INTERNATIONAL MONETARY FUND

Charges and Maturities—Proposals for Reform

Prepared by the Strategy, Policy, and Review and Finance Departments

In consultation with Legal and other departments

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December 12, 2008

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EXECUTIVE SUMMARY

- ***Scope***. This paper focuses on two key features of the financial terms and maturities of high access to the Fund's General Resources Account (GRA): surcharges and time-based repurchase expectations. Surcharges, which together with the adjusted rate of charge determine the cost of high access to Fund credit, currently vary across facilities and are linked to either the level of access or the duration of lending. The policy on repurchase expectations is an administrative mechanism that encourages accelerated repayment terms, effectively shortening loan maturities. Both policies on surcharges and repurchase expectations were introduced to mitigate credit risks and safeguard the revolving nature of Fund resources.

- ***Experience***. A review of recent experience suggests that, all things considered, these policies have helped meet their stated objectives: surcharges have allowed a considerable build up of precautionary balances and, together with repurchase expectations, have contributed to early repayments—although, in some cases, factors such as the stigma of borrowing from the Fund have also been at play. The policies on surcharges and repurchase expectations are, however, very complex and difficult to understand, including because they vary across lending instruments.

- ***Context***. A reform of these policies is long overdue—Directors called for comprehensive changes at the last review of charges and maturities in 2005 (*2005 Review*) and asked staff to make proposals for aligning surcharges across facilities and abolish the time-based repurchase expectations policy. They also asked staff to assess the usefulness of the Supplemental Reserve Facility (SRF) going forward. Since the *2005 Review*, the global financial landscape has changed dramatically, with demand for Fund resources dropping to historic lows, before resurging in recent months. The proposed modifications to the financial terms of high access lending by the Fund reflect these developments and are informed by the new income model and by the ongoing work on the role and adequacy of precautionary balances and access limits.

- ***Reform aims***. This paper proposes a reform of surcharges aimed at simplifying the cost structure of high-access Fund lending and reducing the sources of misalignment of lending terms across facilities. It also proposes to replace the time-based repurchase expectations policy—a move that would lengthen loan maturities—with a price incentive (a time-based surcharge) to discourage prolonged use of Fund resources.

- ***Reform proposal***. Specifically, for lending in the credit tranches and under the Short-term Liquidity Facility (SLF), staff propose to remove the existing 100 basis point surcharge for access between 200 and 300 percent of quota. Credit outstanding above 300 percent of quota would continue to be subject to a surcharge of 200 basis points.

An additional time-based surcharge of 100 basis points would be applied when credit outstanding remains above 300 percent of quota for more than three years.

Proposed Reform of Surcharges

Figure A. Current Surcharge Schedule
(in basis points)

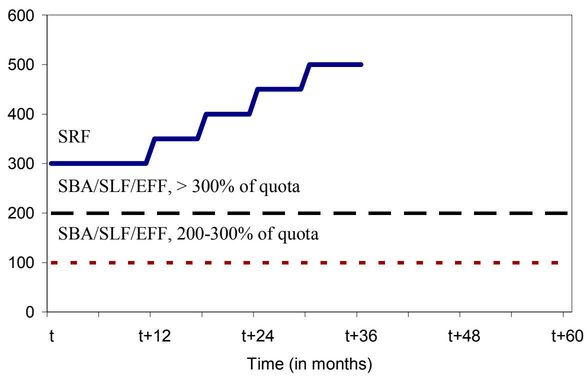
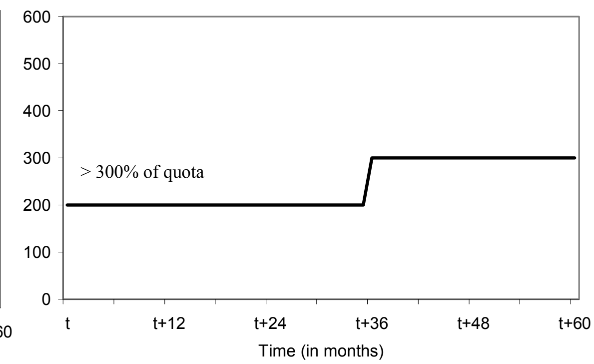


Figure B. Proposed New Surcharge Schedule
(in basis points)



- ***Cost of borrowing***. While the removal of the existing level-based surcharge at 200 percent of quota would tend to lower the cost of borrowing Fund resources, the introduction of a time-based surcharge would have the opposite effect (under the same repayment schedule). Staff simulations suggest that, for typical arrangements in the credit tranches, the proposed surcharge system would tend to lower borrowing costs when access is below 800 percent of quota.

- ***Implications for GRA facilities***. Full alignment of the proposed surcharge schedule across all GRA facilities would make the SLF and the SRF much less expensive than at present (including because the time-based surcharge would never apply due to the short maturity of these instruments), and the Extended Fund Facility (EFF) more expensive for access levels well above 300 percent of quota. Alternatively, if the current surcharge structure for these facilities were to be maintained, demand for the SRF would likely remain low due to its very high cost and the EFF would lack a time-based incentive for early repayment.

- ***Future of the SRF and the EFF***. Given that the SRF has not been seen as a useful instrument for members in recent years, including because of the lower frequency of the type of "V-shaped" crises that this instrument was originally envisaged to address, staff propose its elimination. As for the EFF, its rare use in recent years suggests that it may also be eliminated, or at least not used as a vehicle to provide high access to members with balance of payments difficulties.

I. PURPOSE AND SCOPE[1]

1. **This paper is part of the ongoing review of the Fund's financing role, and addresses issues related to the terms of *high access* to the Fund's GRA**.[2] The cost of high-access Fund credit has two main components: (i) the basic rate of charge (adjusted for burden sharing); and (ii) surcharges. The first component applies to all Fund credit from the GRA regardless of the level of access and will not be addressed in this paper.[3] The paper focuses instead on the second component, the surcharges, which currently apply to (i) *high access* purchases in the credit tranches, and under the EFF and the SLF, and (ii) purchases under the SRF. The paper also covers the related policy on time-based repurchase expectations (TBRE)—an administrative mechanism to shorten the maturity of lending by encouraging early repayments. Both surcharges and the TBRE policy were introduced with the objective of increasing the Fund's capacity to safeguard the revolving nature of its resources and mitigate credit risks.

2. **The conclusions of the *2005 Review* inform this paper**.[4] At that time, Directors asked staff to make proposals for aligning surcharges across facilities in the GRA, abolishing the TBRE policy, and assessing whether the SRF is still useful. This paper, which is related to the ongoing work on the Fund's precautionary balances, is also informed by the new income model principles and developments in members' use of GRA resources subject to surcharges since the *2005 Review.*[5]

3. **The paper proposes a new system of surcharges and the abolishment of the TBRE policy**. It also assesses the scope for aligning surcharges across existing GRA facilities and, in doing so, it touches on the usefulness of the SRF and the EFF and whether they should be eliminated. The rest of the paper is organized as follows: Section II provides background on the policies on surcharges and TBRE; Section III discusses developments in Fund lending since the *2005 Review* that have a bearing on the surcharges and the TBRE policies; Section IV proposes a new system of surcharges; and Section V examines the implications of the proposed system and of abolishing of the TBRE policy on the evolution of

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[1] Paper prepared by a staff team consisting of Messrs. Savastano, Rossi, Perrelli, and Lam (all FIN); and Messrs. Giorgianni and Arvanitis, and Mmes. Gust and Barkbu (all SPR).

[2] For the purpose of this paper, access is defined to be "high" if it exceeds the thresholds that trigger surcharges. These thresholds are different from the normal access limits that trigger "exceptional" access.

[3] In 2008, the Board broadly supported a new framework for setting the basic rate of charge and agreed on an initial margin over the SDR rate of 100 basis points, see *IMF Executive Board Reviews Fund's Income Position and Sets Lending Rate for FY2009*, July 3, 2008.

[4] See *IMF Executive Board Has Preliminary Discussion on Charges and Maturities*, August 1, 2005.

[5] See *IMF Board Reviews the Fund's Financing Role*, October 9, 2008.

precautionary balances and on the alignment of surcharges across GRA facilities. Section VI presents issues for discussion.

II. THE CURRENT SYSTEM OF SURCHARGES AND THE TBRE POLICY

A. Surcharges

4. **Surcharges were introduced in three separate instances (in 1997 for the SRF, in 2000 for the credit tranches and the EFF, and in 2008 for the SLF) to increase the Fund's capacity to safeguard the revolving nature of its resources and mitigate credit risk**. To this end, they provide price incentives to help moderate large and/or prolonged use of Fund resources by members, and encourage them to repay the Fund as soon as their external financing conditions start to normalize. In addition, surcharges help mitigate credit risk by generating income to build the Fund's precautionary balances.

5. **The current system of surcharges contains both time- and level-based elements**.

- ***Time-based surcharges*** apply to all purchases under the SRF, which was introduced in 1997 to help members overcome "V-shaped" capital account crises entailing very large, short-term financing needs that reverse quickly. Its time-based surcharges aim to progressively reduce the gap between the cost of borrowing from the Fund and from international capital markets, thus providing incentives for quick repurchases.

- ***Level-based surcharges*** apply to high levels of access in the credit tranches, and under the EFF and the SLF.[6] Surcharges for purchases in the credit tranches and under the EFF were introduced in the context of the *2000 Review of Fund Facilities* mainly to discourage large use of Fund resources and help build precautionary balances.[7] In October 2008, the same level-based surcharges were introduced for the SLF.

6. **As noted at the *2005 Review*, the co-existence of two separate (i.e., level-based and time-based) surcharges has resulted in a cumbersome structure that has been a source of confusion for members** (Table 1).

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[6] Purchases under the Compensatory Financing Facility (CFF) and the special policy on emergency assistance are, and are proposed to remain, exempt from surcharges for the reasons given at the conclusion of the *2000 Review of Fund Facilities*. See *IMF Board Completes Review of Fund Financial Facilities*, November 30, 2000

[7] A summary of the decisions concerning surcharges and the TBRE policy during the *2000 Review of Facilities* can be found at http://www.imf.org/external/np/pdr/fac/2000/02/decis.htm.

Table 1. Current System of Surcharges

	Credit tranches, EFF, and SLF	SRF
Model	Level based	Time based
Description	Surcharge is 100 bps for credit over 200 percent of quota, and 200 bps for credit over 300 percent of quota.	Surcharge is 300 bps during the first year from the date of the first purchase, rising by 50 bps at the end of the first year, and every six months thereafter, up to maximum of 500 bps.
Access thresholds (In percent of quota) 1/	200 and 300	None
Base	Outstanding credit 2/	Outstanding SRF credit
Number of tiers/steps	2	5
Surcharges (In basis points)		
First tier, credit outstanding between 200 and 300% of quota	100	
Second tier, credit outstanding above 300% of quota	200	
First step, during 1st year from date of 1st purchase		300
Second step, 12 months from date of 1st purchase		350
Third step, 18 months from date of 1st purchase		400
Fourth step, 24 months from date of 1st purchase		450
Fifth step, 30 months from date of 1st purchase		500

Source: Finance Department, IMF.

