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Transparency in Central Bank Operations in the Foreign Exchange Market

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Abstract

Transparency in the economic sphere involves making public sector action visible and understandable to the private sector. Transparency in central bank operations can be seen a complement to the greater transparency being established in policy formulation. Among the most important areas in this regard and the central bank's operations in the foreign exchange market. This paper looks at the respective roles of overt and covert foreign exchange market operations, and considers that each may be appropriate under particular conditions. Reconciling covert operations with transparency requires rules for full disclosure with as short a lag as possible.

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I. INTRODUCTION

Transparency may be defined broadly, in the economic sphere, as making public sector actions visible and understandable to the private sector. "Real time" transparency is where actions are visible at the time that they take place; "ex ante" transparency is where the public sector announces in advance what it will do, i.e., there are clearly-stated rules for its behavior; and "ex post" transparency is where the public sector explains afterwards what it has done. This last condition may be considered close to a requirement of accountability to the public.[2]

There has in recent years been increasing consensus on the need for transparency in the conduct of monetary policy: the actions of the monetary authorities should be clearly seen, and easily understood. In part, this derives from the desire for accountability for policy makers. More broadly it derives from the view that an economy functions best when policy makers provide a stable environment for the operation of market forces; this, in turn, depends upon establishing clear rules for the conduct of policy and being seen to be following them. For instance, in the mid-1970s a number of countries adopted quantitative monetary targets as a basis for policy, and in the early-1990s several introduced explicit inflation targets. Together with this, in the past few years, there has been increased focus also on transparency in explaining how central banks decide to *apply* their monetary instruments in order to meet these targets. In the United Kingdom, the Bank of England's Quarterly Inflation Report is

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[2]While accountability to the *government* is a widely-recognized requirement for any public sector institution, this concept of accountability falls short of the notion of transparency, which—as stated above—rests on disclosure to the *public*.

designed to make public the in-house analysis underlying advice on actions to achieve the government-set inflation targets. In the United States the deliberations of the Federal Open Market Committee are published, with a delay, to help make monetary policy decisions transparent.[3]

Even with increased transparency in the monetary instruments, however, there may not necessarily be transparency in the techniques of applying those instruments—that is in the operations of the money and foreign exchange markets. For instance, it may be transparent that the central bank seeks higher interest rates, or a fixed exchange rate, but it may still be obscure how this is to be achieved. While there have been important developments in the techniques of monetary operations in recent years, the main watch-word has been that the operations be "market-based" rather than necessarily transparent.[4] Deeper and more sophisticated financial markets, growth of technology, and increased understanding of the role of signals in guiding markets, have all served to reinforce the trend toward "market-based" operations. The link from "market-based" to transparency seems to have been left implicit.

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[3]Central banks in general have traditionally been rather secretive institutions. No doubt this derives in part from a central bank's traditional function as "banker to the government." With the relative decline in that function—including in many central banks very tight limits on credit to government—the monetary policy function of central banks has come very much to the fore. Thus issues of optimal monetary policy rules rather than those of banker-client relationships increasingly underpin discussions on the degree of openness of a central bank.

[4]For example, Article 2 of the Statutes of the European System of Central Banks, attached to the Treaty of Maastricht, establishing the framework for European Economic and Monetary Union, states explicitly that operations should be "in accordance with the principle of an open market economy with free competition, favoring an efficient allocation of resources."

This paper looks at developments in one of the markets in which the central bank operates—the foreign exchange market—to see to what extent trends toward transparency[5] and market-responsiveness have been mutually reinforcing. Insofar as there may be conflicts, this may place those responsible for the design of policy operations in a dilemma. The paper identifies some areas where such a dilemma may exist, and provides some suggested solutions. In particular, it notes from market practices, and from the literature on the reasons for ambiguity in central bank operations, that it may well not be the case that central bank operations in the foreign exchange market should always be immediately transparent. To compensate for this, there should be ex post accountability through full disclosure on a fairly frequent basis of what the central bank has been doing.

