is negative. Perfectly in line with the macroeconomic identity between national  $S$  and  $I$  discussed in Chapters 3 and 4, the necessary equality between a country’s foreign saving and investment is the logical implication of the ‘vehicular’ nature of money and finds strong confirmation in the concept of the international investment position (IIP) adopted by the IMF. Defined as ‘the balance sheet of the stock of external financial assets and liabilities’ (International Monetary Fund 1993: 104), the IIP ‘is a statistical statement of (i) the value and composition of the stock of an economy’s financial assets, or the economy’s claims on the rest of the world, and (ii) the value and composition of the stock of an economy’s liabilities to the rest of the world’ (ibid.: 6). Thus, a current account surplus defines an increase in the economy’s claims on the rest of the world and is entered in the international investment position as a positive change in the value and composition of the stock of the economy’s financial assets, that is, as an investment. Inversely, a current account deficit marks a decrease of the economy’s net claims on the rest of the world and is entered in the IIP as an increase in the value and composition of the stock of the country’s liabilities to the rest of the world, that is, as a negative investment.

The logical identity between a country’s saving and a country’s investment does not imply, of course, that current account transactions necessarily balance. The balancing of current account transactions is certainly not a requirement of the balance of payments, whose identity applies only at the global level, that is, for the whole of current, capital and financial account transactions. In accordance with double-entry book-keeping, each single current account transaction is entered twice in the balance of payments, but this does not mean that a current account credit (or debit) is necessarily matched by a current account debit (or credit). In fact, a current account imbalance is almost the rule in a highly diversified world benefiting from international trade and international capital flows. Now, this is not in the least hampered by the identity between a country’s saving and investment. A country with a positive current account imbalance is a country whose net (inter)national saving is positive and is matched by an equivalent investment, while a country running a current account deficit is a country whose saving is negative and which benefits from a foreign investment of the same amount. ‘Any current-account imbalance must be matched by borrowing and lending. A current-account deficit must coincide with an equal decline in net foreign assets and a current-account surplus must coincide with an equal increase in net foreign assets’ (Cumby and Levich 1992: 116). Equation (3) is therefore both erroneous and misleading. It is erroneous because it suggests that a current account surplus could define a positive saving that is not necessarily invested (or that a current account deficit could not imply a positive borrowing), which is openly in contrast with the nature of money, the actual workings of the monetary and financial systems, and the principle behind the concept of the international investment position adopted by the IMF. It is misleading because it endorses the belief that current account balance is a matter of equilibrium between the residents’ decision to save and to invest. Equation (3) is therefore also a clear example of the atavistic need to continue interpreting economic reality by referring to the concept of equilibrium derived from classical physics and introduced into economic theory by Walras, Menger, and Jevons.

A further example of the misguided influence exerted by general equilibrium analysis on international economics is given by the interpretation of the accounting identity between the sources and uses of funds in a properly defined balance of payments. According to Stern (1973), this identity would hold good only *ex post*, that is, only after prices and quantities have adjusted. As claimed in the IMF Manual, the balance of payments identity establishes the necessary

equality (with sign reversed) between the current account balance (CBA) and 'the net capital and financial account balance [NKA] plus reserve asset transactions [RT]' (International Monetary Fund 1993: 160):

$$(4) \text{ CAB} = \text{NKA} + \text{RT}$$

According to the IMF experts 'this relationship shows that the net provision, as measured by the current account balance, of resources to or from the rest of the world must – by definition – be matched by a change in net claims on the rest of the world' (ibid.: 160). Now, according to the neoclassical paradigm and in the words of Cumby and Levich, this identity 'is another example of an ex post accounting identity; ex ante planned current-account and capital-account transactions might not have been consistent' (Cumby and Levich 1992: 114). But what is a planned current or capital and financial account transaction, and what adjustment can it engender ex ante? What kind of force can an export of real goods, that has not yet taken place, exert and on which market? Exporters do certainly not adjust their decisions to those of importers and, moreover, whatever the decisions actually taken by importers and exporters of goods, services and financial assets, honouring and obeying double-entry book-keeping does not allow for any divergence between current, and capital and financial account balances. An ex ante adjustment between an exporter's willingness to sell abroad a given amount of his production and a foreign importer's desire to purchase a different amount of it (or the same amount at a different price) is perfectly conceivable. Yet, before the transaction actually takes place, it would be meaningless to talk about a possible imbalance between current, and capital and financial accounts. Since neither the current nor the capital and financial account transaction has yet occurred, how is it possible for them to be inconsistent? A planned or desired transaction is not yet a transaction and can therefore not be inconsistent with another planned transaction that, like itself, is actually no transaction at all. It is only after a transaction has indeed occurred that it can be defined as such, and when this happens it is too late to find any adjustment between its entries in the current, and capital and financial accounts.

Despite this indisputable conclusion, most economists stick to a neoclassical interpretation of the balance of payments and keep considering the book-keeping identity

$$\text{CAB} + \text{NKA} \text{ (official reserves excluded)} = 0$$

as a condition of equilibrium in a system of free floating exchange rates, thus dogmatically endorsing the universal character of general equilibrium analysis. 'The measurement of payments equilibrium and the interpretation of balance-of-payments data are general equilibrium questions' (ibid.: 115). The microeconomic approach proper to GEA is generalized so as to include balance of payments analysis, and general equilibrium models of the balance of payments are construed in order to explain how economic shocks or policy changes may affect current and/or capital and financial accounts.