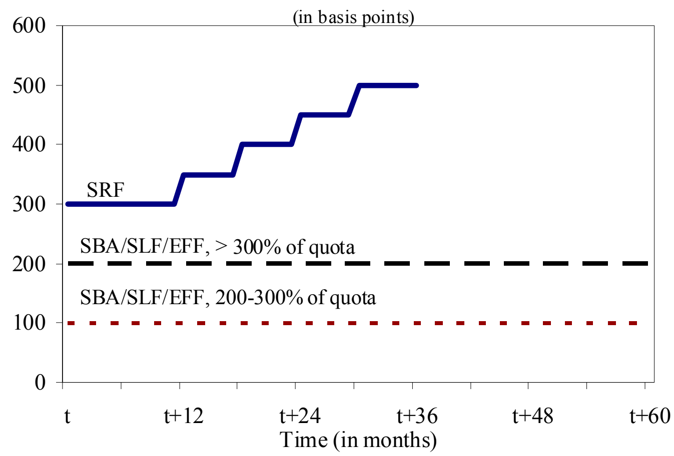
1/ Access limits under the credit tranches and the EFF are 100 percent (annual) and 300 percent (cumulative) of quota. Arrangements under the SRF can only be approved with a high access SBA or arrangement under the EFF.

2/ For credit tranches and EFF the base is total GRA credit outstanding; for SLF the base is solely SLF credit outstanding.

- **First, the base and the thresholds for the application of surcharges are different**.
    - For the credit tranches and the EFF, the base for surcharges is the member's total outstanding credit in the credit tranches and under the EFF, and surcharges start to apply after such outstanding credit exceeds 200 percent of the member's quota.
    - For the SLF, the base for surcharges is the member's outstanding credit as a result of purchases under the SLF, and surcharges start to apply on the balance of such outstanding credit above 200 percent of the member's quota.
    - For the SRF, surcharges depend on the time lapsed since the first SRF purchase, and the base for surcharges is solely the SRF credit outstanding.[8]
- **Second, the size of surcharges and the number of tiers or steps vary across facilities**. High access in the credit tranches and under the EFF and the SLF is subject to two tiers of (level-based) surcharges, while SRF purchases are subject to five (time-based) surcharge steps (Figure 1).

[8] Financing under the SRF is made available to members under a Stand-By Arrangement (SBA) or an EFF. Since access in the credit tranches is available for all types of balance of payments problems, members have the right to make full use of access in the credit tranches before using SRF credit.

Figure 1. Current System of Surcharges



B. The TBRE Policy

7. **The TBRE policy was introduced along with surcharges as an additional tool to encourage early repayment.**[9] Under the TBRE policy, members (including those under high-access arrangements) are expected to adhere to the repurchase expectations schedule, which is shorter than the repurchase obligations schedule, and may request an extension of repurchases to the obligations schedule at any time. The TBRE policy for purchases under the SRF is slightly more stringent than that applicable to purchases in the credit tranches and under the EFF (Table 2). For arrangements in the credit tranches and under the EFF, the Board may grant a request to extend repurchases from the expectations to the obligations schedule if it considers that the member's external position is not sufficiently strong for it to repay early without undue hardship or risk; in the case of the SRF, the member also has to be taking actions to strengthen its balance of payments.

8. **The TBRE policy was introduced mainly because the Fund's general policy on early repurchases had not been effective**. The Articles provide for an early repurchase

Table 2. Time-based Repurchase Expectations

	Credit tranches	EFF	SRF	SLF
Repayment period (in years)				
Expectations basis	2 1/4 - 4	4 1/2 - 7	2 - 2 1/2	n.a.
Obligation basis 1/ 2/	3 1/4 - 5	4 1/2 - 10	2 1/2 - 3	3, 6, or 9 months
Installments				
Expectations basis	8 quarterly	6 semi-annual	2 semi-annual	n.a.
Obligation basis 1/ 2/	8 quarterly	12 semi-annual	2 semi-annual	1 (full repurchase)

1/ For the credit tranches and the EFF, a member whose external position has not improved sufficiently to meet the expectations schedule without undue hardship or risk can request an extension to the obligation schedule.
2/ For the SRF, extensions can only be provided if: (i) the member is unable to meet the repurchase expectations without undue hardship; and (ii) the member is taking actions to strengthen its balance of payments.

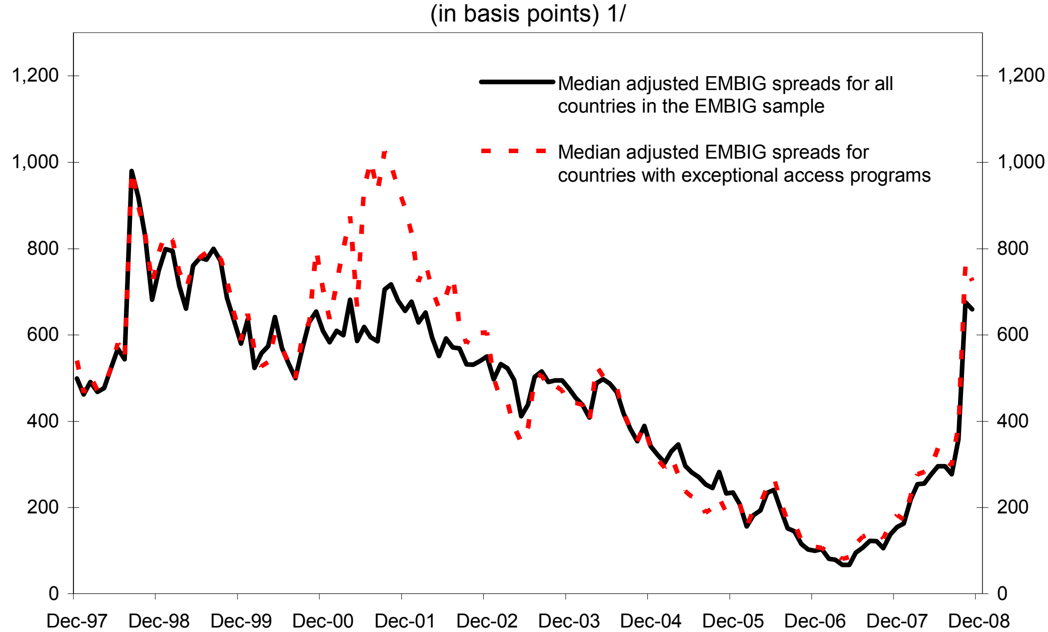
[9] The concept of two separate schedules of repurchases was introduced with the creation of the SRF in 1997. In November 2000, a similar concept was introduced for purchases in the credit tranches and under the EFF and the CFF. The TBRE policy does not apply to the SLF.

policy under Article V, Section 7(b). Guidelines for early repurchases were established in 1978 and took their current form in February 2001, but had not elicited significant early repurchases. It was concluded that the main reason for this outcome was that the initiative to request early repurchases rest with the Fund, which put the burden of proof so high that, in practice, the policy was applied only rarely.[10]

III. Experience with High Access Since the *2005 Review*

9. **Demand for Fund arrangements, including those with high access, declined shortly after the *2005 Review*.** Accordingly, concerns about prolonged use and the need to strengthen safeguards on the revolving nature of the Fund's resources diminished somewhat. From 2005 until mid-2008, the external environment was extremely benign, global liquidity was plentiful, and borrowing terms for emerging market countries were very favorable (Figure 2). Against this background, the demand for Fund credit fell to historical lows and the cost differential between borrowing from the market and the Fund narrowed substantially (Figures 3–4). During those years, there were only three requests for arrangements involving exceptional access: Uruguay and Turkey in mid-2005 and Liberia in early 2008, and no member used SRF resources (Table 3).[11]

Figure 2. Spread Between Market Rates and Fund Cost of Borrowing: Adjusted EMBIG Spreads
(in basis points) 1/

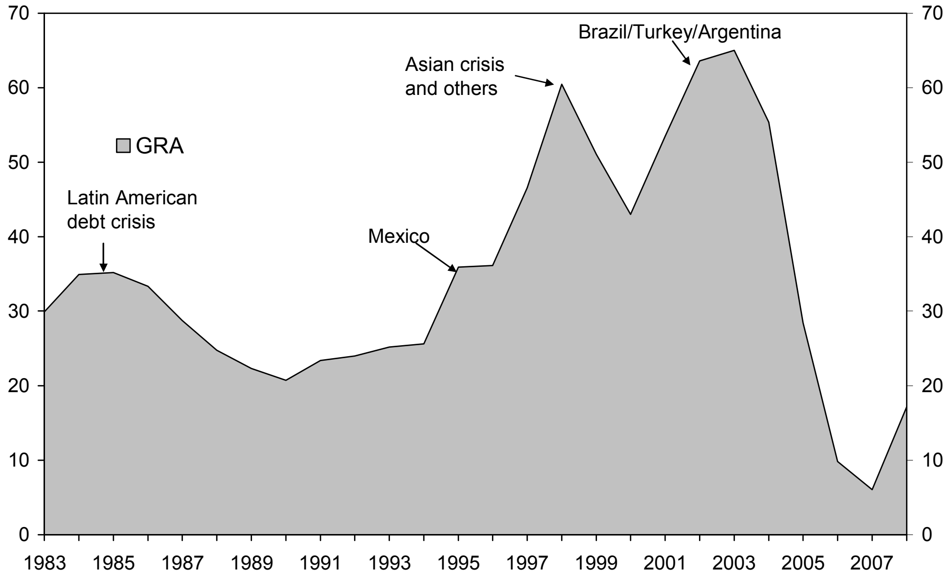


Source: J.P. Morgan, Bloomberg, and Finance Department
1/ Exceptional access cases are listed in Table 3. The adjusted EMBIG spreads are defined as the EMBIG yields net of the adjusted rate of charge. The solid line is the median for all exceptional access cases since 1995 (including under the SRF), subject to data availability.

[10] See *Guidelines for Early Repurchase*, February 9, 2001.