The foreign exchange market is particularly relevant with regard to the issue of transparency, since it is one of the major channels of transmission from the instruments of monetary policy to the final objectives, because developments in the foreign exchange market are by their very nature of interest to partner countries in the foreign exchange market,[6] and because foreign exchange market policy seems frequently to have become dominated by non-economic

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[5]Applying the definition above, an operation in the foreign exchange market is considered transparent if the nature and the extent of the operation are made clear immediately or almost immediately after the operation has taken place. A weaker definition might be that the rules under which the operation was conducted would be well known.

[6]Hence under the Bretton Woods arrangements virtually all countries committed themselves to fixed exchange rates, in part in reaction to the notorious "beggar-thy-neighbor" use of aggressive depreciation in the interwar period. The second amendment to the IMF's Articles of Agreement prohibited the use of the exchange rate as an active instrument of policy to improve competitiveness.

factors, with political pressures, or the desire to maintain the credibility of the exchange rate regime, causing central banks to maintain exchange rates that could not be justified by market fundamentals.

II. Overt and Covert Foreign Exchange Market Intervention

Unless a country has adopted a pure floating exchange rate and is prepared to absent itself fully and at all times from the foreign exchange markets,[7] it will at least occasionally be participating in the foreign exchange market with a view to influencing the rate.[8] In most countries, the size of foreign exchange reserves available for intervention is small relative to the size of potential market flows.[9] Intervention on its own cannot be expected to have a lasting effect on the rate.[10] Clearly, it is important that the authorities' desired exchange rate path is consistent with the overall policy stance, but the fact of intervention means that the

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[7]Also, if it does not have partner countries which—as may be the case especially where a large country is concerned—press it to intervene in order to achieve some objectives in the partner countries.

[8]In some countries with poorly developed domestic financial markets the authorities may be intervening in the markets in order to achieve domestic monetary objectives.

[9]See, for instance, Obstfeld and Rogoff (1995). Goldstein and Folkerts-Landau (1994) point out that a single hedge fund has greater resources than all but twenty of the world's central banks.

[10]This is not so much because resources would be insufficient to defend the rate if all other objectives of policy were to be subordinated to defending the rate, but because there will be competing objectives that will make such a defense unsustainable beyond the very short term.

authorities expect that the intervention provides some additional movement toward, or support for, policy objectives.

In this regard, leaving aside issues such as when to sterilize the liquidity effects of their actions in the foreign exchange market, central bank operators have traditionally had the alternatives of **covert** or **overt** intervention. There may be a time for each. Covert intervention may be explained as designed to avoid indicating to the market that the central bank is involved, by seeking to give the impression that there is additional market demand supporting the rate. Overt intervention may be designed, particularly in the case of a currency with a deep market, not so much to provide additional demand for that currency but to give a signal that the authorities are committed to that rate and are willing to use the instruments at their disposal to maintain it, or in some cases simply that they are trying to guide the rate to where they think it should be. Such choices arise whether a country is operating under a fixed or a floating exchange rate regime—as long as the rate moves within a band, or the authorities have, at least, some preferences as to where a floating exchange rate should be, or how rapidly it should be permitted to move.

The dichotomy above is, however, not generally so simple. For instance, there are likely to be limits in the degree to which the central bank can achieve its preference between overt and covert intervention. In order for intervention to be covert, it is important that the central bank's counterparties in the market are not aware that the intervention comes from the central bank, or—if individual counterparties are aware of it—they must not disseminate this

information to the market or make use of it for their own purposes to the extent that other participants can detect the central bank's involvement.

The greater the volume of intervention, other things being equal, the less likely that the authorities will be able to keep it covert. On the other side, in cases where the central bank is frequently in the market for non-exchange management purposes—this is usually the case where the central bank acts for the government in the latter's international transactions—it may be difficult for the market to perceive that a particular transaction is designed for exchange management purposes. Indeed, the distinction between agency and exchange management functions may itself not always be clear, since there is some scope for the central bank to undertake its own "leads and lags" with its government transactions—e.g., accelerating or delaying payments on major overseas government contracts.

