

**FOR  
AGENDA**

EBS/08/119  
Supplement 1

CONFIDENTIAL

November 4, 2008

To: Members of the Executive Board

From: The Secretary

Subject: **Hungary—Assessment of the Risks to the Fund and the Fund's  
Liquidity Position**

The attached paper on an assessment of Hungary's risks to the Fund and the Fund's liquidity position is being issued as a supplement to the paper on Hungary's request for a Stand-By Arrangement (EBS/08/119, 11/4/08), which is tentatively scheduled for discussion on **Thursday, November 6, 2008**. At the time of circulation of this paper to the Board, the Secretary's Department has received a communication from the authorities of Hungary indicating that they consent to the Fund's publication of this paper.

Questions may be referred to Mr. Visconti, FIN (ext. 34228) and Mr. Arvanitis, SPR (ext. 36054).

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## INTERNATIONAL MONETARY FUND

**Hungary—Assessment of the Risks to the Fund and the Fund's Liquidity Position**

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

In consultation with other Departments

Approved by Andrew Tweedie and Adnan Mazarei

November 4, 2008

1. **This note assesses the risks to the Fund arising from the proposed Stand-By Arrangement (SBA) with Hungary and its effects on the Fund's liquidity, in accordance with the policy on exceptional access.**<sup>1 2</sup> The authorities are requesting a 17-month SBA with access of SDR 10.5 billion (1,015 percent of quota). Proposed access is front-loaded, with SDR 4.2 billion (406 percent of quota) available upon approval, and SDR 2.1 billion (203 percent of quota) available in February 2009 (Table 1). The remaining access is phased in three quarterly purchases of SDR 1.3 billion (122 percent of quota), and a final purchase of SDR 0.4 billion (41 percent of quota) scheduled for February 2010.

**Table 1. Hungary: Proposed SBA—Access and Phasing**

Availability	Date 1/	SDR mn	Purchases	
			Percent of quota	
			Annual	Cumulative
2008	November (Approval)	4,215.0	405.9	405.9
2009	February	2,107.5	203.0	608.9
	May	1,264.5	121.8	730.6
	August	1,264.5	121.8	852.4
	November	1,264.5	121.8	974.2
2010	February	421.5	40.6	1,014.8
	Total	10,537.5	1,014.8	1,014.8

Source: Finance Department.

1/ Starting from February 2009, purchases will depend on the completion of a review.

<sup>1</sup> See *The Acting Chair's Summing Up of the Review of Access Policy Under the Credit Tranches and the Extended Fund Facility, and Access Policy in Capital Account Crises—Modifications to the Supplemental Reserve Facility and Follow-Up Issues Related to Exceptional Access Policy* (BUFF/03/28, 3/5/03).

<sup>2</sup> The analysis in this supplement is based on information on Fund arrangements as of end-September 2008. Except where specifically noted, it does not take into account the effects of other arrangements that may be put forward for the consideration of the Board in the near term.

## I. BACKGROUND

2. **Hungary has had an extensive financial relationship with the Fund since becoming a member in May 1982, but it has not borrowed from the Fund since 1993.** Purchases from the General Resources Account (GRA) were made under five SBAs, one extended arrangement, and three uses of the Compensatory Financing Facility during 1982 to 1993 (Table 2). Hungary's last arrangement with the Fund was its sixth SBA expiring in February 1998, and no purchases were made under this arrangement which was entered into on a precautionary basis. Total Fund credit to Hungary peaked at SDR 972 million in 1984-85, fell to SDR 174 million in 1990, rose again to SDR 908 million in 1993, and declined thereafter until full repayment in 1998 (Figure 1).

