Governance aspects of foreign exchange interventions

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Introduction

This paper provides comparative information on governance arrangements guiding foreign exchange interventions, on central banks' related communications policies, and on the accountability of central banks for their intervention decisions. The paper makes use of data from the BIS survey carried out for the December 2004 Meeting of Deputy Governors.

Powers and decision-making

Allocation of powers in respect of monetary and financial policy is an issue of great significance, over which views differ from country to country, and change through time. Legislative reforms in recent years have generally given central banks greater operational independence, accompanied by increased accountability. Key institutional design issues at the heart of recent and earlier reforms include alignment of decision-makers' incentives with public policy objectives, the coordination of interacting elements of public policy, and time-consistency.

The close linkages between monetary policy and the exchange rate mean that public policy interests in each area cannot be treated separately. In principle this ought to lead to institutional designs with integrated governance arrangements for monetary policy and exchange rate policy. Yet in a number of countries, tensions between different governance arrangements have been carried over from earlier structures. In several cases, goal and operational independence have been granted to the central bank, but the government has authority over exchange rate policy. The potential for the central bank's domestic policy target to be undermined by a government decision on exchange rate policy is not always provided for within legislative or other conflict resolution procedures.

At the operational level, governance arrangements for foreign exchange interventions also seem somewhat less clearly defined and more opaque than those for making monetary policy decisions. In addition, foreign exchange interventions are an area where central bank actions remain behind the scenes more often than in other areas of conducting policy, for a range of clear and not-so-clear reasons. At the margin, this may call for clearer and more detailed related governance procedures inside the central bank than for activities that are carried out in the public eye, but detailed information on these internal governance mechanisms is not widely available.[1]

Legal basis

There are two ways to consider the legal grounding of foreign exchange interventions by central banks. The first and broader question concerns the regime choice. What are the principal objectives of the central bank, and what are its powers in the area of monetary and exchange rate policy? For example, is an exchange rate objective set down in the central bank law?[2] And how are the powers to

[1] Often, formal statements on governance mechanisms focus on high-level aspects while questions of detail are covered in internal rules and procedures that are rarely published.

[2] Of course, the absence of an exchange rate objective is not inconsistent with a central bank conducting interventions, but their role and objectives may differ depending on the formulation of the policy objective.

decide on the exchange rate regime and to determine exchange rate policy distributed between the government and the central bank? For example, does the power to choose the exchange rate regime rest with the government, with the central bank having full control over exchange rate policy (deciding, for example, on the rate of crawl of a crawling peg, or the width of exchange rate bands in a hybrid model)? Or is exchange rate policy a shared responsibility, with, for example, both the government and the central bank determining operational objectives? The second, narrower question concerns the extent to which the central bank has the power to make foreign exchange interventions, to decide when to intervene and by how much, which resources it may use to intervene, who at the central bank may make the decision, and if there are specific reporting requirements.

We first address the broader question. As noted, many central banks have recently been mandated by law to pursue a price stability objective, and others choose to pursue such an objective as a concrete interpretation of a broader legal mandate. Table 1 shows that the central bank laws of industrialised countries often stipulate price stability as the principal objective, or set out a broader or more complex objective that combines the value of money, economic growth and overall public welfare (a much older tradition). By contrast, the central bank laws of many emerging market economies are of a vintage in between: they do not specify the broad objectives that are typical of relatively old central bank laws, but are also not so specific as to demand price stability, as has become almost the norm since the 1990s. Instead, many ask the central bank to maintain the value of the currency, without distinguishing between its *external and internal value*.[3]

Table 1

Primary objective of the central bank

Central bank laws of 90 countries and currency areas

	Preserve *internal* value of currency	**Preserve *external* value of currency**	**Preserve value of currency**	**Broader or more complex objective**
25 central banks in BIS survey	32%[1]	4%	32%	32%
53 emerging market economies	21%	4%	38%	38%
12 industrialised countries	42%	0%	0%	58%
Total	27%	3%	31%	39%

[1] Colombia, the Czech Republic, Hungary, Korea, New Zealand, the Philippines, Poland and Turkey.

This raises the question whether the choice of broader central bank mandates in emerging market economies is linked to their higher propensity than industrialised countries to engage in foreign exchange intervention. The link could be direct (a higher propensity for intervention could derive from the central bank's interpretation of the objectives specified in the law) or indirect (with the central bank law having been designed differently as a result of different needs).[4] There does indeed seem to be widespread agreement that emerging market economies display greater aversion to exchange rate volatility than the typical floating exchange rate developed economy, as encapsulated by the "fear of floating" idea (Calvo and Reinhart (2000)). Against this background it would not be surprising if both central bank officials and lawmakers shared a broadly common perspective about the merits of

[3] The inflation targeting frameworks adopted by many central banks typically give clear priority to a specific inflation target or target band but they are normally not mentioned explicitly in central bank laws.

[4] Differences in the precise wording of the central bank's primary objective need not be a question of semantics. For example, in his statement to the Commission of Inquiry into the Rapid Depreciation of the Exchange Rate of the Rand and Related Matters (Myburgh Commission), the Governor of the South African Reserve Bank (SARB) discussed how the objective in the SARB Act and in the Interim Constitution of 1993 ("to protect the internal and external value of the currency …") changed in the Constitution of 1996 ("to protect the value of the currency"), thus placing "greater emphasis or focus upon the Bank's role in striving for domestic price stability" (Mboweni (2002), p 3).

attempting to limit exchange rate fluctuations, and the trade-off with other policy objectives that might be involved. Hence lack of specificity in the law about the place of exchange rate objectives, and decision-making powers related thereto, might not be as large a source of potential confusion and conflict as would be the case in other circumstances.