Nevertheless, there generally is some choice available to the central bank, in that it is able to disguise its intervention if it wishes. Intervention, unless massive, may be spread across counterparties and intermediaries, and in some countries may be undertaken by agencies other than the central bank, for instance by state-owned commercial banks. A central bank will generally deal with a broker, who will generally have to buy from, or sell to, the market the currency demanded or supplied by the central bank. The broker is likely to have little incentive to reveal the central bank's presence in the market for fear of driving the price against itself before it has laid off the position it has acquired from its transactions with the central bank. Also, intervention may be other than in the spot market, for instance in the forward market or

using a range of derivative instruments, or the central bank can conduct two-way operations or intervene in off-shore markets. And, while the **fact** of official foreign exchange market intervention may be hard to conceal, the **magnitude** of such intervention—which is likely to be the more critical for determining the authorities' intentions—may be hard for outsiders to determine if the authorities do not wish it to be known.

This analysis is in line with that from the literature on the microstructure of the foreign exchange market which stresses[11] that the foreign exchange market—unlike, say, the equity market—is decentralized and participants do not have full information as to the aggregate net demand for a currency. Thus the operation of the foreign exchange market does not conform with the conventional requirements for transparency that all agents are identical, information is perfect, and trading costless. Dealers conduct around 85 percent of all spot market transactions; the remainder is customer driven (defined as anyone who does not offer two-way prices). Dealers get new information by executing orders; they "sell" each other information about their transactions with outside customers.[12] Thus, except in crisis situations, when the central bank may be the dominant counterparty in the exchange market, the central bank's involvement in the market may be perceived only imperfectly by other market participants.[13]

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[11]See, for instance, Lyons (1995).

[12]See Perraudin and Vitale (1996).

[13]A very strong form of market efficiency would postulate that the market would in any case "see through" a central bank's intervention, and would adjust solely on the basis of the underlying fundamentals.

At a simple level, such covert intervention may be regarded as desirable when the authorities do not wish to give a signal of their involvement. This would occur, for instance, when the authorities are comfortable with their overall policy stance, and feel that they are facing a temporary shortfall or glut in demand for currency and are seeking to avoid this temporary shortage or glut getting built into expectations and thus having a longer-lasting impact on the market. A second reason would be where the central bank is not sure of its own commitment or ability to defend a particular rate, and therefore does not wish to jeopardize its credibility by being seen to support a rate which is subsequently not held. This may well be the case in the event of central bank intervention to "lean against the wind" and safeguard orderly market conditions rather than to protect the level of the exchange rate per se. A third reason, in some ways the converse of the second, may be where the central bank has limited credibility (or limited reserves) and where it is concerned that its appearance in the markets may in fact prompt increased market pressures against it.[14] A fourth possibility is that in cases where a country is operating within a foreign exchange rate band regime (such as the exchange rate mechanism (ERM) of the European Monetary System), there may be advantages in covert intramarginal intervention to avoid the speculative pressures that might emerge if the rate were permitted to move to the edge of the band.[15] Finally, and more prosaically, there may

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[14]Cukierman and Meltzer (1986) demonstrate, in the context of ambiguity in the operation of monetary policy, that a central bank is likely to seek more ambiguous control procedures the more uncertain its objectives and the higher its rate of time preference.

[15]Experience from the ERM indicated that, in cases of moderate divergences from the central rate, there was mean reversion in expectations; in cases where there was substantial divergence from the central rate, on the other hand, markets tended to expect the divergence to increase further. Studies of this experience led to the so-called Basle-Nyborg Agreement

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well be sound operational reasons for keeping intervention covert. On some occasions, a central bank may, like a typical market participant, wish to get the "best rate" (i.e., the lowest spread around the central rate) it can for any deal; it does not wish to risk that it is perceived as "distress buying," since—even if there is full credibility that its intervention will be sufficient to achieve the desired effect on the exchange rate—this might well encourage market counterparties to offer it worse terms. In this sense, the central bank would aim to disguise its intentions exactly as would any other sizeable player in the foreign exchange market.