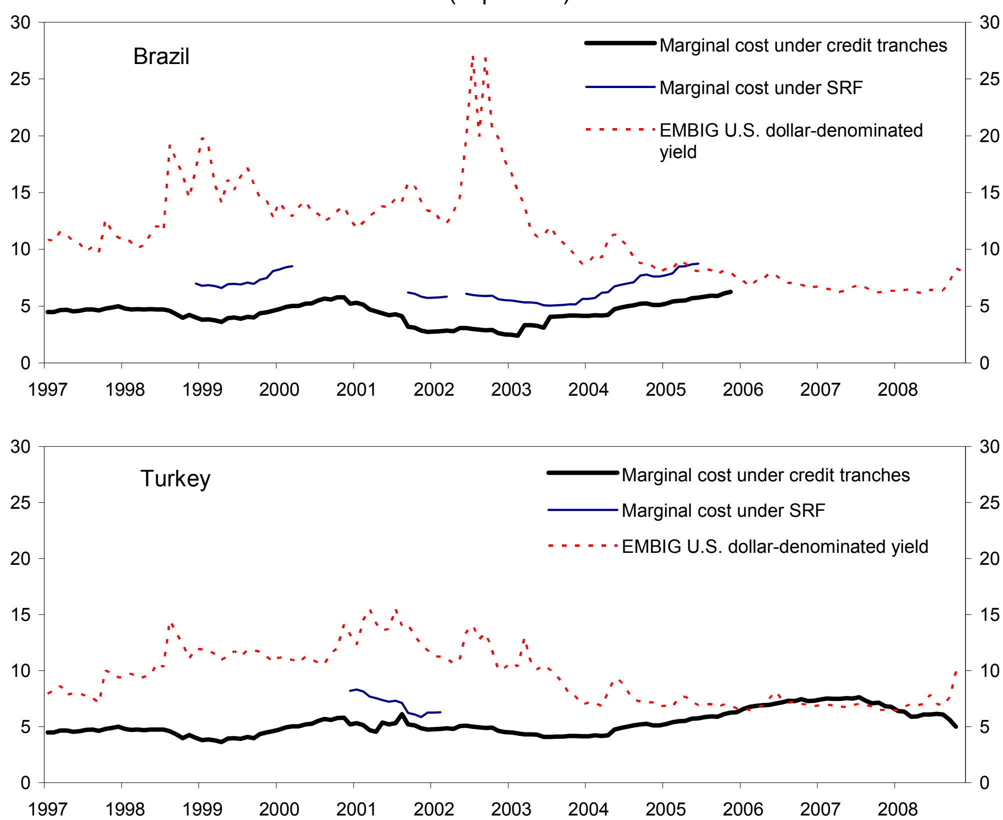
[11] The 2008 EFF arrangement for Liberia is different from the other arrangements involving exceptional access in Table 3, in that exceptional access was granted in the context of Liberia's clearance of arrears to the Fund.

Figure 3. Fund GRA Credit Outstanding, 1983–November 2008 1/
(In billions of SDRs, end of period)



Source: Finance Department, IMF.
1/ Includes the initial purchase of the November 2008 arrangements with Hungary, Iceland, Pakistan, and Ukraine.

Figure 4. EMBIG Yield and Fund Cost of Borrowing: Brazil and Turkey (1997–2008) 1/
(in percent)



Sources: J.P. Morgan; Bloomberg; and Finance Department, IMF.

1/ Marginal cost under credit tranches is the adjusted rate of charge plus the highest applicable level-based surcharges. Marginal cost under SRF is the adjusted rate of charge plus the highest applicable SRF surcharges.

Table 3. Fund Arrangements with Exceptional Access, January 1995–November 2008 1/

	Date	Type of Arrangement	GRA Credit Outstanding Prior to Approval of Programs, in percent of quota	Total Arrangement Amounts: Under All Facilities, in SDR millions	Under All Facilities, in percent of quota	*Of which*: under SRF, in SDR millions	*Of which*: under SRF, in percent of quota
A. Not subject to surcharges							
1 Mexico	2/1/1995	SBA	149	12,070	688		
2 Russia I	3/26/1996	EFF	166	6,901	160		
3 Thailand	8/20/1997	SBA	-	2,900	505		
4 Indonesia I	11/5/1997	SBA	-	7,338	490		
5 Indonesia II	7/15/1998	SBA	196	8,338	557		
6 Indonesia III	8/25/1998	EFF	245	4,669	312		
7 Indonesia IV	3/25/1999	EFF	310	5,383	259		
8 Turkey I	12/22/1999	SBA	46	2,892	300		
9 Indonesia V	2/4/2000	EFF	359	3,638	175		
B. Subject to surcharges							
B1. SRF cases							
1 Korea 2/	12/4/1997	SBA	-	15,500	1,938	9,950	1,244
2 Russia II 3/	7/20/1998	EFF	248	15,363	356	3,993	93
3 Brazil I	12/2/1998	SBA	-	13,025	600	9,117	420
4 Turkey II	12/21/2000	SBA	107	8,676	900	5,784	600
5 Argentina I	1/12/2001	SBA	183	10,586	500	2,117	100
6 Argentina II	9/7/2001	SBA	307	16,936	800	6,087	288
7 Brazil II 4/	9/14/2001	SBA	97	12,144	400	9,951	328
8 Uruguay I	6/25/2002	SBA	122	1,752	572	386	126
9 Uruguay II 5/	8/8/2002	SBA	243	2,128	694	129	42
10 Brazil III	9/6/2002	SBA	359	22,821	752	7,610	251
B2. Non-SRF cases							
1 Turkey III	5/15/2001	SBA	445	15,038	1,560		
2 Turkey IV	2/4/2002	SBA	1165	12,821	1,330		
3 Argentina III	1/24/2003	SBA	498	2,175	103		
4 Argentina IV	9/20/2003	SBA	517	8,981	424		
5 Brazil IV 6/	12/12/2003	SBA	769	27,375	902		
6 Turkey V	5/11/2005	SBA	1357	6,662	691		
7 Uruguay III	6/8/2005	SBA	534	766	250		
8 Liberia 7/	3/14/2008	EFF	155	343	265		
9 Georgia 8/	9/15/2008	SBA	-	477	317		
10 Ukraine	11/5/2008	SBA	5	11,000	802		
11 Hungary	11/6/2008	SBA	-	10,500	1,015		
12 Iceland	11/19/2008	SBA	-	1,400	1,190		
13 Pakistan 8/	11/24/2008	SBA	1	5,169	500		
Number of arrangements			32				
Number of countries			15				
Number of arrangements with surcharges			23				
Number of countries that have paid surcharges			12				

Source: Finance Department, IMF.

1/ As of November 30, 2008. All arrangements were approved for amounts above annual and cumulative limits, with the exception of Russia's EFF in 1996 which exceeded only the annual limit and Indonesia's EFF in 2000 which exceeded only the cumulative limit. Arrangements cover new arrangements and extensions and augmentations of existing arrangements.
2/ Total amount approved on December 4, 1997 as an SBA. A portion was then converted to an SRF on December 18, 1997.
3/ EFF amount includes 50 percent of quota approved under the CCFF along with the augmentation.
4/ Brazil's 1998 SBA was cancelled and replaced with this arrangement.
5/ The SRF approved at the previous augmentation was cancelled and the SBA augmentation was increased by the equivalent to the undrawn amount.
6/ Arrangement turned precautionary from this point forward.
7/ Liberia's exceptional access arrangement was granted in the context of Liberia's clearance of arrears to the Fund. It excludes the credit outstanding and approved arrangement under PRGF trust.
8/ Excludes the credit outstanding to the PRGF trust.

10. **Many members with high levels of outstanding Fund credit made large advance repurchases during this period** (Table 4). Key factors behind those large repurchases, aside from the benign global financial market conditions, included the incentives for early repayments embedded in the TBRE policy and in the surcharges. In some cases, factors other than global liquidity and cost differentials were at play—including stigma associated with borrowing from the Fund and a perceived positive signal from fully repaying the Fund—as some members decided to repay early all credit outstanding, including amounts not subject to surcharges.

Table 4. Advance and Early Repurchases by Large Users of Fund Credit 1/

	Years of Advance/Early Repurchases	Total Advance/Early Repurchases (SDR million)	Fund credit outstanding following last advance repurchase (SDR million)
Argentina	2006	6,655	0
Brazil	2000, 2002, 2005	20,786	0
Indonesia	2006	4,704	0
Korea	1999, 2001	10,113	0
Mexico	1996, 1997, 2000	4,897	0
Russia	1999, 2001, 2005	4,413	0
Thailand	2003	269	0
Turkey	2002	4,483	13,643
Uruguay	2004, 2005, 2006	2,304	0

Source: See Annex II, Table 1.

1/ Advance repurchases are voluntary payments made by the member at least five days ahead of the date scheduled for repayment. Early repurchases are payment expectations that arise under the Fund's early repurchase policy.

11. **The recent turmoil in global financial markets has increased sharply the demand for Fund arrangements involving high access**. Since mid-2008, access to international capital markets has become more expensive and challenging for many members, and the global process of deleveraging has impacted particularly hard members that were heavily dependent on external financing or had other vulnerabilities. Against this backdrop, during September-November 2008, the Fund has approved arrangements involving exceptional access for five members (Georgia, Hungary, Iceland, Pakistan, and Ukraine) for total commitments of SDR 28 billion.

12. **Aside from the high access-arrangements listed in Table 4, the broader evidence on Fund repurchases shows the TBRE policy has contributed to shorten repayment periods**. From April 2005 to June 2007, about two-thirds of all repurchases to the Fund adhered to the expectations schedule (compared to a ratio of 44 percent in the previous two

years). From July 2007 to November 2008, the ratio increased to 100 percent—although the number of countries with outstanding Fund credit was significantly lower (Table 5).[12]

Table 5. Repurchases Under Expectations Schedule, 2003–2008

	Total (SDR million)	in percent of arising (percent)	Number of countries 4/
January 2003–March 2005			
Arising repurchases 1/	15,883	---	14
Extended repurchases 2/	8,886	55.9	---
Repurchases met 3/	6,997	44.1	---
April 2005–June 2007			
Arising repurchases 1/	13,847	---	18
Extended repurchases 2/	4,757	34.4	---
Repurchases met 3/	9,090	65.6	---
July 2007–November 2008			
Arising repurchases 1/	1,766	---	6
Extended repurchases 2/	0	---	---
Repurchases met 3/	1,766	100.0	---

Source: See Annex II, Table 2.

1/ Total repurchases under the expectations schedule (as of the beginning of the period) falling due within the period. Total repurchases during the period could be higher owing to the repurchases under the obligation basis.
2/ Value of repurchases switched from expectations to obligation schedule during the period.
3/ Repurchase made under the expectations schedule, excluding any repurchase made of amounts arising in subsequent periods (i.e., excluding advance repurchases).
4/ Countries with repurchases arising during the period.

13. **Notwithstanding this favorable record, the co-existence of two different repurchase schedules has created confusion and, in some cases, caused difficulties in policy implementation**. Already during the *2005 Review*, it was noted that a lack of understanding of the TBRE policy had led some market participants and the media to view extensions as a de facto rescheduling of Fund credit; the differences in the repurchase expectations policy for the SRF and the credit tranches compounded the confusion. Within the Fund, the Executive Board has often raised questions about the appropriate benchmark against which to assess the strength of a member's balance of payments position in response to the member's request to a switch to the obligations schedule. This has been particularly problematic in follow-up arrangements.

[12] Experience with repurchases under the SRF since the *2005 Review* was limited, as only one member (Brazil) had repurchases under the SRF falling due. Brazil repurchased all amounts due in July 2005, ahead of the expectations schedule.