There is great diversity regarding who has the power to choose the exchange rate *regime*. In about a quarter of the economies participating in the BIS survey, this decision is to be made jointly by the government and the central bank. Among the remainder, the following options occur (ordered by declining frequency): choice by the central bank; choice by the government; choice by the government after consulting the central bank; choice by parliament or the legislature; choice by the central bank subject to the agreement of the government; as well as several other variations. This diversity is notable and provides substance to the questions raised earlier concerning the extent of a central bank's monetary policy autonomy when the exchange rate regime choice is made elsewhere.

By contrast, the right to *implement* exchange rate policy (within the confines of the chosen exchange rate regime) is held by the vast majority of the central banks in the survey (78%).[5] In Mexico, the central bank may implement exchange rate policy within guidelines set by the government and the central bank;[6] in India, Korea and New Zealand exchange rate policy is a joint responsibility of the government and the central bank; and in Malaysia it is the prerogative of the government, after consulting the central bank. It should be noted that in many countries where governments retain a degree of involvement in decision-making on exchange rate policy, legally independent central bank decisions can have important consequences for the exchange rate. Thus, for example, a decision by the central bank to raise interest rates in pursuit of an inflation target may lead to an exchange rate appreciation. While this may be desirable from the perspective of the central bank because it will help bring down inflation, it may not be in line with the government's preferences concerning exchange rate policy. It is in such circumstances that an overlap between governance arrangements for monetary policy and exchange rate policy becomes significant.

Turning at last to the power to decide on specific foreign exchange *interventions*, there is a high - but not complete - degree of overlap with the power to conduct exchange rate policy. Who bears the initial financial risk and who owns the foreign exchange reserves are additional factors (Annex 1 to this paper provides details on the latter). More than 90% of the central banks in the survey have the power to decide on interventions, including the Reserve Bank of New Zealand (RBNZ), where exchange rate policy is a joint responsibility of the government and the central bank.[7] In Mexico, intervention decisions are made jointly by the government and the central bank, and in Malaysia they are made by the government after consulting the central bank. Brazil, Hong Kong SAR, Korea, New Zealand, Peru and one survey participant that preferred not to be identified are the only economies in the survey where the central bank does not own the foreign exchange reserves in full or almost in full. In Brazil, they are owned by the government. In Hong Kong, they are held by the HKMA on behalf of the government, and the HKMA has the authority to decide on interventions subject to limits set by the Financial Secretary. The Bank of Korea has the power to decide on interventions using that portion of the reserves which it owns, after consulting the government; while the government has the final say on interventions using reserves it holds, after consulting the Bank. In New Zealand, some reserves are held by the Treasury and other government agencies, with informal protocols rather than clear legal authorities governing their accessibility by the central bank. Overall, however, the vast majority of central banks participating in the survey regard the powers they are given in their respective central bank laws as sufficient to allow them to conduct the intervention policy they deem appropriate.

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5 The precise meaning of the right to conduct exchange rate policy depends on the exchange rate regime chosen. For a floating exchange rate regime, this right would at least cover verbal interventions, and typically allows the central bank to conduct actual exchange rate interventions with its own reserves if it chooses to do so.

6 The guidelines are set by the Foreign Exchange Commission, which comprises three members from the ministry of finance and three members from the central bank. The ministry of finance has ultimate control since the Minister of Finance has the power to decide in case of a tie, and any official decision by the commission must have at least one vote by a member from the ministry of finance in its favour.

7 In the RBNZ's case, while the Bank has the power to intervene on its own initiative, it bears the financial risk associated with the intervention. Where the government directs the Bank to intervene, the financial risk is transferred to the government.

9 The Bank of England Act contains specific provisions concerning transparency with regard to foreign exchange interventions (see next section) but not on the decision-making process itself.