On other occasions, the central bank will wish to make its intervention overt where it wishes to give the market the signal that it has a policy preference as to where the rate will be, and it has sufficient credibility that this signal will encourage expectations that this rate will be achieved and will thus move expectations toward that rate. For instance, in cases where there is a large discrete trade, overt smoothing operations may help avoid overreaction to market fluctuations. An additional reason for making intervention overt is where the central bank feels that it will anyway be unable to conceal the intervention and thus considers that giving the market accurate information on intervention will be preferable to the market generating

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[15](...continued)
(see, for instance, Ungerer (1997), pp. 179-80)—under which it was agreed that the authorities should act to prevent exchange rates from reaching their bands, including through intramarginal intervention.

inaccurate information on its own.[17] [18] Finally, there is a strong case for making intervention overt where there are uncertainties over a central bank's (or the authorities' in general) overall policy stance, and information about the activities in the foreign exchange market will give better understanding—or improve the credibility—of that stance.

III. Transparency: How and to Whom?

Many of the arguments for transparency in policy-making carry over also to the *operation* of policy. The public would, for instance, seem to be have as legitimate an interest in the implementation of policies by the central bank as in the design of policies. In the same way as inappropriate policies may lead to economic costs, so too can inappropriate implementation of those policies. Inappropriate exchange market intervention, for instance, can lead to significant macroeconomic losses.

Two forms of accountability can be identified: that of the central bank to the government, or more specifically the Ministry of Finance (MoF), and that to the public. The argument for

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[17]It should be noted that absence of information on central bank intervention does not necessarily mean that the market will assume that there is zero intervention. The market may indeed form a view that intervention is greater than that actually undertaken. A credible statement of the level of intervention undertaken would in such cases serve to dampen the market's estimate of the magnitude of intervention.

[18]Ghosh (1994) presents a model which demonstrates that, with sticky goods prices and forward-looking exchange rate expectations, the central bank may prefer to intervene secretly in the foreign market when acting in anticipation of future shocks, but openly when reacting to current shocks.

accountability to the government is that the central bank is potentially using public funds, so the public authorities have a legitimate interest in approving and monitoring the use of those funds. In some countries, therefore, the central bank has to secure authority in advance for all foreign exchange market intervention, and has to report intervention immediately to the MoF. Such intrusive involvement of the government, however, may be considered inconsistent with operational independence of the central bank. Insofar as a central bank has the mandate to operate monetary policy independently, in order to achieve the monetary targets, it also has to have day-to-day responsibility for managing the foreign exchange market and hence for foreign exchange market intervention. This latter view has been given effect by the widespread trend for the foreign exchange reserves to be owned by the central bank.[19] In any case, although accountability to the government is important, it is not the same as accountability to the public—i.e., transparency.

Operational independence can be accompanied by clear rules determining the parameters for the central bank's activities, as well as firm disclosure requirements.[20] At one extreme is the possibility of establishing a Currency Board Arrangement (CBA). In this case, the central bank is legally obliged to maintain full foreign exchange cover for specified domestic monetary liabilities, and stands ready to exchange them at a pre-specified rate of exchange. Indeed, any

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[19]Such practice does not take away from the fact that public funds remain at least potentially at risk, either in the form of lower dividends to the government from profit remittances, or ultimately from the need for the government to recapitalize the central bank in the event of losses.