IV. A New System of Surcharges

A. Guiding Principles

14. **A key goal of any reform of surcharges should be to simplify the current system**. At the same time, the reform should take into account (i) the need to be supportive of members' efforts to correct the imbalances that led to a significant deterioration in their external position; (ii) the cooperative nature of the Fund and its preferred creditor status; and (iii) the important role of surcharges in protecting the Fund against credit risk by accumulating reserves and helping preserve the revolving character of Fund resources. Based on these objectives, this section lays out a staff proposal for a new system of surcharges for lending in the credit tranches. The implications of the proposal for aligning pricing of high access across GRA facilities and accumulating precautionary balances are discussed in Section V.

B. Options for Reform

15. **In considering a new structure for surcharges, three broad approaches are possible**: a purely level-based system, a time-based system for the outstanding credit above a certain threshold, or some combination of the two—i.e., a hybrid system. Time-based surcharges provide strong incentives for members to repay the Fund as soon as their external conditions improve, thereby discouraging members from unduly delaying repayment of Fund credit. Level-based surcharges link the cost of using Fund resources to the scale of those resources, thereby discouraging excessively large borrowings from the Fund.

16. **Staff preference is for a hybrid system**. Such a system could combine the benefits of each approach—i.e., discourage prolonged use and mitigate the credit risks normally associated with large scale arrangements. To the extent that it contains a time-based element, a hybrid system would broadly conform with one of the recommendations of the Committee of Eminent Persons regarding the pricing of Fund credit.[13]

17. **Careful design considerations are necessary to avoid making the hybrid system too complex**. Many specific features and parameters need to be decided to make such a system operational. These include: the number and thresholds of the level-based surcharges; the number and duration of the time-based surcharges; and the overall cost of high access.

C. Staff Proposal

18. **The staff's proposal builds on key elements of the existing system of surcharges**. Specifically, staff proposes that (i) surcharges be applied when a member's outstanding credit

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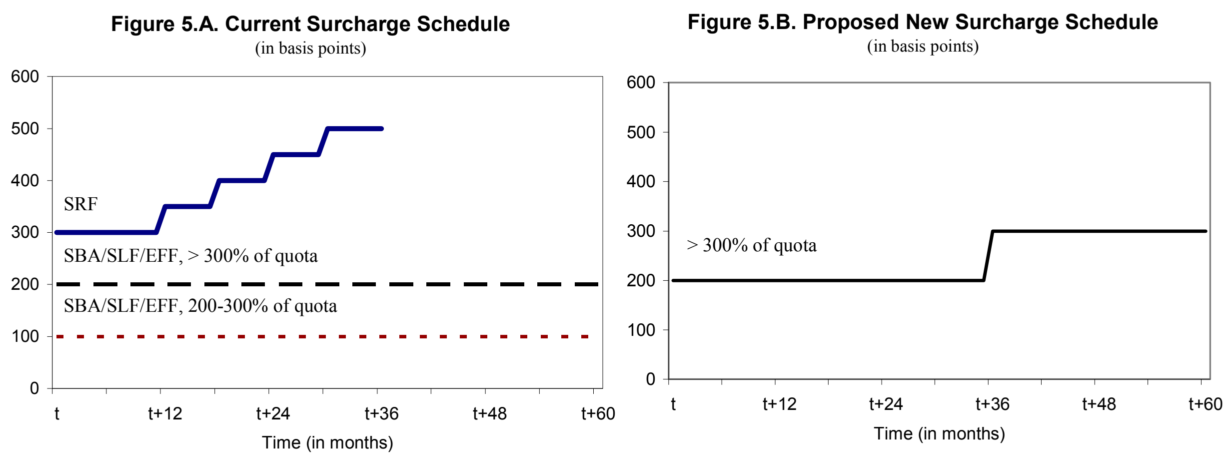
[13] See *Committee to Study Sustainable Long-Term Financing of the IMF-Final Report*, January 31, 2007, pages 7–8.

is above a certain threshold (expressed in terms of quota), and (ii) members that maintain such outstanding credit for a longer period are charged more than those that repurchase early.

19. **Concretely, for the credit tranches staff proposes a single-tier schedule with time-varying surcharges** as follows (Figure 5.B and Box 1):

- Credit outstanding below 300 percent of quota would not be subject to surcharges;
- Credit outstanding above 300 percent of quota would be subject to a surcharge of 200 basis points; and
- Outstanding credit that remains above 300 percent of quota for more than three years would be subject to a surcharge of 300 basis points. That is, a time-based surcharge of 100 basis points would apply when credit outstanding remains above 300 percent of quota for more than three years.

Figure 5. Proposed Surcharge Schedule



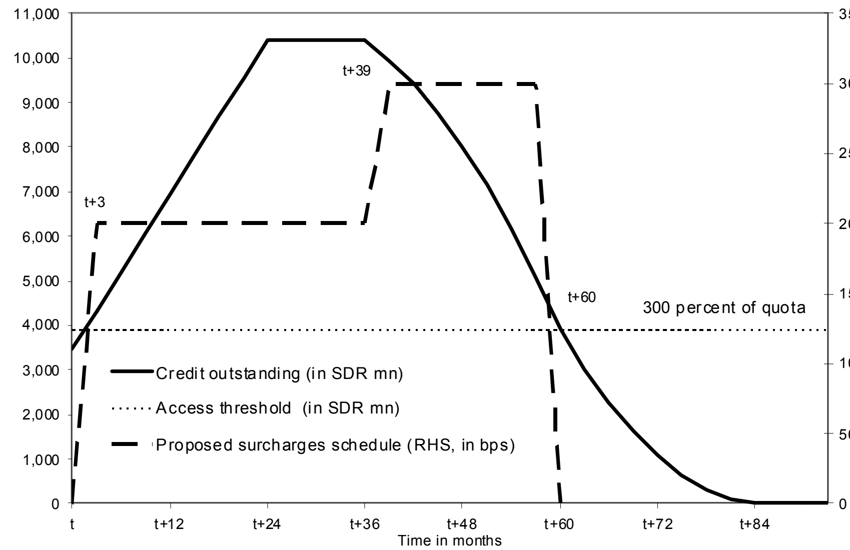
20. **The staff proposal has advantages and disadvantages compared to the current system, and to other options considered by staff**:

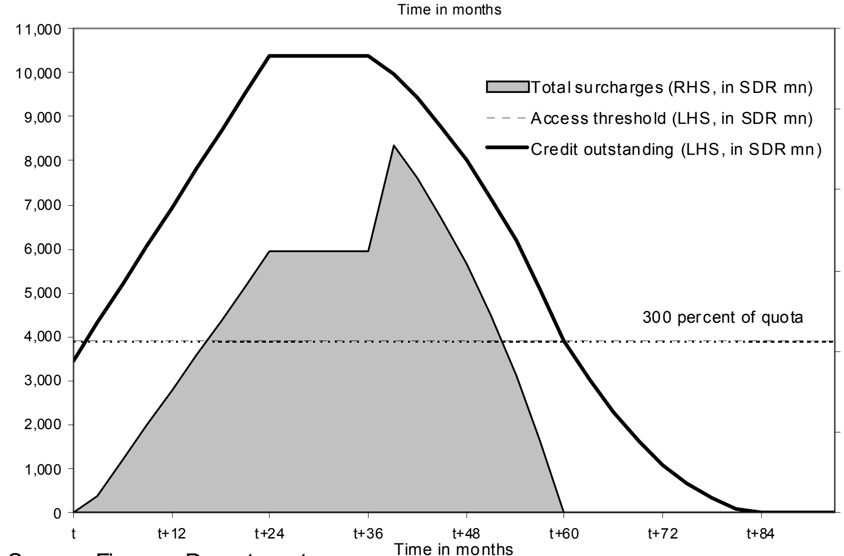
a. **Tier structure**. The single tier (level-based) surcharge schedule would be simpler to administer and easier to understand by members than the existing two-tier schedule. A single-tier schedule, however, would not allow price differentiation among different levels of high access and may therefore not fully mitigate the incremental credit risks that those access levels may entail.

b. **Time-based incentive**. A key objective of the proposed time-based surcharge is to establish a price-based mechanism to help mitigate the risk of prolonged use of Fund resources, thereby facilitating elimination of the TBRE policy. This price incentive could operate through a single step adjustment, or through smaller and more frequent

Box 1. Proposed System of Surcharges: A Practical Illustration

The example in this box illustrates how the proposed system of surcharges would work in practice. Consider a 24-month arrangement with access of 800 percent of quota for a member country with a quota of SDR 1300 million. One-third of total commitments under the arrangement is disbursed upfront upon approval; the rest in eight equal quarterly purchases. Repurchases follow the obligations schedule. The member has no credit outstanding at the time of approval. The top chart depicts the evolution over time of outstanding credit (in SDR million), and the applicable surcharges (in basis points), under this hypothetical arrangement.





Source: Finance Department

In this example, surcharges would be triggered after the second purchase (that is, one quarter after approval), when outstanding credit would exceed the access threshold of 300 percent of quota. A surcharge of 200 basis points would be levied on outstanding credit above 300 percent of quota for the following 36 months; an additional surcharge of 100 basis points would be applicable from the 39th month to the 60th month, at which time outstanding credit would fall below 300 percent of quota. The stream of surcharge payments from the member (surcharge income for the Fund) implied by the application of the proposed system of surcharges to this arrangement is depicted by the shaded area of the bottom chart.

step adjustments. On balance, staff chose a single step adjustment for simplicity considerations. The choice of three years as a trigger point for the step increase was guided by the objective of trying to replicate through price incentives the one-year reduction in the repayment period attained by the TBRE policy.[14]

c. **Alignment of thresholds with access limits**. The access threshold that would trigger surcharges in the proposed system (300 percent of quota) would be the same as the cumulative access limit that currently defines exceptional access under the credit tranches and the EFF. While this alignment would disappear if access limits are increased from current levels, as proposed in a companion paper, there is no alignment at present as level-based surcharges (and surcharges under the SRF) apply within the current cumulative access limit.[15]

21. **Size of surcharges**. The single-tier schedule of surcharges proposed by staff complies qualitatively with the guiding principles discussed in paragraph 14. Even so, choosing the precise size of the surcharges is ultimately a matter of judgment. A key element to inform this judgment is the comparison between the costs of borrowing large amounts from the Fund and borrowing from market sources. In practice, the wedge between the maximum level of surcharges and the (median of the) cost of borrowing from the markets faced by members that have had Fund arrangements involving high access has been very large at the time of approval of the Fund arrangement, remained large for up to 24 months following approval of the arrangement, and narrowed more rapidly starting in the third year (Figure 6). Based on this evidence, staff concluded that, on balance, setting the second (duration-triggered) level of surcharges at 300 basis points three years after the approval of the arrangement could provide adequate incentives to induce early repayments of Fund credit outstanding.