Once more we are confronted with the choice between a logical identity that does not allow for individual behaviour to play any equilibrating role at the global level, and a conditional equality in which a prominent role is reserved for an adjustment mechanism based on individual and aggregate decisions. Inherently macroeconomic, the first alternative emphasizes the structural aspect of the system of international payments and aims at explaining today's economic disorders by referring to the lack of alignment between the laws the present system should comply with and its actual working. The second alternative, on the contrary, is essentially microeconomic and it is implicitly centred on the idea that economic order is the momentary result of a process of adjustment taking place between opposite forces in a constantly renewed attempt to equilibrate more or less diverging forms of behaviour. Whereas, in a national context, GEA is put at bay by the logical impossibility to determine relative prices, in an international setting its irrelevance derives from the impossibility to adjust international transactions through 'tâtonnement' (groping) as well as from the impossibility of treating the entire balance of payments as a system of independent equations whose simultaneous solution would determine the equilibrium level of international transactions and exchange rates.

Another related question is whether a balance of payments equilibrium is sustainable in the first place. This question has usually been asked in order to verify if the accounting balancing of current, capital, and financial accounts is compatible with a given level of national income, prices, saving, investment, and exchange rates, that is, whether a country's balance of payments 'can be sustained without intervention' (Kindleberger 1969: 874). The sustainability of balance of payments equilibrium is mainly analysed in terms of official reserve variations and the costs related to them. Without entering any detailed examination of the problem, let us observe that 'current-account imbalances might persist for periods of several years without signalling any disequilibrium provided that the imbalances are financed by voluntary capital flows' (Cumby and Levich 1992: 116). As correctly pointed out by Cumby and Levich, in fact, 'a country with a high private saving rate might experience persistent current-account surpluses that are accompanied by net private acquisition of foreign claims. A rapidly growing developing country might run persistent current-account deficits that are voluntarily financed by foreign residents' (ibid.: 116). If this were indeed the case, there would be no serious reasons to worry about current account imbalances, the overall equilibrium having been achieved without resorting to compensating transactions that leads to the adoption of trade restrictions or related measures likely to alter the autonomous balance of payments transactions.

As a matter of fact, Cumby and Levich's example refers to an ideal state of affairs that would suit particularly well the needs of industrialized countries, which would thus increase their exports of real goods and services and invest their capital at greater profit, and for developing countries, which could develop faster thanks to foreign investments

and greater imports of foreign goods and services. Why does such prospect sound utopian today? Is it only because of their internal difficulties, both at the economic and political level, that LDCs do not benefit from an inflow of foreign capitals sufficient to finance the imports they need to speed up their economic development and which would simultaneously favour an increase in production of highly industrialized countries? What if the system of international payments itself were a major source of disorder? One of the aims of a truly macroeconomic analysis of international transactions is precisely to provide a clear answer to this question. In this respect, the balance of payments represents a privileged conceptual framework for analysis. The search for reasons why the fundamental accounting identity of the balance of payments does not avoid the formation of major discrepancies both at the national and at the international levels will in fact open the way to a new understanding of what hampers today the development of poor countries as well as the economic growth of the rich nations.

### *Balance of payments discrepancies*

#### *The role of official reserves*

A complement to the capital and financial account, the official reserves account measures the net change in a country's holding of foreign reserve assets. Essentially made up by monetary gold, special drawing rights, reserve positions at the IMF, and foreign exchange holdings, reserve assets 'consist of those external assets that are readily available to and controlled by monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitude of such imbalances through intervention in exchange markets to affect the currency exchange rate, and/or for other purposes' (International Monetary Fund 1993: 97).

Let us start our considerations from the balance of payments fundamental identity as represented in equation (4). Bearing in mind that transactions entered in the current account are opposite in sign with respect to those entered in the net capital and financial account and in the reserve assets account, equation (4) can be written as:

$$(5) \quad RT = CAB - NKA$$

Equation (5) states that changes in reserve assets are equal to the difference between the two main accounts of the balance of payments, but it does not establish any causal relationship between its two terms. An economic interpretation is needed in order to explain whether a causal relationship exists, and, if so, in which direction it is exerted. The problem does not seem to pose any serious threat, since it is unanimously accepted that, measuring the net holdings of a country's foreign financial assets, official reserves are the result of the transactions entered in the current, capital and financial accounts. Thus, for example, a positive entry in the current account that is not matched by an increase in official or private claims on non-residents entered in the capital and financial account is balanced by the acquisition of reserve assets by monetary authorities. Does this mean that official reserves are what, following Meade (1952), economists call a compensating item?

According to IMF experts, the answer varies depending on whether the country's exchange rates are pegged or are free to float. In the case of pegged exchange rates, a difference between *CAB* and *NKA* would lead to a variation in reserve assets (owing to official intervention on the foreign exchange market), whereas in the case of pure float a variation in exchange rates would take place that would guarantee the perfect matching between current account and capital and financial account ( $CAB = NKA$ ) without any need for intervention on the foreign exchange market and, therefore, without any change in official reserve assets. But what if – as we have shown in *Quaderni di ricerca* No. 2 – exchange rates did *not* fluctuate according to balance of payments transactions? In this case, would it still be possible to argue in favour of the compensating role played by official reserves? Equation (5) does not provide any answer, since it simply shows that reserve asset transactions are part of the balance of payments, which could at most suggest that reserve asset transactions may be themselves a cause of a balance of payments discrepancy. Besides, it seems self-contradictory to claim that 'changes in official reserves are a highly visible part of international capital movements and, in principle, they should be among the most reliable and best-measured elements of capital flows' (International Monetary Fund 1992: 69), and simultaneously maintain that changes in official reserves can help reduce a balance of payments imbalance. If reserve asset transactions are among the most reliable and best-measured elements of capital flows, they are necessarily entered in a balanced way in the capital and financial account and can therefore not compensate for any imbalance.