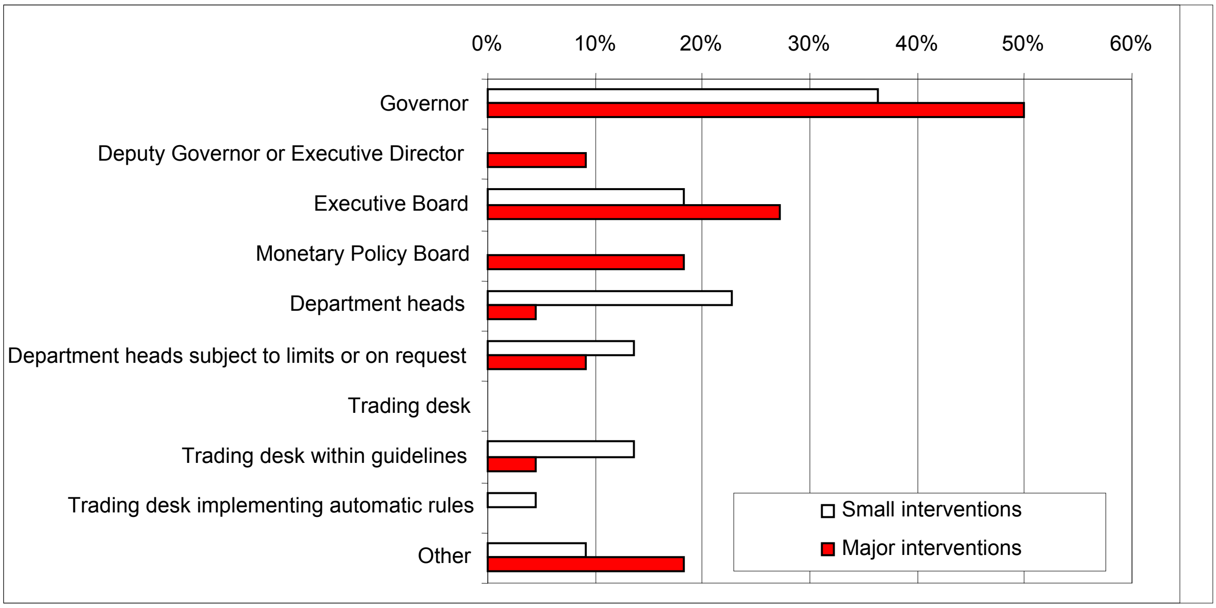
Decision-making inside the central bank

The vast majority of central bank laws do not contain specific provisions applicable exclusively to the central bank's arrangements for foreign exchange interventions or decision-making procedures for foreign exchange interventions. Instead, interventions are generally governed by the same rules as monetary policy decisions and actions, or as exchange rate policy matters if there are separate procedures for the latter (as is the case, for example, in Mexico).[9]

In practice, decisions on major interventions are usually reserved for the top decision-making authority within the central bank. Accordingly, such decisions are often the prerogative of the Board or the Governor (alone or under delegation from the Board, depending on the country and circumstances). The role of the central bank's staff is usually to provide advice, although decision-making power for small interventions is frequently delegated to the department or trading room level (Figure 1).

Figure 1

Executive authority for small and large foreign exchange interventions



A number of central bank practitioners stress the need for well developed internal decision-making procedures and guidelines on actual interventions. On the one hand, the trading desk has the most immediate access to market intelligence and typically a very good feel for the market, and delegating authority to the desk in deciding precisely where, when and how interventions are carried out can increase their effectiveness. This is especially relevant where the intervention strategy involves harnessing market dynamics to maximise impact on the exchange rate. Precise timing may be less of an issue where the objective of the intervention is, for example, to build reserves. Even then, however, most central banks have a concern to avoid adding volatility to the exchange rate, and detailed knowledge of current market dynamics can be valuable in that regard.[10] Interventions for reserve building purposes will often involve a concern to transact at financially favourable prices, which may also require detailed market knowledge to achieve (unless auction-based alternatives are used for that purpose).

In addition, the market's response to an intervention may require immediate follow-up actions (such as a second intervention) in order to get the central bank's overall message across in full. If the mandate

[10] The papers *Motives for intervention* and *Foreign exchange market intervention: methods and tactics* in this volume provide more discussion on these issues.

for the trading desk is overly narrow, the absence (or even delay) of such follow-up can obscure the message and ultimately damage the central bank's credibility.

On the other hand, if interventions are believed to make a genuine difference to the policy performance of the central bank, they need to be guided by those who are in charge of policy decisions and are held accountable for them, not least because they can be costly in terms of both money and reputation. In practice, this tends to mean that delegations to the trading desk are relatively narrow, and the head of department retains close operational oversight of any intervention. Nor is (formal or informal) delegation to the head of department usually extensive, given the policy and political sensitivity of intervention. In order to reduce the potential for delay as tactics need to be modified in line with the market's response, in most cases the central bank's senior management will make themselves available for immediate consultation.

The design of procedures and guidelines that strike the right balance between these two needs is probably not an easy task, and central banks may want to consider exchanging information in order to benefit from each other's experience. Instructions issued by the US Federal Open Market Committee (FOMC) provide an interesting example of a guideline that is in the public domain, particularly since its contents reflect the experience gained over a considerable period of time (see Annex 2 to this paper). Central banks may also wish to cooperate on exchanging information on codes of conduct and related procedures that are designed to ensure that advance knowledge of impending foreign exchange interventions is not used for illicit gains.[11]

Transparency

Approaches

There has been an enormous increase in transparency on monetary policy in the past 10-15 years, reflecting the idea that a clearly specified monetary policy objective can be achieved more efficiently if markets and the public know how the central bank reads the economic situation and what determines its policy actions.[12] This increase in transparency coincided with (but typically was not primarily caused by) public demands for governments to become more transparent. Today, for many in the financial press and elsewhere a good central bank is a transparent central bank.

Yet foreign exchange interventions by central banks are often conducted secretly, and in general this is well accepted in markets and compliant with central bank laws as well as with codes of best practice. For example, the Bank of England Act of 1998 contains stringent requirements for the Monetary Policy Committee to release information about its policy deliberations and decisions, but exempts intervention activities from these requirements.[13] And the IMF Code of Good Practices on

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[11] Details on the precise nature of information passed on via electronic communications by an administrative staff member at the Central Bank of Chile are not known, but the incident led to the resignation of the Bank's Governor in 2003.

[12] Storgaard (2002) reviews this development with an emphasis on the role played by the choice of foreign exchange rate regime.

[13] The relevant part of the Bank of England Act is: "15. -

(1) After each meeting of the Monetary Policy Committee, the Bank shall publish minutes of the meeting before the end of the period of six weeks beginning with the day of the meeting.

(2) Subsection (1) shall not apply to minutes of any proceedings relating to-

(a) a decision to intervene in financial markets, or

(b) a decision about the publication of a decision to intervene in financial markets, unless the Committee has decided that publication of the decision to intervene would not be likely, or would no longer be likely, to impede or frustrate the achievement of the intervention's purpose.

(3) Minutes of proceedings relating to-

(a) a decision to intervene in financial markets, or

(b) a decision about the publication of a decision to intervene in financial markets, shall, if not required to be published before the end of the period of six weeks beginning with the day of the meeting, be published by the Bank before the end of the period of six weeks beginning with the day on which a statement about the decision to intervene is published under section 14(5).