V. Implications of Reform Proposals

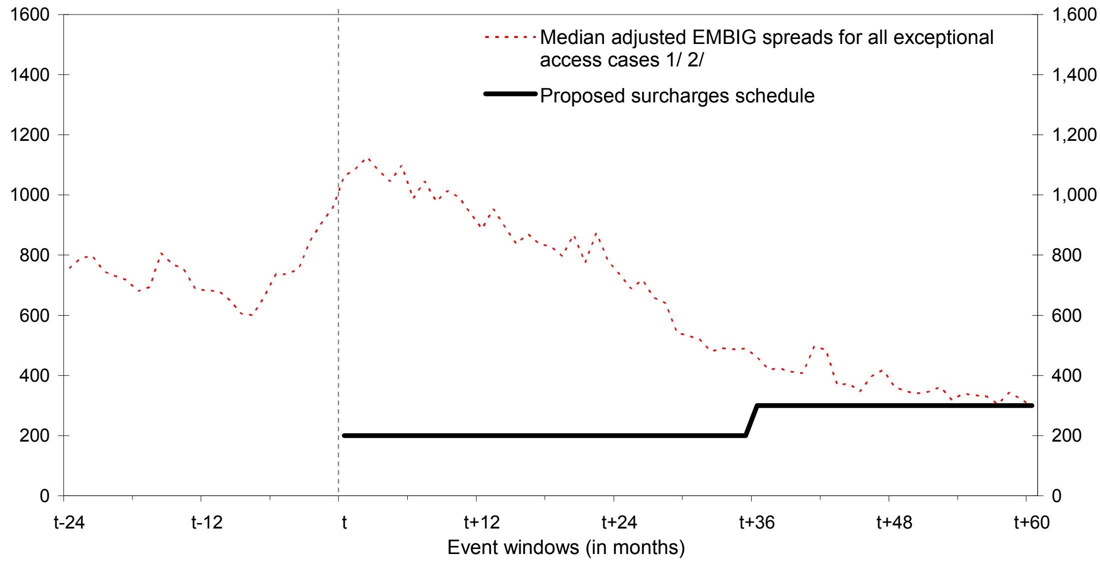
A. Precautionary Balances

22. **As noted, income from surcharges plays a key role in contributing to the Fund's precautionary balances, thus helping to mitigate the higher credit risk associated with arrangements involving high access**. Income from surcharges was the most important contributor to the increase in precautionary balances during 2002–05. As discussed in

[14] The mid-point of the repayment period for an SBA under the repurchase expectations schedule is 3 ⅛ years. Setting the step increase of surcharges around that point is intended to provide a similar incentive to shorten the repayment period as currently provided by the expectations schedule (see Section V.B).

[15] See *Review of Access to Financing in the Credit Tranches and Under the Extended Fund Facility, and Overall Access Limits Under the General Resources Account*, to be published on www.imf.org.

Figure 6. Proposed Surcharges and Adjusted EMBIG Spreads



Sources: J.P. Morgan; Bloomberg; and Finance Department, IMF.
1/ Exceptional access cases are listed in Table 3. The adjusted EMBIG spreads are defined as the EMBIG yields net of the adjusted rate of charge. The dotted line is the median for all exceptional access cases since 1995 (including under the SRF), subject to data availability.
2/ Episodes refer to the dates when there were exceptional access programs approved by the Fund. In the event window, t corresponds to the month when exceptional access was granted. The window shows 24 months prior to each episode and 60 months after. EMBI series are available only for 3 of the arrangements recently approved (Hungary, Pakistan, and Ukraine) and only for the period prior to the program approval. See Annex I.

a staff paper on precautionary balances, the role of precautionary balances will remain essentially unchanged under the new income model for the Fund. Going forward, the pace of accumulation of precautionary balances will still be driven by two factors: the number of arrangements involving high access and the structure of surcharges. However, to the extent that the low demand for SRF resources persists and most of the future high access arrangements are not subject to SRF surcharges, the pace of accumulation of precautionary balances is likely to be considerably slower than in the 2002–05 build up.

23. **Will the proposed schedule of surcharges yield higher or lower surcharge income than the current system?** While the size of surcharges in the proposed system (200/300 basis points) will be higher than the existing surcharges (100/200 basis points), under the proposed system, surcharges will start to apply at a higher level of credit outstanding. In the end, the answer will depend on key parameters of each arrangement, such as the amount of access (in percent of quota), the phasing of purchases, and the size of the initial purchase. The comparison will also depend on whether repurchases are made according to the expectations or the obligations schedule.

24. **Staff estimates suggest that, for "typical" high access arrangements, surcharge income under the proposed schedule would tend to be lower than under the existing system for arrangements with access below 800 percent of quota (under the obligations**

schedule) or 1100 percent of quota (under the expectations schedule).[16] Table 6 and Figure 7 illustrate these results. Table 6 presents estimates of the surcharge income the Fund would obtain if the proposed schedule of surcharges were applied to exceptional access SBAs with two hypothetical countries: country A with a quota of SDR 1,300 million, and country B with a quota of SDR 3,000 million; both members have no prior credit outstanding from the Fund.[17] The table shows that if repayments follow the expectations schedule (columns (1)–(2)), the proposed system of surcharges would yield lower income to the Fund than the current system of surcharges for arrangements of 400 percent of quota and 800 percent of quota, while surcharge income would be marginally higher in arrangements with access of 1200 of quota. If repayments follow the obligations schedule, however, the break-even point occurs at a lower level of access (columns (3)–(4)). In this case, income from surcharges would be lower under the proposed system in all arrangements with access below 800 percent of quota, and would be higher in all arrangements with access above 800 percent of quota. Figure 7 shows the distribution of surcharges income over time generated from the current and proposed schedule of surcharges for arrangements of 800 percent and 1200 percent of quota that are repaid under the obligations schedule. Surcharge income would typically be higher than currently is the case for follow on arrangements with members where credit outstanding is at the outset above the 300 percent of quota threshold—as here the time-based surcharge would apply for a longer period than under the examples discussed above.

Table 6. Surcharge Income Under Current and Proposed Systems
(in SDR millions) 1/

	Expectations schedule			Obligations schedule		
	Current surcharges	Proposed surcharges	Change, in percent	Current surcharges	Proposed surcharges	Change, in percent
SBA with access of:	(1)	(2)	(2) - (1)	(3)	(4)	(4) - (3)
400 percent of quota						
Country A	58.4	25.5	-56.4	97.4	51.5	-47.1
Country B	134.7	58.8	-56.4	224.7	118.8	-47.1
800 percent of quota						
Country A	330.4	292.0	-11.6	473.4	473.4	0.0
Country B	762.5	673.8	-11.6	1,092.5	1,092.5	0.0
1200 percent of quota						
Country A	639.0	645.1	1.0	886.0	984.8	11.1
Country B	1,474.7	1,488.8	1.0	2,044.7	2,272.5	11.1

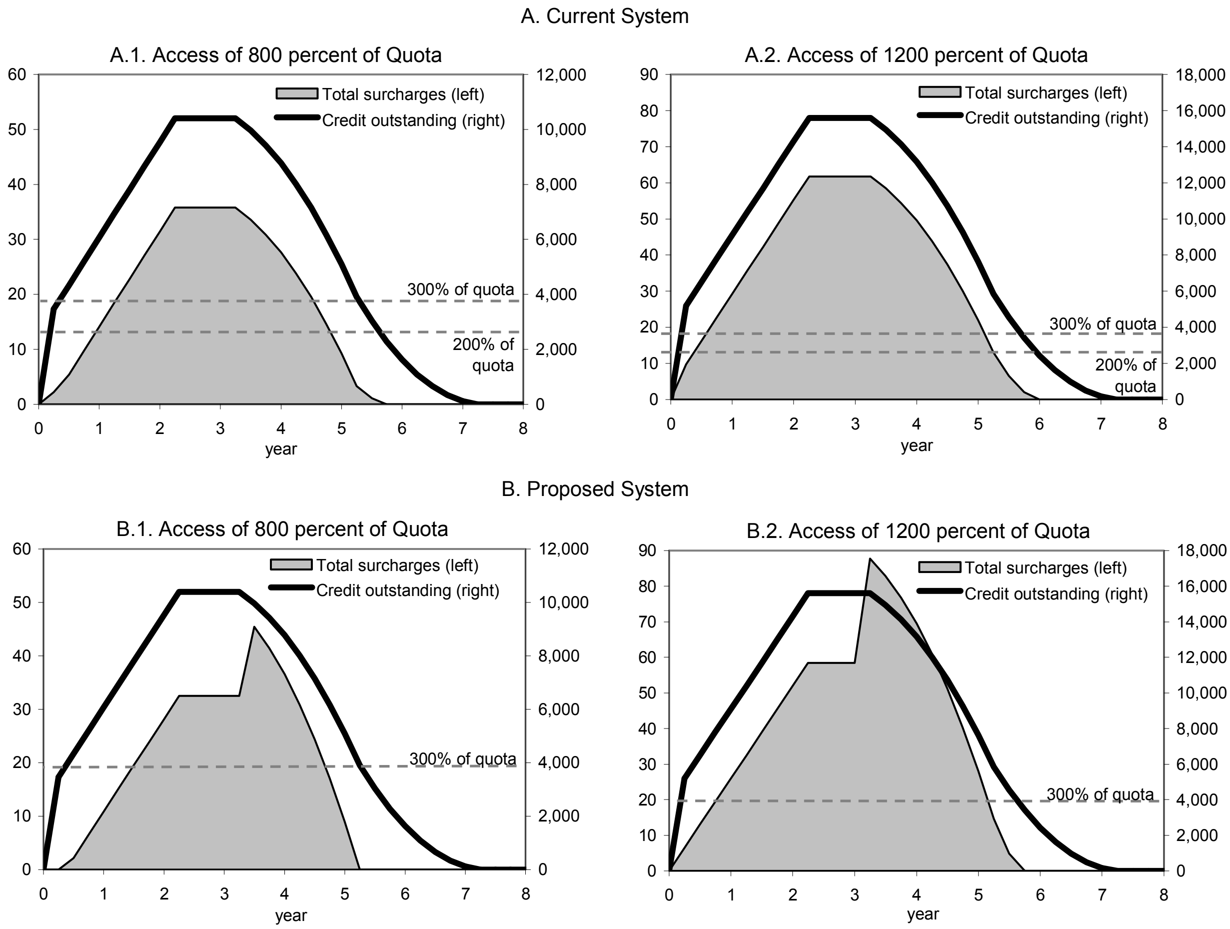
Source: Finance Department, IMF.

1/ Current level-based schedule and proposed schedule as shown in Figure 5. Calculations based on a hypothetical 24-month SBA where one-third of the committed resources is disbursed upon approval, and the remaining two-thirds are evenly disbursed in eight quarterly installments. Expectations and obligations repurchase schedules as defined in Table 2. The quotas of countries A and B are assumed to be SDR 1300 million and SDR 3000 million, respectively.

[16] For these calculations, the "typical" high access arrangement was assumed to be a 24-month SBA with total access, relative to quota, of 400 percent, 800 percent, or 1,200 percent. It was further assumed that one third of committed resources is disbursed under approval and the rest is disbursed evenly in eight quarterly tranches.

[17] To put these figures in context, current quotas for Hungary, Pakistan, and Ukraine (three members with recently approved arrangements involving exceptional access) are, respectively, SDR 1015 million, SDR 1033 million, and SDR 1372 million.