Let us consider the case in which official reserves increase their assets through borrowing, and that in which the increase is financed by a current account surplus. The borrowing of reserve assets (for example foreign reserve currencies) is entered in the balance of payments as a credit (the sale of domestic securities, for example Treasury bonds) and as a debit (the inflow of reserve currencies) in the capital and financial account. The fact that foreign reserve currencies flow into the reserve asset component of the financial account does not alter the final result: the increase in official reserve assets obtained through borrowing is a self-compensatory transaction and does not contribute to the restoring of the overall equilibrium of the balance of payments. The same is true when reserve assets are acquired through a current account surplus. While the commercial surplus is entered as a credit in the current account, its payment is entered as a debit in the capital and financial account: the two entries balance and no compensating effect is exerted on the other balance of payments entries. Even if the reserve assets newly acquired by official reserves might be

used in the future by monetary authorities, this is not enough to conclude that they exert a balancing effect from the outset. The ‘availability for use’ criterion adopted by the IMF to classify an asset controlled by monetary authorities as a reserve asset is not a sufficient condition to make of it a compensating item. This conclusion is in part implicitly admitted by the IMF experts themselves, who claim that ‘the use or acquisition of *reserve assets*, therefore, does not necessarily reflect the degree or size of the payments imbalance of concern to the authorities. The authorities also may hold reserves for other motives – such as to maintain confidence in the currency of the economy, to satisfy domestic legal requirements, or to serve as a basis for foreign borrowing’ (International Monetary Fund 1993: 97).

The official introduction by the IMF of a statistical coverage of the data reflecting the stocks of a country’s international assets and liabilities – known as international investment position (*IIP*) – has marked an important progress towards a new interpretation of the balance of payments. If a role for the official reserves account is to be found, it is in this direction that it must be looked for. The conceptual improvement made by IMF experts has to be matched by a new theoretical interpretation of official reserves, starting from a critical analysis of the impact of monetary authorities’ intervention on the balance of payments equilibrium. If it were to be confirmed, for example, that exchange rate fluctuations are not determined by current or capital and financial account imbalances (*Quaderni di ricerca* No.2), it would be clear that monetary authorities’ interventions in the foreign exchange market has no compensating effect on the discrepancies inherent to the balance of payments itself. By reducing exchange rate fluctuations, the intervention – if successful – would avoid a worsening of the imbalance, but it would not affect the causes at the origin of the initial discrepancy. As statistical evidence shows, errors and omissions subsist and their variation is not correlated in any significant way with changes in official reserves (Table 1).

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>USA</b>                  | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | -19.39      | -90.45      | 129.63      | 59.16       | -44.08      | -20.77      | -45.84      |
| Official reserves           | 6.67        | -1.01       | -6.73       | 8.73        | -0.29       | -4.93       | -3.69       |

  

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Japan</b>                | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | 0.65        | 34.31       | 4.36        | 16.97       | 16.87       | 3.72        | 0.39        |
| Official reserves           | -35.14      | -6.57       | 6.16        | -76.26      | -48.95      | -40.49      | -46.13      |

  

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Germany</b>              | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | -1.35       | 4.20        | -2.33       | 37.87       | -22.88      | 10.46       | 28.74       |
| Official reserves           | 1.20        | 3.75        | -4.02       | 14.11       | 5.22        | 5.47        | 1.98        |

  

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>France</b>               | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | 1.08        | 4.26        | 9.94        | 1.30        | 10.14       | 6.85        | 3.83        |
| Official reserves           | -0.24       | -5.94       | -19.82      | 1.39        | 2.43        | 5.57        | 3.97        |

  

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>UK</b>                   | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | 3.66        | 9.79        | 6.68        | -0.7        | 6.13        | -6.14       | 0.39        |
| Official reserves           | 0.65        | 3.90        | 0.26        | 1.04        | -5.30       | 4.46        | 0.63        |

  

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Canada</b>               | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | 5.56        | -2.98       | 4.55        | 6.73        | -3.67       | -5.90       | -6.47       |
| Official reserves           | -5.49       | 2.39        | -4.99       | -5.93       | -3.72       | -2.17       | 0.18        |

  

| (in billions of US dollars) |             |             |             |             |             |             |             |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Italy</b>                | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> |
| Net Errors and Omissions    | -20.18      | -15.81      | -25.75      | -1.71       | -1.36       | 2.79        | -2.02       |
| Official reserves           | -11.91      | -13.15      | 21.47       | 8.05        | -3.25       | 0.59        | -3.17       |

Table 1 Errors and Omissions, and official reserves of major industrialized countries

Source: data elaborated from IMF, Balance of Payments Statistics Yearbook, Vol. 54, Part 1, 2003.

Conceived of as the account recording a country's external capital and financial transactions, the official reserves account would mimic the traditional capital and financial account of the balance of payments. This is not surprising, of course, since a country is implicitly involved in the transactions of its residents and the balance of payments is indeed meant to represent the country's involvement with its residents' external transactions. *It is worth observing here that, although the country itself does not carry out any transaction, the overall result – a net increase or decrease in reserve assets – concerns the country as such and no anyone of its specific residents.* A net increase in official reserves deriving from net commercial exports, for example, does not define the gain of any particular individual importer but that of the country itself, which, as the *set* of its residents, represents them all indistinctly. The function of the official reserves account would thus be 'isotopic' to that of the international investment position. What would then be the specific advantage of this new arrangement? It amounts to an explicit recognition of the economic existence of countries, which results from the creation of each country's own account. The shift from international monetary disorder to order will require a reform of the present system of international payments, and the introduction of each country as a book-keeping subject accountable for accordingly.