Transparency in Monetary and Financial Policies recognises that “there are circumstances in which it would not be appropriate for central banks to disclose their near-term monetary and exchange rate implementation tactics and provide detailed information on foreign exchange operations”. The quotation contains part of the answer to the question of why there are valid limits for transparency on foreign exchange interventions: transparency about the objective need not be synonymous with transparency on related tools and tactics. Holub (in this volume), amongst others, points to a second reason: transparency about operations in the foreign exchange market may impede their effectiveness.

The paper by Archer in this volume (*Foreign exchange market intervention: methods and tactics*) provides a discussion of the possible connections between transparency and effectiveness, and Mihaljek’s paper (*Central banks’ views on foreign exchange intervention*) draws together the perspectives of central banks. Holub (in this volume), in reviewing the Czech National Bank’s experience with various intervention tactics (including open and secret interventions), draws a conclusion that could also be a summary of these papers - namely that it is impossible to extract a mechanical rule: “Something that did work in one situation may have had little effect in another one”.

The issue of transparency in the context of this paper has more to do with accountability than tactics. A prerequisite for effective accountability is information. That is clear in terms of information about implementation strategy, without which any assessment of consistency with stated policy would be very difficult. It may also be the case that information on tools and tactics is needed in order to assess actual performance against professed strategy. Quite frequently, central banks distinguish between information on strategy and on actual interventions that is released ex ante or ex post. Presumably, the former approach is intended to support the policy objectives of the central bank while the latter is deemed important for holding the central bank to account. At this point, if not before, the potential for tensions between possible harm to policy effectiveness and likely gains in accountability arising from full transparency becomes apparent, for one thing because ex post announcements on strategy or actual interventions are bound to influence market expectations for the future. It would not be surprising then if different judgments were reached in different circumstances on the appropriate balance to be struck. And that turns out to be the case for the group of central banks responding to the BIS survey. Tables 2a and 2b summarise practices with respect to releasing information on central banks’ intervention strategies as well as on actual interventions.

To help identify potential linkages, Tables 2a and 2b include information on the size of the foreign exchange reserves central banks have available to conduct interventions, as well as on the principal motives behind interventions carried out in the past five years. The key point apparent is the absence of clear patterns linking the provision of information on interventions to size of foreign exchange reserves or motives for intervention. On the one hand, this means that the question whether (and if so, when) to publish information on intervention strategy and on actual interventions demands a detailed analysis (and perhaps some trial and error) because central bank practices vary so widely. On the other hand, the absence of a clear pattern of practices means that on this issue, central banks may have considerable room for choosing the communications approach they find works best in their circumstances.[14]

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(4) Minutes published under this section shall record, in relation to any decision of the Committee, the voting preference of the members who took part in the vote on the decision.

(5) Publication under this section shall be in such manner as the Bank thinks fit”.

[14] This is in contrast to, for example, communications on monetary policy, where central banks can be under strong pressure from market watchers or the financial press to adopt one particular model that these observers feel is clearly superior over others.

Table 2a

Publication of information on intervention and level of foreign exchange reserves

Information on …	When	Level of foreign exchange reserves[1]					
		In absolute terms[2]			In relative terms[3]		
		Low	High	Total	Low	High	Total
Strategy	Regularly	AR, CZ, HU, IL	HK, IN, TR	*7*	CZ, HK, HU, TR	AR, IL, IN	*7*
	If changed	CL, CO, NZ, ZA	BR, MX	*6*	MX, NZ, ZA	BR, CL, CO	*6*
	Either or both	*8*	*5*	***13***	*7*	*6*	***13***
	No	PE, PH, VE	KR, ID MY, PL, SG, TH		PH, PL, MY, TH	KR, ID, PE, SG, VE	
	No	*3*	*6*	***9***	*4*	*5*	***9***
Intervention	Same day	AR, CO, PE	BR, MX	*5*	MX	AR, BR, CO, PE	*5*
	Regularly	CL, CZ, IL, ZA	HK	*5*	CZ, HK, ZA	CL, IL	*5*
	Either or both	*7*	*3*	***10***	*4*	*6*	***10***
	No guidelines/ mixed	NZ, PH		*2*	NZ, PH, PL, TR		*4*
	No	HU, VE	ID, IN, KR, MY, PL, SG, TH, TR	*10*	HU, MY, TH	ID, IN, KR, SG, VE	*8*
	No, no guidelines/ mixed	*4*	*8*	***12***	*7*	*5*	***12***
On strategy *and* on actual intervention		AR, CL, CZ, IL, ZA	BR, HK, MX		CZ, HK, MX, ZA	AR, BR, CL, CO, IL	
		5	*3*	***8***	*4*	*5*	***9***
On strategy *or* on actual intervention		CO, HU, NZ, PE	IN, TR		HU, NZ, TR	IN, PE	
		4	*2*	***6***	*3*	*2*	***5***
Neither on strategy *nor* on actual intervention		PH, VE	ID, KR, MY, PL, SG, TH		PH, PL, MY, TH	KR, ID, SG, VE	
		2	*6*	***8***	*4*	*4*	***8***

[1] The classification into “Low” and “High” was done by splitting the sample into two groups of the same size. [2] Classified according to the absolute size of the foreign exchange reserves at end-2003 in US dollar terms. [3] Classified according to the size of the foreign exchange reserves relative to imports at end-2003.

Source: Central bank responses to the BIS survey.