Figure 7. Surcharges Income Under Current and Proposed Systems

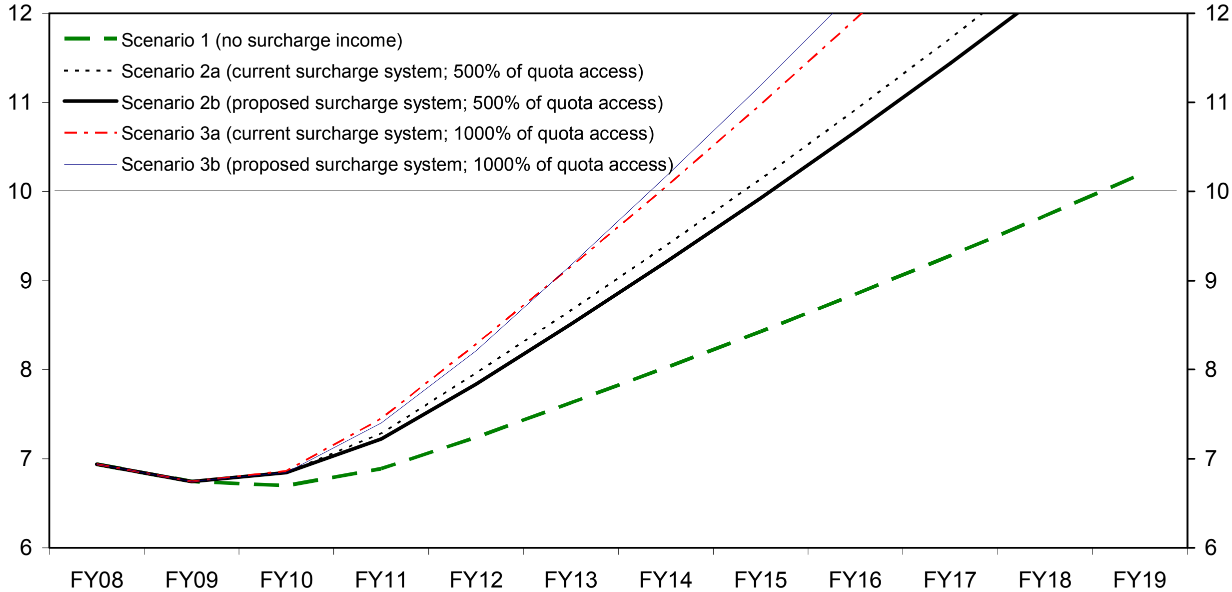


Source: Finance Department, IMF.

1/ Calculations done for two hypothetical arrangements with access of 800 and 1200 percent of quota, for a country with quota of SDR 1300 million, under the current level-based surcharge system (top panel) and the proposed system of surcharges (bottom panel). Each figure depicts the Fund credit outstanding (solid line) and the income from surcharges generated by the arrangement (shaded area). For every arrangement, it is assumed that one-third of the total amount is disbursed upon approval, and the remaining two-thirds are evenly disbursed in eight quarterly installments. Repurchases are assumed to follow the obligations schedule.

25. **The overall pace of reserve accumulation is not expected to be substantially affected by the proposed change in the surcharge system**. For a given level of Fund credit outstanding, the pace of reserve accumulation under the proposed surcharge system would tend to be slightly lower than under the current system if access levels average 500 percent of quota (Scenario 2 of Figure 8). In contrast, for access levels averaging 1000 percent of quota, the proposed surcharge system would result in a slightly faster pace of reserve accumulation compared to the current system (Scenario 3 of Figure 8).

Figure 8. Reserve Accumulation Scenarios
(in SDR millions)



Source: Finance Department

All scenarios assume SDR 40 billion of credit outstanding (credit tranches terms). Scenarios 2-3 assume that SDR 10 billion in credit outstanding is not subject to surcharges. Scenarios 1 and 2a are the same as in Figure 5 of EBS/08/110.

Scenario 1: basic rate of charge on all outstanding credit, with margin of 100 basis points.
Scenario 2a: current surcharge system; access averaging 500 percent of quota.
Scenario 2b: proposed surcharge system; access averaging 500 percent of quota.
Scenario 3a: current surcharge system; access averaging 1000 percent of quota.
Scenario 3b: proposed surcharge system; access averaging 1000 percent of quota.

B. The TBRE Policy and Early Repayments

26. **Introducing a time-based step in the surcharge structure would strengthen the case for abolishing the TBRE policy**. A comparison of Column (1) and Column (4) in Table 6 shows that members that obtain Fund arrangements with access of 1,200 percent of quota would have to pay significantly more surcharges under the proposed schedule when repayments follow the obligations schedule (which will be the only schedule for all arrangements following the elimination of the TBRE policy). If countries were to repay earlier than what is stipulated by the obligations schedule (say, if they were to shift forward the repayment schedule by about one year as would be the case under the expectations schedule) they would pay significantly less surcharges in arrangements of 400 percent of quota and 800 percent of quota, while they would pay essentially the same in arrangements of 1200 percent of quota.

C. Pricing High Access Across GRA Facilities

Short-term Liquidity Facility

27. **Aside from high access arrangements in the credit tranches, staff proposes applying the new system of surcharges to members' purchases under the SLF**. As is currently the case, surcharges would apply only to the credit outstanding that results from SLF purchases, and not from other arrangements. Because of the short maturity of the SLF (three months) the proposed time-based surcharge would never be triggered. As a result, applying the proposed surcharge schedule to the SLF would unambiguously reduce the cost of borrowing under this facility (Table 7).

Table 7. Surcharge Income Under Current and Proposed Systems: SLF Purchases
(in SDR millions) 1/

	Current schedule	Proposed schedule	Change, in percent
SLF purchases of:	(1)	(2)	(2) - (1)
300 percent of quota			
Country A	9.8	0.0	…
Country B	22.5	0.0	…
500 percent of quota			
Country A	48.8	39.0	-20
Country B	112.5	90.0	-20

Source: Finance Department, IMF.

1/ Calculations done for two hypothetical SLF with purchases equivalent to 300 and 500 percent of quota. It is assumed that the full amount of the SLF is disbursed upon approval, renewed twice, and fully repurchased at the end of a 9-month period. The quotas of countries A and B are assumed to be SDR 1300 million and 3000 million, respectively.

Supplemental Reserve Facility and Extended Fund Facility

28. **What about the other two GRA facilities—the SRF and the EFF?** Aligning surcharges across all GRA facilities was one of the issues Directors expressly asked staff to consider further at the time of the *2005 Review*. Applying exactly the same schedule of surcharges for all GRA facilities would undoubtedly simplify the system of surcharges. Aside from simplicity, however, it is not clear that the same schedule of surcharges ought to be applied to lending instruments that, by design, intend to address different types of balance of payments problems and, as a result, have different maturities, repayment terms, and monitoring procedures (Tables 1 and 2). Possible ways to deal with this complex issue are discussed below.

29. **What are the implications of *full alignment of surcharges* across GRA facilities?**

- ***SRF***.[18] If the proposed system of surcharges were to be applied to the SRF, the cost of SRF resources would be lowered significantly (Table 1, Figure 5a), including because the proposed time-based surcharge would never apply to the SRF, given its short maturity. The co-existence of SRF and high access arrangements in the credit tranches subject to the same surcharges could thus give rise to arbitrage opportunities as borrowing from the SRF would, in effect, become cheaper than borrowing from the credit tranches.

- ***EFF***. The EFF was designed to provide medium-term financing to countries with structural impediments to sustained economic growth, where balance of payments problems were expected to take a long time to resolve. Accordingly, the repayment period for purchases under an EFF arrangement is significantly longer than for purchases under an SBA (Table 2). Applying the proposed surcharges schedule to the EFF would thus generate the undesirable outcome of members with a high-access EFF arrangement being levied the highest surcharge for a much longer period than countries with a high access SBA.

30. **What are instead the implications of *not aligning surcharges* across facilities?**

- ***SRF***. Maintaining the existing system of surcharges for the SRF would essentially imply preserving the large cost differential between the SRF and high-access arrangements in the credit tranches. This may imply that the demand for the SRF would remain low (Box 2).

- ***EFF***. If the proposed system of surcharges were not applied to the EFF, borrowing costs under a high access (i.e., above 200 percent of quota) EFF would be higher than under the credit tranches during the first three years of the arrangement. Moreover, the concurrent elimination of the TBRE policy would extend the repayment period of EFF arrangements by three years on average without providing any incentives for early repurchases (Table 2). One way to mitigate these undesirable effects would be to establish the principle that the EFF would not be used as a vehicle to provide high access to members with balance of payments difficulties.

[18] An amendment of the SRF would be needed to modify its surcharges or to eliminate the expectations schedule.

Box 2. Experience with the Supplemental Reserve Facility

The SRF was established in December 1997 to meet a large short-term financing need. Sudden losses of market confidence had led to massive outflows of capital in Mexico (1995) and in Asia (Thailand, Korea, and Indonesia (1997)), and required financing on a much larger scale than the Fund had previously provided. The SRF Decision defines the circumstances under which SRF resources can be used (i.e., the "circumstance test"): to "provide financial assistance to members experiencing exceptional balance of payments difficulties due to a large short-term financing need resulting from a sudden and disruptive loss of market confidence reflected in pressure on the capital account and the member's reserves, if there is a reasonable expectation that the implementation of strong adjustment policies and adequate financing will result, within a short period of time, in an early correction of such difficulties." Consistent with this, the SRF offers financing on a short-term basis and with significant surcharges (Tables 1–2). Financing under the SRF is made available to members under a stand-by or extended arrangement. Financing is committed for up to one year, even if the corresponding arrangement is for longer, and will generally be available in two or more purchases.

The use of the SRF has been limited due to the varying nature of capital account crises, both in terms of causes and duration. Since its creation, the Board has approved 27 arrangements involving exceptional access, of which 10 involved SRF resources for six members (the last one in 2002), notwithstanding the presumption that exceptional access in capital account crisis be provided under the SRF (Table 3). In general, there have been few "V-shaped" capital account crises, and in many cases, countries have satisfied the SRF circumstance test as noted above, but the expected or actual duration of the crisis was longer than the SRF repayment schedule:

- In some cases, SRF resources were replaced with financing under SBA/EFF terms. In Turkey (2002), and Uruguay (August 2002), the recovery from capital account crisis took longer than initially anticipated, leading to a medium-term balance of payments need.
- In other cases, SRF/SBA/EFF blends were used where a higher share of resources was provided in the credit tranches. In Argentina (2001), Brazil (2001, 2002), and Uruguay (June 2002), blends of resources on credit tranches terms (beyond normal access levels) and on SRF terms were justified on the basis of the expected longer-term nature of the financing need.