To conclude this short analysis of reserve asset transactions, let us observe that, from a logical point of view, official reserves could be so conceived as to be implicated in every current, capital and financial account transaction. A commercial export, for example, would be matched by a foreign exchange inflow that would be entered in the country's official reserves, while a commercial import would be balanced by a financial outflow that would reduce the country's official reserves. Every transaction recorded in the balance of payments concerns the country as such and modifies its credit or debit situation vis-à-vis the rest of the world. It would therefore be perfectly consistent to construe the official reserves account as the account of the country itself and have it involved in the external transactions carried out by its residents (government included). This would give the term *official reserves* its full meaning and help in clarifying the problem of the role reserve assets can play. If official reserves are to represent the country's external position, they cannot be affected by only a restricted number of transactions carried out by its monetary authorities. This means that a fully significant official reserves account would have to be construed along the same lines as the international investment position or, to be more precise, as the flow version of the *IIP*. The net result of the flows entered into the official reserves account during a given period of time would thus correspond to the net international investment position and define the external financial position of the country, that is, its net stock of financial assets and liabilities.

#### *Net errors and omissions*

As we have seen, IMF experts maintain that the balance of payments identity holds good only *in principle*, while *in practice* 'the accounts frequently do not balance' (International Monetary Fund 1993: 6). Giving little, if any, consideration to the contradiction implicit in the assumption that an identity might be verified only under favourable circumstances (when it is unanimously recognized by logicians that an identity is an equality that holds under any circumstances), experts claim that, 'because data for balance of payments entries often are derived independently from different sources, implementation of the double-entry recording system is not perfect' (*ibid.*: 160). In order for the sum of all international transactions for each single country to be equal to zero, it becomes necessary to introduce a compensating entry known as *net errors and omissions*.

In balance of payments statements, the standard practice is to show a separate item for net errors and omissions. Labelled by some compilers as a balancing item or statistical discrepancy, that item is intended as an offset to the overstatement or understatement of the recorded components. Thus, if the balance of those components is a credit, the item for net errors and omissions will be shown as a debit of equal value, and vice versa.

(*ibid.*: 38)

Now, the quantitative relevance of errors and omissions can hardly be denied. As a source of concern for balance of payments analysts, it led – among other initiatives – to the creation by the IMF of a Working Party charged to 'evaluate statistical practices relating to the measurement of international capital flows and, in particular, investigate the principal sources of discrepancy in the components categories of the capital account' (International Monetary Fund 1992: xi).

#### *World balance of payments discrepancies*

The first anomaly tackled by IMF experts was that concerning the current account balance of the world taken as a whole. Consistently with the fact that one country's purchases are the rest of the world's sales, the world current accounts should necessarily add up to zero.

Because the world as a whole is a closed economy, world saving must equal world investment and world spending must equal world output. Individual countries can run current account surpluses or deficits to invest or borrow abroad. Because one country's lending is another country's borrowing, however, the sum of all these individual current account imbalances necessarily equals zero. Or does it?

(Krugman and Obstfeld 2003: 314)

In fact, as was already clearly pointed out by the *IMF Report on the World Current Account Discrepancy* published September 1987, ‘after 1979, the available statistics on the world current account began to show a large negative discrepancy, indicating that either the deficits of some countries and areas were being overstated, or that surpluses were being understated’ (International Monetary Fund 1987: 1). As Table 2 shows, despite remarkable improvements in statistical data collection and compilation, the world current account is still significantly out of balance.

(in billions of US dollars)

|                       | 1996  | 1997 | 1998  | 1999  | 2000   | 2001   | 2002  |
|-----------------------|-------|------|-------|-------|--------|--------|-------|
| World current account | -32.3 | 29.9 | -48.7 | -80.0 | -102.7 | -117.8 | -76.0 |

Table 2 World current account’s evolution

Source: data elaborated from IMF, Balance of Payments Statistics Yearbook, Vol. 54, Part 2, 2003.

As we have already anticipated, the world current account discrepancy is not the only global discrepancy detected by balance of payments compilers. The members of the Working Party set up in 1992 to investigate international capital flows identified a discrepancy in the global capital account deriving from a substantial difference between global capital inflows and outflows. Logically, the capital and financial transactions of one country should be mirrored by those of other countries so that, on the whole, the world capital and financial account should always and necessarily balance. Table 3 shows that this has not been the case even after the adjustments suggested by the two IMF working parties were implemented.

(in billions of US dollars)

|                                     | 1996  | 1997 | 1998  | 1999 | 2000  | 2001  | 2002  |
|-------------------------------------|-------|------|-------|------|-------|-------|-------|
| World capital and financial account | 110.8 | 93.3 | -24.9 | 24.7 | 228.3 | 166.8 | 101.3 |

Table 3 The evolution of the world capital and financial account

Source: data elaborated from IMF, Balance of Payments Statistics Yearbook, Vol. 54, Part 2, 2003.