[20]See Enoch, Khamis, and Stella (1997) for a discussion of ex ante and ex post transparency in the case of the central bank's role in the provision of a financial sector safety net.

fixed rate regime, particularly one with relatively narrow bands, also constrains the central bank, although to a lesser degree. To go further, any regime with a nominal anchor will constrain the central bank, although the central bank may have considerable discretion among the various instruments available to it, as well as discretion in operating those instruments. In all cases, firm disclosure requirements will be necessary in order to establish full central bank accountability.

There is also a question whether transparency can be improved by ex ante announcements as to the amounts (either as targets or limits) of a central bank's intervention. On the one hand, this may be thought to be unnecessarily restrictive: the purpose of foreign exchange reserves is essentially that they are available for intervention, and ex ante restrictions on the extent to which they can be used may serve to diminish the reserves' usefulness. Also, the more short-term the targets or limits (weekly or perhaps daily), the more they may provide information to counterparties to the central bank's transactions which could add to the central bank's costs and reduce the effectiveness of the interventions.

Transparency means not only giving the public access to as much information as possible, but ensuring that this access is provided on equal terms to all. Modern technology has much facilitated this process, with central banks, ministers of finance, and statistical authorities able to release data to the entire public simultaneously for instance through the Internet and tend to establish calendars for the release of information. Privileged access to information to those

who may be able to make use of it would mean that information released subsequently may be tainted and the process no longer transparent.

Thus the search for greater transparency may lead to a conundrum. It may indicate a need to hold back information until the central bank (or the statistical authority) is ready to release it to all. In its most pure form, this recognition has led in a number of countries to the requirement that the government gets access to central bank information at the same time as the public. It has led in some countries, most particularly the United States, to restrictive regulations governing interactions between central bankers with insider information and market participants who would stand to benefit from that information.[21] With those able to benefit from such information being ever-more-sophisticated in the means by which they can make use of what information they gain,[22] increasingly comprehensive regulations governing the dissemination of information are likely to need to be formulated. Indeed, during periods when a central banker has market-sensitive proprietary information, it may be necessary to prevent all unmonitored contact with market participants.[23]

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[21]This is not just a "fairness" consideration, but reflects the fact that one of the principal conditions for the proper working of a competitive market is that there is equal access to information to all participants.

[22]For instance, market participants benefit not only if they know whether a particular event will occur, but even if they just know that the probability of it occurring is different from that expected by the markets, since they will be able to take hedged positions to take advantage of their information on the probabilities.

[23]This presumably should include all those working in the lobbying groups that have sprung up specifically to obtain such information, as well as former central bankers employed by market practitioners to provide insights from their former employment. At the same time, an

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In order to prevent such restrictions becoming impossibly onerous and isolating the central bank too severely from the markets in which it is operating, the effects of such restrictions might be mitigated, for instance, by clarifying to the greatest extent possible ex ante the basis on which the central bank will be operating (so that the value of any proprietary information is limited), minimizing the time during which information is proprietary, and minimizing the number of central bankers who have access to it.

IV. Transparency Through Disclosure

Beyond the restrictions discussed above to prevent non-transparencies in central bank foreign exchange market activity, the most effective form of ensuring transparency is likely to be through the reporting of a central bank's activities in the foreign exchange market. Reporting can be of the flows or of the stocks of its foreign exchange involvement; the first typically comprises figures of central bank intervention, while the latter conventionally comprises figures for the country's foreign exchange reserve position.[23]

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appropriate response to concern over revealing inside information might be that central bankers should maximize their exposure to the public media, and maybe the rating agencies, so that information would be quickly disseminated to the public as a whole.

[23]A further important source of transparency is through disclosure requirements through the accounts of the central bank. In the area of central bank accounting there has been a widespread trend toward higher standards of disclosure.

Both these forms of disclosure have been practiced for many years, and it is perhaps surprising that concerns about the drawbacks of the conventional presentations have emerged so recently. The first problem with intervention figures is that typically they have related only to intervention in the spot foreign exchange market by the central bank. As noted above, these figures may therefore exclude forward market intervention, or intervention by other state organs, including state-owned commercial banks.