More recently, all exceptional access has been provided in the credit tranches. After 2002, the Board has granted exceptional access in the credit tranches in 11 cases because the need for exceptional access arose outside circumstances for which the SRF was created:

- For Brazil (2003), uncertainties about the nature and duration of the balance of payments problem precluded the use of SRF resources. Instead an augmentation and extension of the 2002 SBA with exceptional access was approved and was treated as precautionary from the outset. Under the terms of the SRF, no access can be approved in the absence of an actual balance of payments need of the type the facility is designed to address, although a member could indicate its intention not to draw under the SRF, despite the existence of an actual balance of payments need.
- In Argentina (January and September 2003), Turkey (2005), and Uruguay (2005), the Fund-supported programs dealt with the legacies of past capital account crisis, which were seen as requiring a longer time to resolve.
- In Georgia, Ukraine, Hungary, Iceland, and Pakistan (all 2008), exceptional access was provided on SBA terms, including because uncertainties related to the re-establishment of normal global financial markets created a risk that the balance of payments difficulties may require a longer time to resolve than the SRF maturity.
- Liberia (2008) was a special case. Liberia is a PRGF-eligible country that was granted exceptional access from the GRA on EFF terms, but it was granted in the context of Liberia's clearance of its arrears with the Fund.

1/ *Decision No. 11627-(97/123), SRF*, December 17, 1997.

31. **Partial alignment of surcharges**. Another possibility would be to apply the proposed system of surcharges to the SRF and the EFF but with a different time-based surcharge trigger—shorter than 36 months in the case of the SRF and longer than 36 months for the EFF (Figure 9). For example, in the case of the SRF, the duration-based trigger could apply two years after the access threshold has been exceeded, rather than the three years proposed for the credit tranches. This modification would make the SRF more expensive relative to access in the credit tranches (though the cost differential would be much lower than at present) and would thus preserve a key distinguishing feature of the SRF. For the EFF, the duration-based trigger could come into effect after five years (instead of three). This would avoid unduly increasing the cost of borrowing under the EFF, while introducing a useful (price-based) incentive for inducing early repayments. A partial alignment of surcharges along the lines suggested, however, would undermine the reform's fundamental goal of simplifying the system.

Figure 9.A Proposed New Surcharge Schedule for Credit Tranches
(in basis points)

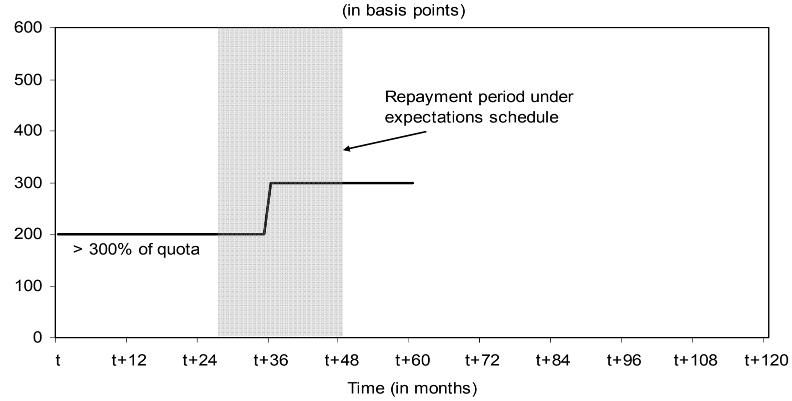


Figure 9.B Possible New Surcharge Schedule for SRF
(in basis points)

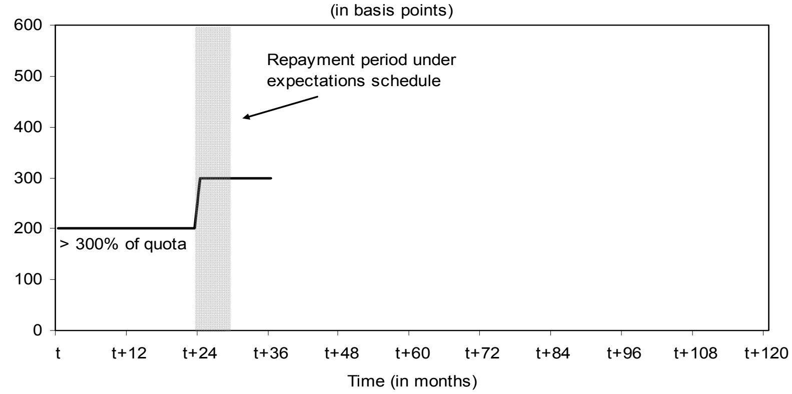
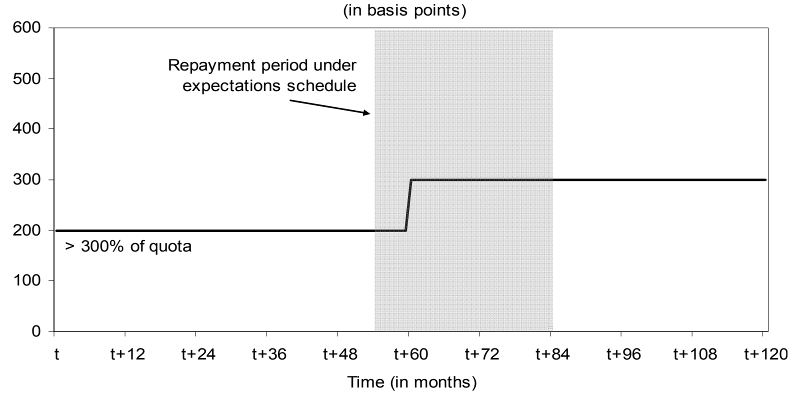


Figure 9.C Possible New Surcharge Schedule for EFF
(in basis points)



32. **In light of these considerations, staff is of the view that the goals of simplifying and aligning the Fund's system of surcharges would be best achieved through the elimination of the SRF, and possibly also the EFF**. As noted, most members do not seem

to regard the SRF as a very useful instrument.[19] Moreover, since its creation more than a decade ago, there have been only a handful of cases where, either ex ante or ex post, a member's balance of payments problem and resolution has conformed with the "V-shaped" capital account crises that the SRF is supposed to help address (Table 3). In fact, in many cases, the expected and/or actual duration of the crisis has been longer than the SRF repayment schedule. As for the EFF, while staff recognizes that it may still be useful in some circumstances (for instance, for low-income members that are transitioning toward market access), its usefulness as a facility for providing high access is much more doubtful.

D. Voting Majorities

33. **Approving the reform proposals contained in this paper requires different voting majorities at the Board**. Modifications to surcharges would require the support of 70 percent of the total voting power. The abolishment of the TBRE policy would require a majority of the vote cast. Elimination of the SRF or the EFF would also require a majority of the votes cast.

VI. Issues for Discussion

34. **In their discussion, Directors may wish to comment on the following issues**:

- Do Directors agree that the TBRE policy should be abolished? Do they see a need to replace the TBRE policy with other procedures in addition to a time-based surcharge?
- Do Directors consider that the staff's proposal on surcharges strikes an appropriate balance between providing incentives to repay exceptional access early without unduly deterring members from seeking Fund financial support?
- Do Directors view the proposed system of surcharges adequate in relation to the need to build precautionary balances?
- What are Directors' views on whether to align surcharges across facilities? Do Directors see benefit in aligning surcharges across facilities for which there has not been demand?
- How do Directors see the role of the SRF and the EFF going forward?

[19] The SRF has not been used since 2002. At the September 2008 discussion of the *Review of the Fund's Financing Role in Member Countries*, some Directors felt the SRF should be retained, while many were prepared to consider its elimination. See *IMF Executive Board Reviews the Fund's Financing Role*, October 9, 2008.

Annex I. Adjusted EMBIG Spreads

Figures 2 and 6 of the main text present different series of the Adjusted EMBIG spread. In this paper, the Adjusted EMBIG spread is defined as the difference between the EMBIG yield and the adjusted rate of charge of the Fund. Formally:

EMBIG spread = EMBIG yield – Adjusted rate of charge;

where

Adjusted rate of charge = SDR interest rate + margin + burden sharing adjustment

The adjusted EMBIG spread is a measure of the difference in borrowing costs between what the market charges to countries and what the Fund charges in arrangements within the normal access limits (same charge to all countries). It therefore provides a useful benchmark to gauge the size of surcharges.

Figure 2 presents two series of adjusted EMBIG spreads: the median adjusted EMBIG spreads for all countries in the EMBIG sample, and the median adjusted EMBIG spreads for countries that had exceptional access arrangements with the Fund from December 1997 to November 2008. Table A.1 lists the series for both variables.

Figure 6 presents the median-adjusted EMBIG spreads for all countries that had exceptional access arrangements since 1997. In this series, every Fund arrangement with exceptional access is regarded as an episode, centered at the time of Board approval of the arrangement (*t*). A full episode covers from 24 months prior to the program approval (*t*-24) to 60 months following program approval (*t*+60). Not all cases contain observations for the full episodes; the median is computed taking into account only the nonzero observations. Table A.2 lists the centered series.

Table I.1 Adjusted EMBIG spreads, December 1997 - November 2008

(in basis points) 1/

	Adjusted EMBIG spreads			Adjusted EMBIG spreads	
Date	Median adjusted EMBIG spreads for all countries in EMBIG sample	Median EMBIG spreads for countries that had exceptional access arrangements	Date	Median adjusted EMBIG spreads for all countries in EMBIG sample	Median EMBIG spreads for countries that had exceptional access arrangements
Dec-1997	499	540	Jun-2003	438	385
Jan-1998	462	466	Jul-2003	503	503
Feb-1998	491	502	Aug-2003	515	507
Mar-1998	468	472	Sep-2003	491	475
Apr-1998	477	480	Oct-2003	495	482
May-1998	522	522	Nov-2003	495	471
Jun-1998	568	581	Dec-2003	476	440
Jul-1998	543	545	Jan-2004	454	442
Aug-1998	980	982	Feb-2004	437	437
Sep-1998	919	903	Mar-2004	409	400
Oct-1998	830	831	Apr-2004	488	527
Nov-1998	681	718	May-2004	497	503
Dec-1998	750	788	Jun-2004	487	487
Jan-1999	799	834	Jul-2004	467	476
Feb-1999	794	819	Aug-2004	418	418
Mar-1999	713	746	Sep-2004	383	383
Apr-1999	661	708	Oct-2004	354	354
May-1999	760	762	Nov-2004	389	389
Jun-1999	779	779	Dec-2004	341	333
Jul-1999	774	790	Jan-2005	321	310
Aug-1999	800	800	Feb-2005	304	292
Sep-1999	771	777	Mar-2005	330	316
Oct-1999	686	727	Apr-2005	346	277
Nov-1999	634	650	May-2005	297	238
Dec-1999	580	587	Jun-2005	281	225
Jan-2000	636	649	Jul-2005	270	219
Feb-2000	524	565	Aug-2005	253	187
Mar-2000	558	527	Sep-2005	245	199
Apr-2000	574	537	Oct-2005	282	222
May-2000	642	600	Nov-2005	232	189
Jun-2000	569	569	Dec-2005	235	203
Jul-2000	533	533	Jan-2006	208	208
Aug-2000	500	500	Feb-2006	156	155
Sep-2000	569	595	Mar-2006	182	195
Oct-2000	630	630	Apr-2006	193	209
Nov-2000	654	798	May-2006	234	245
Dec-2000	609	708	Jun-2006	240	269
Jan-2001	583	637	Jul-2006	194	211
Feb-2001	609	717	Aug-2006	152	166
Mar-2001	599	798	Sep-2006	144	163
Apr-2001	682	875	Oct-2006	115	123
May-2001	586	664	Nov-2006	102	116
Jun-2001	618	938	Dec-2006	100	109
Jul-2001	595	1004	Jan-2007	103	106
Aug-2001	585	932	Feb-2007	81	94
Sep-2001	706	1025	Mar-2007	79	93
Oct-2001	717	992	Apr-2007	67	80
Nov-2001	679	939	May-2007	67	85
Dec-2001	656	893	Jun-2007	95	115
Jan-2002	677	834	Jul-2007	107	132
Feb-2002	629	723	Aug-2007	123	139
Mar-2002	652	763	Sep-2007	122	144
Apr-2002	593	705	Oct-2007	106	129
May-2002	551	660	Nov-2007	137	162
Jun-2002	591	689	Dec-2007	155	182
Jul-2002	571	735	Jan-2008	163	172
Aug-2002	569	623	Feb-2008	219	226
Sep-2002	531	579	Mar-2008	254	277
Oct-2002	531	610	Apr-2008	256	282
Nov-2002	540	605	May-2008	277	293
Dec-2002	550	605	Jun-2008	296	338
Jan-2003	497	497	Jul-2008	296	312
Feb-2003	533	451	Aug-2008	277	297
Mar-2003	523	443	Sep-2008	358	391
Apr-2003	495	387	Oct-2008	676	766
May-2003	411	351	Nov-2008	659	726