Up to this point, if we were to summarize we would say that there are two sorts of global discrepancies: one regarding the world current account; and one affecting the world capital and financial account. Now, *a priori*, there seems to be no reason to rule out the fact that these discrepancies may well add up to one another. ‘In principle, the current and capital accounts should be mirror images, and for the world as a whole each should sum to zero. However, it can be seen that over the years the consistency of both sets of accounts has deteriorated, generating large cumulative debits and credits’ (ibid.: 12). If the causes of the imbalances were disparate and if they were potentially at work in any of the numerous items of the balance of payments, how could it be claimed that, in reality, these discrepancies are two expressions of just one imbalance? This would indeed be the case only if it were possible to show that they are the joint effect of one and the same cause. Figures, as they appear in tables 2 and 3, do not provide any explanation of the discrepancies they measure. On one end, ‘positive and negative errors cancel out in the summation leading to the global figures’ (Krugman and Obstfeld 2003: 314), so that discrepancies are only inaccurately measured. On the other end, without the support of a conceptual analysis it is impossible to know whether the discrepancies are due to misreported debits or credits, to deficits being overstated or surpluses being understated, to insufficient outflows or to exuberant inflows. It is to the analytical efforts of academic economists and IMF experts that we must therefore turn our attention in order to verify if any satisfactory explanation of world balance of payments discrepancies has been provided so far and, if not, which direction analysis should take in the future.

#### *Attempts at explanation*

Let us distinguish the certainly wrong-headed from the more insightful attempts.

##### *From statistical coverage to capital flight*

The most common and plain explanation of world balance of payments discrepancies consists in identifying their cause in the lack of statistical accuracy and reliability of data entering the balances of payments. A well known difficulty, for example, arises from the necessity to respect the uniqueness of time recording. ‘In the double-entry system of the balance of payments, two entries must be recorded simultaneously for each transaction. Simultaneous recording ensures that both entries show the transaction occurring at the same time, that is, on the same date’ (International Monetary Fund 1993: 30). As clearly stated by IMF experts, ‘in practice, however, the two entries for a transaction often are derived independently from different sources and accounting records, and conventions for time of recording for the

participants in that transaction may differ. Consequently, simultaneous recording of the two sides may not be achieved' (ibid.: 30). The problem is twofold: agree on a unique rule as to the time of recording of balance of payments transactions, and implement worldwide the operational structure required in order to stick to it. Be that as it may, it is clear that the lack of uniformity in the timing of data collection is a source of statistical discrepancies. It is also true, however, that the importance of this cause of statistical discrepancy is very limited both because of constant technical improvements, and because over the long run the differences in timing compensate. It is thus enough to include a time-lag in the computation of statistical data to avoid introducing this particular cause for discrepancies.

Apart from other minor causes of statistical errors and omissions, another serious problem is represented by the anomalous outflow of capital known as *capital flight*. Although it is not a clear-cut concept, capital flight is usually meant to represent an illegal outflow of capital carried out in order to evade taxation or exchange controls, for fear of confiscation, or to avoid legal prosecution. 'The primary motivation for certain current account transactions may be the evasion of tariffs, quotas, or laws regarding trade in illegal drugs or other activities, and these transactions necessarily generate a capital account dimension' (Cumby and Levich 1987: 30). IMF experts distinguish between capital flight proper and capital outflows associated with drug trafficking and other illegal activities. Yet, they agree that the two are deliberately hidden, illegal capital outflows that may lead to imbalances in world capital and financial accounts. 'Discrepancies in the global data arise when haven countries record increases in foreign liabilities that are not compiled as assets in the exporting country's accounts' (International Monetary Fund 1992: 95). Now, even if this occurrence cannot be entirely ruled out, it has to be kept in mind that the most common device through which capitals are surreptitiously 'transferred' abroad is by over-pricing imports and under-pricing exports. The consequent variation in the current account balance – a smaller surplus or a larger deficit – is in fact statistically 'equivalent to the omission of a capital outflow' (ibid.: 90) and clearly shows that capital flight can take place even if there is 'no direct evidence in the reported capital account that an outflow has occurred' (ibid.: 90). This is also a further confirmation of the fact that capitals never really flow out of their country of origin. A capital flight does not define the transfer of a capital that abandons its country to increase the capital accumulated in the rest of the world. Through under-invoicing exports and over-invoicing imports a resident of country *A* can hide part of his capital from fiscal authorities but cannot reduce the amount of domestic capital available within *A*'s banking system. If it is through under-invoicing exports that a capital flight occurs, it is immediately clear that the resident of *A* becomes the holder of a foreign bank deposit corresponding to the difference between the price at which he actually sells his exports to the rest of the world (*R*) and the price he declares to his domestic fiscal authorities, and that no capital flows from *A* to *R*. If it is by overpricing his imports that *A*'s resident evades taxation, he does so either by converting part of his domestic capital into a foreign bank deposit in money *R* or by transferring abroad the claims on part of his domestic capital still deposited in *A*'s banking system. In both cases, *A*'s domestic capital is not reduced by capital flight, whose negative effect is beyond dispute but confined, in our example, to tax evasion.

IMF experts are aware of the difficulties inherent in the analysis and in the measurement of capital flight. In particular, they seem to endorse the idea that 'illegal capital flows' are unlikely to provide an adequate explanation of a country's errors and omissions: 'the essential point is that a concealed capital outflow may not be evident at all in a country's balance of payments accounts' (ibid.: 90). Since abnormal capital outflows are essentially illegal, they are very difficult to track down. If successful, capital flight goes unrecorded and it is obvious that 'in such a case the country's balance of payments accounts will also show no errors and omissions associated with the missing transactions' (ibid.: 90, n. 141). For the same reasons, it is not at all clear why capital flight could help explaining world balance of payments discrepancies. If an illegal transaction goes unrecorded in a country, very likely it will remain hidden also from the rest of the world. If the sale of drugs to foreigners leaves no traces in the balance of payments, it does so with respect to the current *and* the capital and financial accounts of both the selling and the purchasing country. Being deliberately concealed from national authorities and compilers, illegal capital outflows resulting from outright capital flight or from other illegal activities define at most two missing entries and therefore can hardly be considered as the main cause of world statistical discrepancies.