Table 2b

Publication of information on intervention and motives for intervention

Information on …	When	Motives for intervention[1]					No inter-ventions
		Level	Volatility	Moder-ation	Extreme events	Other	
Strategy	Regularly	CZ, HU, tr	ar, cz, IN, TR	CZ, hu	ar, CZ, hu	AR, HK	IL
	If changed	CL	br, CL, CO	CL	br, CL, mx	BR, CO, MX, ZA	NZ
	Either or both	*4*	*7*	*3*	*6*	*6*	**2**
	No	ID, kr, MY, SG, VE	ID, MY, PE, PH, SG, TH, VE	KR, PE, SG, VE	ID, MY, PH, VE	kr, MY, SG	PL
	No	*5*	*7*	**4**	*4*	*3*	1
Intervention	Same day		ar, br, CO, PE	PE	ar, br, mx	AR, BR, CO, MX	
	Regularly	CL, CZ	CL, cz	CL, CZ	CL, CZ	HK, ZA	IL
	Either or both	*2*	*6*	3	*5*	*6*	1
	No guidelines/ mixed		PH		PH		NZ
	No	HU, ID, kr, MY, tr, SG, VE	ID, IN, MY, SG, TH, TR, VE	hu, KR, SG, VE	hu, ID, MY, VE	kr, MY,SG	PL
	No, no guidelines/ mixed	*7*	*8*	4	*5*	*3*	2
On strategy *and* on actual intervention		CL, CZ	ar, br, CL, CO, cz	CL, CZ	ar, br, CL, CZ, mx	AR, BR, CO, HK, MX, ZA	IL
		2	*5*	2	*5*	*6*	1
On strategy *or* on actual intervention		HU, tr	IN, PE, TR	hu, PE	hu		NZ
		2	*3*	*2*	*1*	*0*	1
Neither on strategy *nor* on actual intervention		ID, kr, MY, SG, VE	ID, MY, PH, SG, TH, VE	KR, SG, VE	ID, MY, PH, VE	kr, MY, SG	PL
		5	*6*	3	*4*	*3*	1

[1] The columns represent the five choices offered in the BIS survey. Country codes in upper case mean that the motive applied in at least half of the years (in the period 2000-04) in which interventions were carried out; country codes are shown in lower case if the motive played a role less often.

Source: Central bank responses to the BIS survey.

A closer look, however, reveals three traces of a possible pattern in Tables 2a and 2b may still be worth discussing:

- The majority of central banks provide information on intervention strategy; a smaller number provide information on actual interventions (and the number of institutions doing so tends to decline with the timeliness of the information).[15]
- More information on actual interventions tends to be released if the objective is to affect the volatility rather than the level of the exchange rate.
- There may be an inverse relationship between absolute size of foreign exchange reserves and the amount of information released on interventions. Why this would be the case is difficult to say.

Selected detailed aspects

At least seven types of information concerning interventions may be distinguished:

1. Information on intervention strategy (eg in a periodic policy statement or an ad hoc announcement).
2. Open mouth interventions - here, the information is the intervention.
3. Real-time or near real-time information on actual interventions (eg newswire release, authorisation of counterparties to reveal information about the intervention).
4. Reports on actual interventions when they still may have a bearing on the market's perception of central bank behaviour (eg a monthly report).
5. Information for the record (eg in the annual reports of the central bank).
6. Historical information (eg the release of intervention data or transcripts of policy meetings with a lag of a number of years).
7. Information released in response to incorrect information circulating in markets (are false rumours ignored or refuted?).

The length of this list (which is probably not exhaustive) illustrates the usefulness of giving thought to a detailed communications strategy. Compared to the central bank's overall strategy for policy communications, this strategy may need to define different sets of responsibilities depending on the degree of transparency chosen for a particular action, to consider in more detail the approaches that can be taken in emergency circumstances, and to be particularly mindful of maintaining a level playing field for all outside the central bank for whom the information may be of value.

Concerning the technical issue of providing (or not providing) information to markets at the time of intervention actions, central banks have devised the following approaches:

No information. The Bank of Korea intervenes through agents selected among major banks, and imposes a confidentiality requirement on them to maintain secrecy concerning the intervention (Rhee (2004)).

Qualitative information. For the special case of a foreign exchange intervention, once the Bank of Canada has actually dealt through a broker, that broker may confirm to others that the Bank has dealt, provided the exact amount and price level are not revealed. The disclosure of any other information, in any other circumstance, is a breach of confidentiality.[16]

A contingent approach. In the United States, the Foreign Exchange Desk at the Federal Reserve Bank of New York has two options between which it can select, depending on the circumstances. If it feels that it is useful for information on the Fed's intervention to spread in markets, it can operate directly in the *interbank market*, allowing the bank that is counterparty to its trade to deal with the information as desired. News of such trades normally spreads quickly in the market, even though there is also some false information where a rumour of an intervention spreads without any intervention having taken

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[15] It is easy to speculate why this may be so - for instance, central banks may fear a loss of credibility and effectiveness if the extent of interventions (successful and unsuccessful) becomes known in detail, or they may be concerned that market participants may be able to extract their intervention rules from detailed data. Ultimately this is a question of tactics, and thus a matter for the paper by Archer in this volume.

[16] See "Letter on Confidentiality" (www.fmac.ca/Profess/confidentiality.html).

place. If the Desk does not want its intervention to become known it asks a commercial bank to place bids or offers in the *brokers market*, and the same principles of confidentiality apply as would if the action was taken on behalf of any other principal.

Immediate information to counterparties/the public. When it conducted interventions in the past, the Swiss National Bank (SNB) dealt directly with foreign and domestic commercial banks operating in several Swiss cities (Fischer (2004)). After the completion of the transaction the SNB informed the counterparty that this had been an SNB intervention, and this information would spread quickly in the market. While the SNB made no formal announcement to news agencies it would confirm (or refute) rumours if asked by a newswire service that had picked up the information in the market. In Canada, a space is now reserved on the central bank's website for announcement of interventions to the public, with the announcement being immediate.