Sources: J.P. Morgan; Bloomberg; and Finance Department, IMF.

1/ Exceptional access cases are listed in Table 3. The adjusted EMBIG spreads are defined as the EMBIG yield net of the adjusted rate of charge.

Table I.2 Median Adjusted EMBIG Spreads Synchronized across Crisis Episodes
(in basis points) 1/

Event window	Median adjusted EMBIG spreads for all exceptional access arrangements	Event window	Median adjusted EMBIG spreads for all exceptional access arrangements
t-24	757	t+19	797
t-23	790	t+20	867
t-22	798	t+21	774
t-21	746	t+22	874
t-20	731	t+23	781
t-19	717	t+24	736
t-18	680	t+25	689
t-17	693	t+26	718
t-16	807	t+27	658
t-15	769	t+28	641
t-14	753	t+29	543
t-13	688	t+30	532
t-12	682	t+31	519
t-11	681	t+32	480
t-10	651	t+33	491
t-9	605	t+34	487
t-8	600	t+35	489
t-7	661	t+36	461
t-6	736	t+37	420
t-5	737	t+38	424
t-4	753	t+39	412
t-3	846	t+40	408
t-2	906	t+41	497
t-1	959	t+42	486
t	1,062	t+43	368
t+1	1,088	t+44	372
t+2	1,126	t+45	347
t+3	1,080	t+46	398
t+4	1,046	t+47	418
t+5	1,098	t+48	362
t+6	988	t+49	346
t+7	1,046	t+50	341
t+8	978	t+51	346
t+9	1,014	t+52	362
t+10	992	t+53	318
t+11	939	t+54	340
t+12	887	t+55	334
t+13	954	t+56	331
t+14	893	t+57	304
t+15	838	t+58	343
t+16	870	t+59	321
t+17	838	t+60	296
t+18	829		

Sources: J.P. Morgan; Bloomberg; and Finance Department, IMF.

1/ Exceptional access cases are listed in Table 3. The adjusted EMBIG spreads are defined as the EMBIG yield net of the adjusted rate of charge. Episodes refer to the dates when there were exceptional access programs approved by the Fund. In the event window, t corresponds to the month when exceptional access was granted. The window shows 24 months prior to each episode and 60 months after.

ANNEX II. ADVANCE REPURCHASES

Table II.1. Experience with Advance and Early Repurchase for Large Users of Fund Credit (January 1996–November 2008) 1/

	Date of Advance and Early Repurchase(s)	Arrangement(s) of Repurchases in Advance	Credit Outstanding Prior to Repurchase(s) in Pre-Paid Arrangement(s) 2/	Advance and Early Repurchase(s) 2/	Credit Outstanding Following Repurchase(s) in Pre-Paid Arrangement(s) 2/	Total GRA Credit Outstanding Following Repurchase(s)	EMBIG yield 3/	Cost of Fund credit 3/	Cost of Fund credit 3/ of which: surcharge rate 3/
			(SDR millions)				(Basis points)		
Argentina	Jan 2006	SBA 2001, 2003	6,634	6,634	0	0	949	627	200
	Jan 2006	EFF 1996	21	21	0	0	949	427	n.a
Brazil	Apr 2000	SRF 1998	5,074	3,256	0	1,357	1,289	846	350
	Apr 2002	SRF 2000	3,317	3,317	0	3,249	1,233	581	300
	Jul 2005	SRF 2002	3,424	3,424	0	10,789	808	872	500
	Dec 2005	SBA 2002	10,789	10,789	0	0	794	622	200
Indonesia	Jun 2006	EFF 1998, 2000	5,132	2,550	2,473	2,473	730	491	n.a.
	Oct 2006	EFF 1998, 2000	2,154	2,154	0	0	673	528	n.a.
Korea	Apr-Sep 1999	SRF 1997	6,400	5,650	0	4,463	769	734	350
	Jan-Aug 2001	SBA 1997	4,463	4,463	0	0	745	556	n.a.
Mexico	Aug 1996-Apr 1997	EFF 1989, SBA 1995	10,265	2,604	7,094	7,094	1,372	454	n.a.
	Aug 2000	EFF 1989, SBA 1995, 1999	2,431	2,293	0	0	949	538	n.a.
Russia	Dec 1999	SRF 1998	338	338	0	11,102	3,417	794	350
	Sep-Nov 2001	CCFF 1998	2,157	1,887	0	5,973	1,350	418	n.a.
	Jan 2005	EFF 1996	2,294	2,188	0	0	646	313	n.a.
Thailand	Feb-Jul 2003	SBA 1997	275	269	0	0	391	252	n.a.
Turkey	Feb 2002	SRF 2000	4,916	4,483	0	13,643	1,130	621	350
Uruguay	Jul 2004	SRF 2002 June	64	27	37	1,627	1,176	736	450
	Dec 2004	SRF 2002 August	37	37	0	1,806	866	752	450
	Dec 2004-Sep 2005	SBA 2002	1,730	459	1,612	1,612	866	502	200
	Mar-Nov 2006	SBA 2002, 2005	1,609	1,781	0	0	688	673	200

Source: Finance Department, IMF.

1/ Early repurchases are payment expectations that arise under the Fund's early repurchase policy, and are determined by a decision of the Board. Advance repayments refer to voluntary payments made by the member at least five days ahead of the date scheduled for repayment approved by the Board. Korea is the only country in this sample that made early repurchases.

2/ Values in column "Credit Outstanding Prior to Repurchases" may not be equal to the sum of values in columns "Advance and Early Repurchases" and "Credit Outstanding Following Repurchases" owing to repurchases made on schedule and/or to purchases under the arrangement.

3/ End-month data prior to the first advance repurchase. EMBIG yield are derived from U.S. dollar-denominated instruments. Cost of Fund credit corresponds to the adjusted rate of charge plus applicable surcharges. 'n.a.' denotes that no surcharges were applicable.

Table II. 2. Purchases and Repurchases Under Expectations Schedule in Stand-By Arrangements (January 2003–November 2008)

(in SDR million, unless otherwise indicated)

	January 1, 2003 through March 31, 2005 1/				April 1, 2005 through June 30, 2007 1/				July 1, 2007 through November 30, 2008			
	Repurchase Expectations			Purchases	Repurchase Expectations			Purchases	Repurchase Expectations			Purchases
	Arising 2/	Extended 3/	Met 4/		Arising 2/	Extended 3/	Met 4/		Arising 2/	Extended 3/	Met 4/	
Argentina	3,594.7	3,403.5	191.1	6,345.5	5,403.7	1,683.1	3,720.6	-	-	-	-	-
Bolivia	-	-	-	101.8	75.7	-	75.7	9.7	-	-	-	-
Bosnia	34.8	-	34.8	36.0	58.4	-	58.4	-	4.5	-	4.5	-
Brazil	2,501.7	664.8	1,836.9	7,307.8	2,502.8	-	2,502.8	-	-	-	-	-
Bulgaria	29.0	-	29.0	156.0	185.0	-	185.0	-	-	-	-	-
Dominica	0.5	0.5	-	0.9	1.5	1.3	0.2	-	0.2	-	0.2	-
Dominican Republic	-	-	-	183.9	99.6	-	99.6	231.2	139.0	-	139.0	154.1
Ecuador	70.9	47.2	23.6	60.4	99.1	-	99.1	-	-	-	-	-
Gabon	-	-	-	41.7	15.6	-	15.6	-	24.3	-	24.3	-
Jordan	2.7	-	2.7	-	8.0	-	8.0	-	-	-	-	-
Macedonia, FYR	-	-	-	20.0	13.0	11.0	2.0	10.5	-	-	-	-
Pakistan	412.5	-	412.5	-	52.5	-	52.5	-	-	-	-	-
Papua New Guinea	47.2	26.0	21.2	-	9.4	-	9.4	-	-	-	-	-
Romania	53.2	-	53.2	165.3	219.3	-	219.3	-	27.6	-	27.6	-
Serbia, Republic of	125.0	18.8	106.3	-	75.0	-	75.0	-	-	-	-	-
Sri Lanka	120.6	76.7	44.0	-	30.2	-	30.2	-	-	-	-	-
Turkey	8,522.2	4,422.4	4,099.8	1,984.8	4,249.4	2,520.7	1,728.7	4,413.6	1,570.1	-	1,570.1	2,248.4
Uruguay	368.3	226.6	141.6	876.8	748.8	540.9	208.0	263.6	-	-	-	-
Total	**15,883.2**	**8,886.4**	**6,996.7**	**17,281.0**	**13,847.1**	**4,756.9**	**9,090.2**	**4,928.5**	**1,765.6**	**-**	**1,765.6**	**2,402.5**
Memorandum Item:												
In percent of arising		55.9	44.1	108.8		34.4	65.6	35.6		-	100.0	136.1

Source: Finance Department, IMF.

1/ Length of period (2¼ years) corresponds to grace period for each purchase under Stand-By Arrangements; after this period repurchases under the expectation schedule start to become due.
2/ Total repurchases under the expectations schedule (as of the beginning of the period) falling due in the next 2¼ years. Total repurchases during the period could be higher owing to the repurchases under obligation basis.
3/ Value of repurchases switched from expectations to obligation schedule during the period.
4/ Repurchase made under the expectations schedule, excluding any repurchase made of amounts arising in subsequent periods (i.e., excluding advance repurchases).