Although errors are still widespread at the various levels of statistical data collection, it would be simplistic to take them to be the main cause of balance of payments discrepancies. Moreover, as we have seen, omissions are often two sided, in which case transactions that get unrecorded in one country escape detection also in the rest of the world. It is thus clear that the analysis must go beyond a mechanical interpretation of statistical data if it is to provide a satisfactory explanation of what has come to be defined as the *mystery* of balance of payments discrepancies. Let us once again follow the trail of world experts in their search for new insights into this difficult problem.

#### *The search for a common cause*

Let us start from the world current account discrepancy. Even though, in principle, this discrepancy might be due to current account deficits being systematically overstated or surpluses understated, IMF experts have come to the conclusion that it is best described as the result of a surplus going unrecorded. Identified with a *missing surplus*, this discrepancy has mainly been attributed to the misreporting of international investment income transactions. In its *Report*, the 1987 IMF Working Party went in a long and detailed analysis of the various investment income items – direct investment income, portfolio income, 'shipment' and 'other transportation', unrequited transfers and 'offshore

financial centres and financial innovation'. Since our aim is to investigate if it is possible to isolate, *conceptually*, a common cause of national and world discrepancies, we will not enter any further discussion about IMF technicalities, but simply retain the idea that the world current account discrepancy is essentially generated by a global under-recording in the investment income position.

As far as the world capital and financial account discrepancy is concerned, members of the IMF 1992 Working Party were unanimous in identifying it with a mysterious unrecorded capital outflow even if, in principle, the discrepancy could also have been imputed to a general overstatement of capital inflows. 'The global capital flow discrepancy indicates that recorded capital outflows have been relatively understated' (International Monetary Fund 1992: 10). In line with the view that 'the countries that receive cross-border financing via financial intermediaries most often remain able to collect information on these capital inflows, while the capital outflows are more erratically recorded by the authorities of the countries in which the capital exporters reside' (International Monetary Fund 1987: 30), the understatement of capital outflows mirrors the current account imbalance caused by a greater reported amount of investment income paid than income received. Since a current account deficit is balanced by a capital and financial account surplus and vice versa, it is clear in fact that the entry of the capital and financial account balance corresponding to a negative entry of the current account (the excess of investment income paid over investment income received) is necessarily referred to a positive capital outflow. IMF experts seem therefore justified to conclude that the understatement of capital outflows 'is consistent with the earlier findings of the Working Party on the Statistical Discrepancy in World Current Account Balances as to the major sources of the discrepancy in the measurement of investment income' (International Monetary Fund 1992: 10).

Up to this point the IMF analysis has led us to conclude that the global current account discrepancy is a question of a missing surplus deriving from the understatement of payments related to investment income, and that the global capital and financial account discrepancy is due to unrecorded capital outflows, that is, to the current account investment income understatement. The connection is clear; yet it is still too broad to allow for the determination of a precise common cause of world accounts discrepancies. A further step is needed, and this time it is the World Bank that provides additional insight into the problem.

#### *On capital flight again*

Instead of being limited to the illegal outflows of capital, the concept of capital flight can be given the meaning of an unrecorded capital outflow, that is, of a capital lost by some countries without being recorded in the balance of payments to the rest of the world. This seems to be the first meaning given to capital flight by the World Bank, by which it refers to the increase in external debt and, at least implicitly, to the payment of interests. According to the *World Development Report*, in fact, capital flight is measured as the difference between capital inflows – as determined by the increase in external debt and net foreign investment – and capital outflows – as determined by current account deficits and variations in official reserves.

Let us consider the set of indebted countries in their relationship with the rest of the world. In the last 24 years, from 1978 to 2002, these countries have benefited from a capital inflow measured by the sum of net foreign direct investment + portfolio equity flows + grants (2,428,975), plus the amount of net flows on debt (1,537.667), that is 3,966.642 million dollars (Table 4).

#### **All developing countries** (in millions of US dollars)

|      | 1                             | 2                      | 3      | 4                 |                         |                       |
|------|-------------------------------|------------------------|--------|-------------------|-------------------------|-----------------------|
|      | Net foreign direct investment | Portfolio equity flows | Grants | Net flows on debt | Current account deficit | Variation in reserves |
| 1977 |                               |                        |        |                   |                         | 117'713               |
| 1978 | 8'130                         | 1                      | 8'459  | 55'008            | 38'379                  |                       |
| 1979 | 7'493                         | -1                     | 10'527 | 67'240            | 11'912                  |                       |
| 1980 | 6'279                         | -1                     | 12'821 | 94'953            | 7'885                   |                       |
| 1981 | 20'376                        | 130                    | 11'424 | 97'671            | 50'707                  |                       |
| 1982 | 23'050                        | -4                     | 10'644 | 83'912            | 66'724                  |                       |
| 1983 | 14'999                        | -1                     | 10'130 | 43'798            | 54'955                  |                       |
| 1984 | 14'384                        | -2                     | 12'341 | 42'434            | 38'879                  |                       |
| 1985 | 12'274                        | 46                     | 13'436 | 38'427            | 42'366                  |                       |
| 1986 | 10'904                        | 225                    | 15'736 | 36'545            | 64'065                  |                       |
| 1987 | 9'394                         | 282                    | 16'714 | 50'657            | 31'409                  |                       |
| 1988 | 17'654                        | 719                    | 18'086 | 44'902            | 40'387                  |                       |
| 1989 | 21'312                        | 3'291                  | 18'982 | 46'373            | 41'919                  |                       |
| 1990 | 24'033                        | 3'004                  | 27'737 | 54'822            | 15'815                  |                       |
| 1991 | 33'106                        | 6'541                  | 33'928 | 65'344            | 68'568                  |                       |
| 1992 | 45'399                        | 12'991                 | 30'104 | 94'090            | 82'135                  |                       |