Announcement of a window and ceiling. In Chile, the central bank announced on 16 August 2001 that spot market interventions up to a maximum of USD 2 billion could occur until 31 December, and a similar announcement was made on 10 October 2002 for the period up to 10 February 2003 (Tapia and Tokman (2004)).

Pre-announcement. In some countries (for example, Colombia, Mexico, Chile and Brazil) interventions are conducted by way of auctions. In such cases, auction parameters are announced in advance.

Another interesting aspect is information flows from markets to the central bank. For example, when choosing which major banks to use as agents in its intervention operations two of the criteria The Bank of Korea uses are the ability of a bank to provide the central bank with instant market information, and its active role as a market-maker (see the contribution by Rhee in this volume). And last but not least, well functioning information flows between the central bank and the government are important. For instance, in the Czech Republic a special account was established at the central bank in early 2000 for foreign exchange privatisation revenues received by the government which had previously been a factor in the appreciation of the Czech koruna. The management of this account proved a useful vehicle for ongoing communication between the government and the central bank on foreign exchange matters (see Holub in this volume).

Accountability

Holding the central bank to account for intervention decisions is almost certainly more complex than accountability for the conduct of monetary policy. This is because interventions are actions on the margin; their impact is often extremely difficult to quantify, especially where the policy objective explicitly or implicitly involves altering the medium-term path of the exchange rate. In addition, an in-depth assessment of intervention actions would require a close familiarity with this complex and practice-oriented subject by the review body. At the same time, the financial consequences of intervention for the central bank and government accounts tend to be more obvious. This asymmetry creates an imbalance which can be highly problematic, and has at times led to severe subsequent difficulties for some decision-makers.

Judging by the coverage of intervention strategies and actions in central banks' annual reports (which in most cases remain their flagship publications for the purpose of official reviews and accountability), a legislator reviewing a central bank's performance would typically find considerably more data and analysis for the overall conduct of monetary policy than for intervention actions. But there are also substantial differences in the approaches chosen by individual central banks. To illustrate, Table 3 gives a qualitative picture of the information on intervention strategy and intervention actions that is provided in central bank press releases, regular or ad hoc reports, and annual reports. It should be stressed that this table is based on a broad comparison of central banks' reports, and seeks to demonstrate similarities and differences in approach, without implying any rank ordering among them.

At times, central banks and ministries of finance are challenged in the political sphere for their intervention actions. To name just two examples, Saxton (1999) demands a substantially more transparent US dollar policy, arguing in part that this is necessary to comply with the Government Performance and Results Act. And in Korea, there have been strong demands in the legislature for the ministry of finance to provide more information on its interventions. In addition, there are cases where central banks have been asked to justify why they chose not to intervene in exchange markets. A well known example is the SARB's defence before the Myburgh Commission of not having intervened to stem the decline in the rand in the second half of 2001 (Cross (2002)).

Table 3

**Information on intervention strategy,
actual interventions and in annual reports**

(Fuller circles signify more detailed information)

Central bank of	Information on intervention strategy	Information on actual interventions	Coverage of foreign exchange intervention in annual reports	Average
Brazil	◒	◒	◒	◒
Chile	◒	◒	◒	◒
Czech Republic	●	◒	●	●
Hungary	●	○	●	◒
India	●	○	○	◔
Indonesia	○	○	○	○
Korea	○	○	◒	○
Mexico	◒	●	◒	◒
Peru	○	●	●	◒
Singapore	○	○	○	○
Turkey	●	○	●	◒

Resources and accounting

Closely linked to the question of accountability is the financial impact of intervention on the central bank, the government and, ultimately, the taxpayer. Friedman's (1953) argument that successful (stabilising) intervention should be profitable has been disputed by several authors (eg Neely (2000)), and it cannot be claimed that foreign exchange interventions need to be profitable in order to be welfare-enhancing (Murray et al (1990)). Achieving profits is not a primary objective for central banks, and net gains or losses from intervention operations should therefore not be a principal concern of policy, it is argued. Nonetheless, legislators and the general public tend to treat large official sector losses as prima facie evidence of failure. Moreover, given the difficulty in measuring the benefits of intervention, the defence that higher public policy goals have primacy is difficult to support with concrete evidence. Not surprisingly, therefore, Neely (2000) reports that although in a formal survey no central bank said that profitability was a consideration when intervention decisions were made, in conversation several central bankers said that the profitability of interventions was considered when assessing the central bank's stewardship of public resources.

All central banks participating in the BIS survey bear the initial costs of their foreign exchange interventions since they are carried out with foreign exchange reserves that are owned by the central bank or at least are on its balance sheet. Even so, ultimately the financial costs (or profits) from interventions are typically borne by the government and the public at large. They will eventually be reflected in the net surplus that the central bank transfers to the government, after deducting its operating costs and building reserves, as provided in the central bank law or in agreements between the central bank and the government. In Brazil, the foreign exchange reserves are owned by the government, and the government needs to compensate the central bank for related losses (but also receives all related profits).

As long as it does not create perverse incentives, the accounting approach that is used for the foreign exchange reserves (and thus for interventions) does not matter in the long term. However, the implications of choosing a particular type of valuation and recognition approach can be substantial on a quarterly or annual basis, and it is important that the choice of approach be consistent with the rule governing the transfer of surpluses from the central bank to government (or the sharing of losses).[17]

Table 4 provides a stylised summary of the accounting policies followed by survey participants for their foreign exchange reserves.[18] In all cases for which the information is available, fair value accounting is used, but there are significant differences in the way income is recognised. The most frequent approach is to build up a revaluation account from unrealised gains and losses which are thus reflected in the central bank's balance sheet but not in its statement of profits and losses.