Foreign reserves figures may be even more problematic.[25] They relate to the gross stock of foreign exchange assets (however defined) at a particular point in time. There is thus immediately a question as to what assets are included, and how they are valued—this is most pronounced in the case of holdings of gold. Probably even more seriously, they ignore foreign exchange obligations. Thus reserves can be inflated through forward transactions, in which the obligation to repay occurs after the measurement date, or simply through borrowings. Also, reserves may not be freely useable; some countries have placed some of their foreign reserves with the commercial banks, making their availability in part dependent on the soundness and the liquidity positions of those banks.

Recognition of these factors is not new. There appear to have been situations where a central bank has reportedly undertaken transactions in the forward market so that the reserves figures would give a truer picture of the extent of discretionary market intervention over a period

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[25]Issues concerning the statistical presentation of foreign reserves data are covered in IMF (1993) and IMF (1995).

when the actual figures had been significantly affected by the central bank's agency business for government, or by swings in other identifiable erratic items.[26] Also, the size of borrowings in foreign exchange reserves has frequently not been concealed. IMF drawings, and borrowings in the markets, are totally public. The United Kingdom, for instance, explicitly said that its ECU borrowings in the 1980s were intended to augment its reserves. Indeed, high gross reserves partially matched by borrowings may be seen as a sign of strength, showing—in the case of market borrowing—that the country has recourse to the markets, or—in the case of Fund drawings—that it is, or has been, operating in accordance with a Fund-supported program. The emphasis placed both in the major industrial countries, and more recently among the South East Asian countries, on having sizeable standing facilities available—which generally have to be repaid fairly quickly, and are entirely at the risk of the borrower—indicates that even borrowed reserves are considered useful.

Nevertheless, the continued focus on gross reserves, and the way in which these figures can be manipulated, may serve to detract from markets' proper understanding of the underlying economic condition of a country. The ability of the authorities to switch their assets between those that appear on balance sheet and those that are off balance sheet means also that reported rates of change of the assets have limited meaning. Without properly presented

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[26]For instance, if there have been net purchases of say US$100 million in the foreign exchange market, but the central bank has spent US$200 million for delivery of an aircraft, it might not wish to give the wrong signal to the markets by reporting simply a US$100 million loss in reserves. Some of the spent dollars might therefore be temporarily reconstituted through a forward transaction.

figures on the external balance sheet of a central bank,[26] there may be a failure to detect emerging economic problems, and the opportunity to take remedial measures on a timely basis may be lost. Reviews of the economic crisis in Mexico in 1994 highlight the degree to which Mexican figures were non-transparent in the period before the crisis, and led to policy recommendations for greater transparency in data, including data on foreign exchange reserves. More recently, an important element in the Fund-supported program for Thailand has been the increase in transparency in the country's foreign exchange reserves. Thus in August 1997 the authorities for the first time published data on their forward positions as well as their spot positions. Such publication is still unusual. Only a few countries, most notably Australia, South Africa, and Thailand, publish such data on a timely and regular basis. The United Kingdom has announced[27] that it too will now publish its forward book.[28]

V. Further Issues in Disclosure of Foreign Exchange Activities

The issue arises to what extent the adoption of higher standards of disclosure among a few countries will prompt similar higher standards of disclosure among other countries. On the one hand, data on gross reserves have always been held in some importance, and their value

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[26]As well as of MoF and other government accounts in cases where they are not in the central bank.

[27]Speech by the Chancellor of the Exchequer at the Annual IMF/World Bank Meetings in Hong Kong, September 20, 1997.

[28]Further information can be obtained from the IMF Dissemination Standard Bulletin Board (http://dsbb@imf.org

may will not be diminished just because some countries have now gone further in their disclosure. On the other hand, there may have been a general public lack of awareness of the deficiencies in the conventional measure of reserves, and markets will now have become more aware of such deficiencies.[30] Such knowledge cannot be unlearned, and one would expect over time that market analysts will seek to set reported reserves figures within the overall context of the net balance sheet position.