|              |         |        |           |           |           |           |
|--------------|---------|--------|-----------|-----------|-----------|-----------|
| 1993         | 68'060  | 42'444 | 27'669    | 108'746   | 127'417   |           |
| 1994         | 89'894  | 35'810 | 31'700    | 71'999    | 80'139    |           |
| 1995         | 105'303 | 17'320 | 31'590    | 151'252   | 101'512   |           |
| 1996         | 127'598 | 32'884 | 26'799    | 116'468   | 88'725    |           |
| 1997         | 171'095 | 22'594 | 25'290    | 105'307   | 93'851    |           |
| 1998         | 175'563 | 6'586  | 26'719    | 57'618    | 109'342   |           |
| 1999         | 181'722 | 12'640 | 28'519    | 13'807    | 9'777     |           |
| 2000         | 162'170 | 12'634 | 28'705    | -9'821    | -51'173   |           |
| 2001         | 175'035 | 4'397  | 27'899    | -1'226    | -14'445   |           |
| 2002         | 147'086 | 4'945  | 31'228    | 7'341     | -74'708   | 996'900   |
|              |         |        | 2'428'975 | 1'537'667 | 1'126'542 | 879'187   |
| <b>Total</b> | (1+2)   |        |           | 3'966'642 | (3+4)     | 2'005'729 |

Table 4 The measure of capital flight

Source: data elaborated from The World Bank, Global Development Finance Online, January 2004.

During the same period of time, the indebted countries have financed their net current account deficit (1,126.542) and their net increase in official reserves (879.187) for an amount total of 2,005.729 million dollars defining their capital outflows. Thus, statistical data show that indebted countries' capital inflows exceeded by 1,960.913 million dollars their recorded capital outflows. The difference, which the World Bank calls a capital flight, is the amount lost by the indebted countries, that is, the amount mysteriously missing from their official reserves. What this insight into capital flight suggests is that world balance of payments discrepancies derive from *a loss of capital suffered by indebted countries and that this loss is closely related to the payment of their current account deficits*. Furthermore, if we take into consideration the fact that current account deficits are mostly due to interest payments, we arrive at the conclusion that *the payment of interest on external debt is the most likely common cause of world accounting discrepancies*. 'A more plausible hypothesis links the missing surplus to one specific cause of accounting discrepancies at the national level, the systematic unreporting of international interest income flows' (Krugman and Obstfeld 2003: 314).

*Global current account and global capital and financial account discrepancies: a simple or a multiple effect?*

Our understanding of national and global discrepancies is still very inadequate. The identification of their cause with the payment of interest on external debt is little more than a hypothesis and too many questions have yet to be answered. However, the World Bank suggestion as to the nature of unreported capital flows is very promising and Schmitt's analysis of external debt is apt to provide strong support to the idea that external debt servicing is the common cause of the anomaly affecting world balance of payments accounts. A complete analysis of world discrepancies along these conceptual lines would require an investigation of each country's indebted position and net interest payments. However, even if such a detailed analysis is still in the future, it is already possible to apply the principles of the pathological servicing of external debt to the set of net indebted countries. In particular, it is possible to present a very simplified version of the effects produced on the global balance of payments accounts by the anomalous payment of interests. Let us assume the net payment of interest carried out by indebted countries – the 138 countries considered in the World Bank's *Global Development Finance* – to be equal to 10 units (equivalent to  $x$  million dollars). As implied by the World Bank definition of capital flight and by Krugman and Obstfeld's hypothesis (itself resulting from the IMF experts' suggestion as to the central role played by the investment income position), the interest payment of 10 units will cause a whole series of discrepancies, namely, between the current accounts of creditor and debtor countries and between the capital and financial accounts of the two sets of countries. If we suppose the whole payment of interest to have these effects, we can synthetically represent them as follows (Table 5).

Table 5

|                      |             |            |     |                 |    |
|----------------------|-------------|------------|-----|-----------------|----|
| Debtor countries     | CA interest | 10 (debit) | KFA | Capital inflow  | 10 |
| Creditor countries   | CA interest | 0          | KFA | Capital outflow | 0  |
| Global discrepancies | CA          | 10         | KFA |                 | 10 |

Table 5 Global current account, and capital and financial account discrepancies

As can easily be seen, the payment of interest gives rise to:

- (1) 10 units of capital outflows in the debtor countries – defining a missing increase in official reserves;
- (2) a global current account discrepancy of 10 units – corresponding to the current account's missing surplus; and
- (3) a global capital and financial account discrepancy also of 10 units – defining the global unreported capital outflow.