Table 4

Accounting approaches for foreign exchange reserves

Central bank of	Exchange rate revaluation			Income recognition of exchange revaluation gains and losses		Balance sheet exchange revaluation account (bypassing P&L)	
	Historical cost	Lower of cost or market value	Fair value	Asymmetric (P&L reflects unrealised losses)	Symmetric (P&L reflects both unrealised gains and losses)	Reflects only unrealised gains	Reflects both unrealised gains and losses
Chile			●		●		
Czech Republic			●[1]		●		
Hong Kong SAR			●		●		
Hungary			●				●
India			●[2]				●
Israel			●[1]	●		●	
Korea			●				●
Malaysia			●[3]				●
Mexico			●[3]				●
Peru			●				●
Philippines			●				●
Poland			●[3]				●
South Africa			●				●
Turkey			●				●

[1] As of every month-end. [2] As of every week-end and month-end. [3] Daily.

[17] The report of the Study Group on Central Bank Capital (2005) contains a detailed discussion of this issue.

[18] The table and the associated classification were prepared by Christine Padua.

Coordination with government on debt management

Foreign exchange intervention can be defined as any operation that has the effect of altering the net foreign exchange position of the public sector - not just the central bank.[19] Thus, there is an indirect link between intervention policy and foreign currency debt management when debt management decisions involve changing the currency composition of the government's debt portfolio and/or the currency exposure of the government's debt service obligations. In some countries that link can even be quite direct. In Brazil, for example, changes in the currency denomination of new debt issues have been implemented in a manner akin to an intervention tool to reduce the extent of exchange rate depreciation in crisis circumstances (in part by providing an onshore hedging instrument for the private sector). The index-linking of debt to foreign currencies has also been used in a similar manner, for example in Chile and Peru.

In the majority of cases in the survey, the governance arrangements accommodating this link (as well as information sharing on debt management more generally) involve a coordination mechanism between the central bank and the public sector entity responsible for debt management. Specifically, in 74% of the cases, government debt is managed by the ministry of finance, and the remainder is split about evenly between debt management by a debt management agency or by the central bank. In 76% of the cases, there is a coordination mechanism for debt management. (Table 5 provides examples.)

Table 5

Examples of coordination mechanisms between the central bank and the government in the area of debt management

Brazil	The central bank and the ministry of finance determine and announce each year the volume of bonds to be issued. On the operational side, the central bank acts on behalf of the Treasury and carries out debt issuance transactions in the external market following the decisions taken in a coordination committee named Codex, which holds monthly meetings between the central bank and the Treasury on external debt matters.
Hong Kong SAR	The HKMA is an independent organisation with responsibility over monetary policy including the management of foreign exchange reserves, while the management of the HKSAR government's fiscal position, including the foreign currency debt, is the responsibility of the Financial Services and the Treasury Bureau. Both institutions are under the oversight of the Financial Secretary, who has overall responsibility for financial and economic policy formulation and implementation.
Hungary	• The central bank provides a formal opinion on the annual borrowing plan of the debt management office, especially concerning the ratio of foreign currency borrowing. • The central bank is represented on the board of the debt management office. • A contract between the central bank and the debt management office sets out the detailed division of tasks in the area of foreign currency debt management. In case of extraordinary market circumstances, the debt management office borrows on the request of the central bank to fill up reserves.
India	The government has constituted a liability management group which includes a representative from the central bank. The key objective of this group is to ensure better management of external liabilities, including prepayment of high-cost debts of the government.

[19] Intervention via the expectations channel, using "open mouth operations", is left aside.

Table 5 (cont)

Examples of coordination mechanisms between the central bank and the government in the area of debt management

Malaysia	Regular meetings are conducted between institutions to discuss operational and strategic issues such as the cash flow position and projections. In addition, ad hoc meetings to discuss issues such as refinancing and bond issuance are held.
Mexico	The central bank acts as financial agent for the government and in this capacity manages some of the government's foreign assets (which are not included in the official definition of international reserves) and carries out foreign debt service on behalf of the government (operational issues only).
Philippines	• Membership of a government representative on the Monetary Board and membership/presence of central bank representatives in inter-agency groups or committees that are directly or indirectly responsible for managing the government's foreign currency borrowings. • Submission to the central bank by the national government and by government-owned and/or -controlled corporations, including government financial institutions, of their annual borrowing plans. • Close monitoring by the central bank of foreign exchange requirements of the public and private sectors, eg for servicing foreign currency obligations and proceeds from new loans. • Comprehensive monitoring of the country's external debt and profile (ie maturity, currency, composition, etc) vis-à-vis foreign exchange reserves.
South Africa	Separate committees with joint representation coordinate and execute the policy of the national treasury and the central bank.
Thailand	Foreign currency debt is administered by the National Debt Committee, which is chaired by the Minister of Finance. The Governor of the Bank of Thailand is a member.

In Chile and Israel there is no coordination between the central bank and the institution managing the foreign currency debt, but the central bank considers the currency composition of foreign currency debt (over a one-year horizon in Chile and a five-year horizon in Israel) explicitly when determining the currency composition of the foreign exchange reserves.

Conclusion

Governance is an important and topical aspect of institution building. Concerning foreign exchange intervention, three governance issues may be highlighted. The broadest is the allocation of powers for monetary policy and for exchange rate policy. The more narrow is decision-making on interventions at the operational level. And the third concerns transparency and accountability for the exercise of independent authority.