It is worth noting also that even giving data on the full foreign exchange balance sheet of the central bank (and government accounts where relevant) will not give a full picture of the liquidity position and financial strength of the country. In particular a country may well have contingent access to additional assets—a classic IMF Stand-By and bilateral swap arrangements are the clearest examples, and there may well be additional credit lines available, for instance from international commercial banks.[31] These contingent lines too may be publicized; the extent to which they are likely to add to credibility in the country's position depends on the one hand on the extent to which these lines are assured, and on the other on the extent to which the drawing on such lines would generate some policy conditionality on the country.[32] Recent discussions among the South East Asian economies regarding the

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[30]See, for instance, the discussion in the Financial Times of September 16, 1997.

[31]Argentina, where the constraints imposed by the CBA made the management of the banking system's liquidity problems very difficult, arranged a series of credit lines with commercial banks in the wake of the "tequila effect." The availability of these lines served to help restore confidence in the CBA.

[32]These two conditions may be mutually contradictory—for instance the provision of

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setting up of swap lines indicate that the prospective participants expect that markets would be reassured by the existence of such lines.[33]

A further limitation lies in the extent of the foreign exchange guarantees that have been given by some countries. If there are blanket guarantees on some set of assets—for instance domestic currency acquired in exchange for foreign exchange by non-residents—then the contingent obligation on the central bank may be large and uncertain. The larger these guarantees, the more likely that the management and ultimate removal of such guarantees will become the dominant policy concern of the authorities, preventing them from achieving any of the other goals expected from sound foreign exchange market management. An additional limitation may derive from questions of valuation of a central bank's holdings of derivatives.[34] Finally, reported figures may be distorted by "window dressing" around reporting dates, for instance if the central bank undertakes a repo operation with a domestic bank across the reporting date.

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[32](...continued)
unconditional credit may be thought to worsen prospects for appropriate policies in a country, and thus reduce confidence in the country. In other instances, however, most clearly an IMF Standby, the two conditions may be mutually reinforcing. For a discussion of the role of conditionality in the evolving market economy, see Guitián (1995).

[33]As suggested above, the extent to which markets may be reassured by such arrangements depends on the extent to which they will be perceived as carrying appropriate conditionality, and the extent to which they will enable countries in difficulty to avoid seeking assistance from the IMF. Presumably, the more the facility is seen as a substitute rather than a complement, the less positive its impact would be.

[34]Considerations regarding the proper valuation of such instruments are discussed in IMF (1995).

Once high standards of transparency are introduced, there may be a risk that over-simplistic conclusions may be drawn from the figures, for instance, to seek to obtain some "net" figure for a country's position by aggregating the forward book with the spot book. While there may be some validity in such aggregation, it will not fully reflect the situation arising from market participants' likely open positions in the markets and hence the likely sources of market pressures. Such problems, however, seem more an argument for greater explanation regarding the information being released rather than for not releasing the information at all.[35]

VI. Conclusions

Greater transparency in central bank operations can be seen as a complement to the greater transparency being established in policy formulation, and in line with the desire to foster greater central bank accountability. One important area in which the transparency of central bank operations is increasing is the foreign exchange market. Many of the traditional arguments for masking the activities of the central bank in the foreign exchange market may seem now to have less force. Nevertheless, there are valid market operational reasons why in real time the public should not always be aware as to what the central bank is doing. Insofar as there is a lack of transparency in day-to-day central bank operations in the foreign exchange market, however, this should be balanced by clear statements of policy in advance (for

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[35]This is very much in line with the thinking underpinning the development of the SDDS.

instance that intervention will be only to smooth short term fluctuations) together with full disclosure within a short period thereafter, to confirm that actual policy was in line with announced policy intentions. In particular, there should be fairly rapid, and equal, public access to accurate information on a country's foreign reserves position.

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