It is important to observe here that the analysis developed so far seems to corroborate the idea that both the ‘missing surplus’ and the ‘missing capital outflow’ exist because the payment of interest fails to be recorded in both the current account and in the capital and financial account of creditor countries. If this were the case, then world discrepancies could be blamed on statistical inaccuracy, misreporting, or inadequacy of data recording and not as the mark of a serious structural disorder of the system of international payments. This is indeed the simplest interpretation of the message conveyed by the choice of the adjective ‘missing’. The world current account discrepancy would thus pose the problem of tracing down the payment of interest in order to enter it to the benefit of creditor countries. Debtor countries pay what they have to pay as interest and creditor countries are paid their due, yet the amount paid gets unrecorded in the current account of creditor countries; this seems to be the way IMF experts conceive of the ‘missing surplus’. ‘The IMF has recently examined this problem and concluded that most of the missing surplus represents unreported interest income earned abroad. Interest income earned abroad is often credited directly into foreign bank accounts without even crossing national boundaries, and thus it is difficult to detect’ (Salvatore 2001: 457). Despite its apparent absurdity, another possibility cannot be ruled out *a priori*, namely that the payment of interest elicits a second, pathological payment of net debtor countries’ current account. In this case, Table 5 would refer to the second payment of interest, that is, to an over-expenditure carried out by the indebted countries and unrecorded by creditor countries. Instead of looking for the ‘missing surplus’ in order to transform it into a recorded payment, the problem would then be avoiding the overpayment of interest in the first place. The choice between these two alternatives – only partial unrecording of a single versus a double payment of interest – requires a careful and thorough analysis of international interest payments. For the time being, let us simply note that interest payment has been almost unanimously pinpointed as a highly original transaction and as the likeliest source of balance of payments discrepancies, which is a good enough reason to investigate it further with the explicit aim to throw some new light on what might be dubbed the puzzle of world balance of payments imbalance.

As shown by Schmitt (2004), statistical evidence confirms the result of conceptual analysis: the payment of interest on external debt is indeed the cause of an international disorder leading to balance of payments discrepancies, its effect being felt both at the national and at the global level. Yet, this does not mean that global current account discrepancies and global capital and financial account discrepancies are added to one another. As IMF experts seem also to suggest, they are twin effects of the same cause.

#### *The International Investment Position and the reconciliation of stocks and flows*

National and global discrepancies are concerned with the transactions entered into the balance of payments. They are thus the sign of a disorder deriving from the recording of *flows*. In order to better understand the cause and nature of this disorder, IMF experts resort to a comparative analysis between the flow data of the balance of payments and the *stock* data of the international investment position, that is, of ‘the balance sheet of the stock of external financial assets and liabilities’ (International Monetary Fund 1993: 104). Experts believe, in fact, that ‘statistics on international assets and liabilities can serve as a check on the capital *flow* data that enter the balance of payments accounts’ (International Monetary Fund 1992: 96). *Indeed, it is important to observe that the discrepancies investigated by the IMF manifest themselves in a divergence between stock and flow accounting data.* The problem of stocks–flows reconciliation is correctly seen as a major obstacle towards sound and reliable statistical coverage, and it is generally thought that the reduction of the stocks–flows divergence (as well as the cutback in balance of payments discrepancies) can be achieved through ‘consistent classification’. ‘Because stock levels often are utilized in the determination of investment income receipts and payments in balance of payments accounts, consistent classification throughout the income category of the current account, the financial account, and the position components is essential for reconciliation of stocks and flows’ (International Monetary Fund 1993: 104).

What is crucial here is to determine what a consistent classification would look like. Is this only meant to describe an improvement in statistical coverage or does it extend to a conceptual understanding of what causes the present disorder to exist *independently* of inaccurate statistical coverage? Is the discrepancy originating in the investment income account and defining the ‘missing surplus’ the result of a ‘technical shortcoming’ or does it represent the unavoidable consequence of a logical inconsistency characterizing today’s system of international payments? If it could be confirmed that interest payments are at the origin of an excess expenditure causing a divergence between current account, and capital and financial account flows (a net capital inflow, as in Table 5), it would then be possible to show that the disparity between stock and flows is the effect of a structural disorder of the system of payments. The payments of interest made by the current account correspond to a transfer to the creditor countries of part of the debtor countries’ domestic output: a stock. If two flows were necessary for the transfer of this unique stock, a discrepancy would appear that could not be considered merely the side effect of imperfect data collection.

The current IMF position seems to endorse a more pragmatic and technical explanation. ‘The links between investment income in the balance of payments accounts and the international investment position – particularly those between net investment income and the net position – are complex and underline the importance of consistent classification of transactions and stocks and of viewing the two as an integrated set of accounts’ (ibid.: 106). The most obvious interpretation of this sentence is that discrepancies and divergences can be successfully dealt with through a constant adjustment and improvement in data collection. Such an interpretation, however, *is not* corroborated by

statistical evidence. IMF experts are well aware of the fact that 'in all recent years except 1997, the global *current account* shows an increasing negative imbalance, that is, a continuously widening excess of recorded debits over recorded credits' (International Monetary Fund 2003: 3). It is thus justified to infer that the problem, though clearly exposed by the IMF, remains an 'unresolved mystery'. In fact, the mystery of the 'missing surplus' is even more staggering today than it was when it was first investigated two decades ago. Could this not be a sign that its origin has to be tracked down to an anomaly far more fundamental than the inadequate reporting of statistical data?

As shown by the analysis of net interest payments, this is precisely the case. Irrespective of individuals or governments' behaviour, the present system of international payments is so structured as to impose on indebted countries a double payment of interests. Two equivalent flows are required to convey the real payment of net interests between countries. In conformity with the IMF experts' intuition, the payment of net interests gives thus rise to an unreported capital outflow defining a net loss for the indebted countries' official reserves. It is this unaccounted loss that explains the mystery of the 'missing surplus'. To understand it thoroughly it is necessary to unveil another little understood phenomenon: the macroeconomic servicing of external debt.

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