On the broad issue, close links between monetary policy and the exchange rate mean that policy interests in each area cannot be treated separately. Even so, it is quite common for central bank laws to obscure who has the power over exchange rate policy. At the operational level, governance arrangements for interventions are also more opaque than for monetary policy. This is notable, since interventions are often carried out in secret, and might thus need tighter governance arrangements than otherwise. Well-considered procedures are also necessary to make the best use of public funds once the decision to intervene has been taken in principle. The trading desk is best placed to assess the most effective timing and tactics, yet the many nuances of policy decision-making in this area limit the ability of those in charge of policy (Governor or Board) to delegate decision authority.

Turning to transparency and accountability, the paradigm today is that a good central bank is a transparent central bank. Foreign exchange interventions are a remarkable exception, reflecting the concern that too much transparency on interventions may impede their effectiveness. Related views and practices among central banks differ widely, but there is a shared concern to make a sufficient amount of information available at least ex post in order to facilitate the central bank being held to account for its intervention actions.

Annex 1:
Selected information on foreign exchange reserves and interventions

Central bank of	Size of foreign exchange reserves (FXR)			Ownership of FXR	Decision-making power for interventions[2]	Intervention strategy published	Information on actual interventions is published			
	USD bn (mid-2004)	Months of imports	[1]	%		Regularly, in case of major Changes, or No	Yes or No	Daily or same-day[3]	Weekly or Bi-weekly	Monthly
Flexible exchange rate arrangements										
India	114	19	●	100	CB	R	N			
Indonesia	33	12	●	?	CB	N	N			
Korea	166	11	●	80	Mixed[3]	N	N			
Philippines	13	4	○	100	CB	N	Some[4]			
Singapore	101	10	●	100	CB	N	N			
Thailand	42	7	●	98	CB	N	N			
Argentina	16	14	R	100	CB	R	Y	Y	Y	Y
Brazil	50	12	●	0	CB	C	Y	Y		
Chile	15	10	R	100	CB	C	Y		B	
Colombia	11	9	R	100	CB	C	Y	Y		
Mexico	59	4	A	100	CB and G jointly	C	Y	Y		
Peru	10	15	R	51	CB	N	Y	Y		
Czech Republic	26	6	○	100	CB	R	Y	E[5]		Y[6]
Hungary	12	3	○	100	CB	R	N[7]			
Poland	36	7	A	100	CB	N	N			
Israel	26	9	R	100	CB	R	Y			Y
New Zealand	3	2	○	100	CB	C	[8]			
South Africa	9	3	○	100	CB	C	Y			Y
Turkey	34	6	A	100	CB	R	N			
Fixed exchange rate or very narrow band										
Hong Kong SAR	121	6	A	0	CB	R	Y			Y
Malaysia	53	8	A	100	G after consulting CB	N	N			
Venezuela	18	25	R	97	CB	N	N			

[1] This field combines the entries in the two numeric fields on foreign exchange reserves. ● = high reserves both in absolute terms and relative to imports; A = high reserves only in absolute terms; R = high reserves only relative to imports; and ○ = a low level of reserves both in absolute terms and relative to imports. (See footnote for Tables 2a and 2b for details.) [2] CB = central bank; G = government. [3] For reserves owned by The Bank of Korea, central bank after consulting government; for reserves owned by the government, government after consulting central bank. [4] The volume of the central bank's outstanding non-deliverable forward transactions is published on its website with a one-month lag from the reference period. Data on other forms of intervention are not published. [5] E = exceptionally. [6] Minutes of the meeting; *Inflation Report*; the central bank's website. [7] One exception was the announcement of the foreign exchange auctions in the aftermath of the January 2003 attack on the strong end of the band. [8] No guidelines established on this point.

Annex 2:
Authorization for foreign currency operations, foreign currency directive and related procedural instructions by the US Federal Open Market Committee[20]

"By unanimous vote, the Authorization for Foreign Currency Operations was reaffirmed in the form shown below.

AUTHORIZATION FOR FOREIGN CURRENCY OPERATIONS

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

Canadian dollars
Danish kroner
Euro
Pounds sterling
Japanese yen
Mexican pesos
Norwegian kroner
Swedish kronor
Swiss francs

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding $25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

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[20] The latest version was adopted at and published in the minutes of the January 2004 meeting of the FOMC, and is excerpted here. Source: http://www.federalreserve.gov/FOMC/minutes/20040128.htm. Section headings are not shown in bold in the original.

Foreign bank	*Amount of arrangement (millions of dollars equivalent)*
Bank of Canada	*2,000*
Bank of Mexico	*3,000*

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

3. All transactions in foreign currencies undertaken under paragraph 1.A. above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). When appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, his alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to his responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.

By unanimous vote, the Foreign Currency Directive was reaffirmed in the form shown below.

FOREIGN CURRENCY DIRECTIVE

1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.

2. To achieve this end the System shall:

A. Undertake spot and forward purchases and sales of foreign exchange.

B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.

C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

A. To adjust System balances in light of probable future needs for currencies.

B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.

C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

A. In close and continuous consultation and cooperation with the United States Treasury;

B. In cooperation, as appropriate, with foreign monetary authorities; and

C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

By unanimous vote, the Procedural Instructions with Respect to Foreign Currency Operations were reaffirmed in the form shown below.

PROCEDURAL INSTRUCTIONS WITH RESPECT TO FOREIGN CURRENCY OPERATIONS

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee. All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $300 million on any day or $600 million since the most recent regular meeting of the Committee.

B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding $150 million, or $300 million when the operation is associated with repayment of swap drawings.

C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.

D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $1.5 billion since the most recent regular meeting of the Committee.

B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character."

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