**Table 2. Hungary: Actual and Projected Use of Fund Resources, 1982–2015**  
(In millions of SDRs)

Year	Type of Facility	Date of Arrangement 1/	Date of Expiration or Cancellation	Amount Approved	Amount Drawn	Purchases	Repurchases 2/	Fund Exposure 3/
1982	SBA, CFF	8-Dec-1982	7-Jan-1984	547.0	547.0	214.5	0.0	214.5
1983						332.5	0.0	547.0
1984	SBA	13-Jan-1984	12-Jan-1985	425.0	425.0	425.0	0.0	972.0
1985						0.0	88.3	883.7
1986						0.0	41.0	842.7
1987						0.0	272.9	569.9
1988	SBA	16-May-1988	30-Jun-1989	265.4	215.4	165.4	263.9	471.3
1989						50.0	174.2	347.1
1990	SBA	14-Mar-1990	19-Feb-1991	159.2	127.4	127.4	242.8	231.7
1991	EFF, CFF	20-Feb-1991	15-Sep-1993	1,340.2	783.4	703.8	55.3	880.2
1992	CFF	26-Mar-1992	26-Mar-1992	38.8	38.8	118.4	122.8	875.8
1993	SBA	15-Sep-1993	14-Dec-1994	340.0	56.7	56.7	36.2	896.3
1994						0.0	114.7	781.6
1995						0.0	522.9	258.7
1996						0.0	140.0	118.7
1997	SBA	15-Mar-1996	14-Feb-1998	264.2	0.0	0.0	0.0	118.7
1998						0.0	118.7	0.0
...								
...								
2008	4/	SBA	6-Nov-2008	10,537.5		4,215.0	--	4,215.0
2009	4/					5,901.0	--	10,116.0
2010	4/					421.5	--	10,537.5
2011	4/					--	--	10,537.5
2012	4/					--	3,372.0	7,165.5
2013	4/					--	5,216.1	1,949.4
2014	4/					--	1,896.8	52.7
2015	4/					--	52.7	0.0

Source: Finance Department.

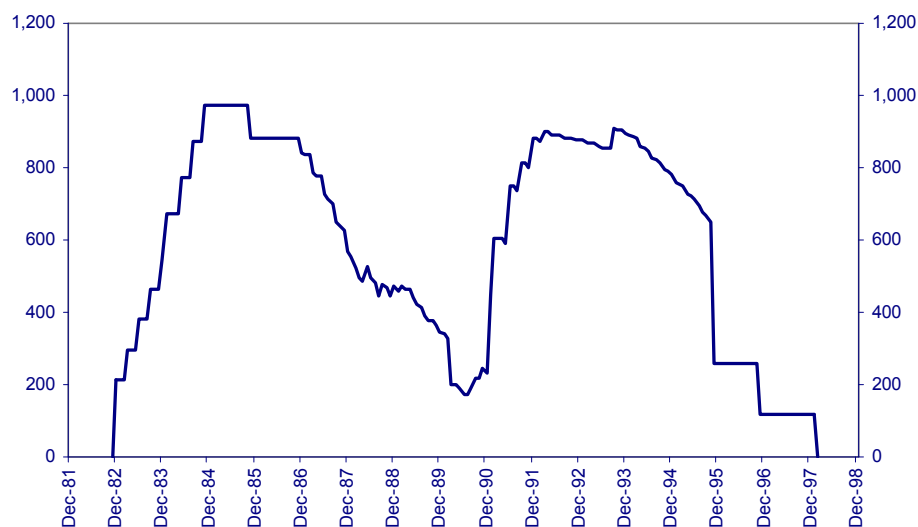
1/ Includes purchases under the Compensatory Financing Facility.

2/ Projected repurchases follow obligations schedule.

3/ As of end-December, unless otherwise indicated.

4/ Figures under the proposed program in italics.

**Figure 1. Hungary: IMF Credit Outstanding, 1981-1998**  
(In millions of SDRs)



Source: IFS.

3. **Notwithstanding the significant progress in fiscal consolidation achieved in recent years, the current global financial crisis has hit Hungary particularly hard.** This reflects the significant vulnerabilities arising from Hungary's high public debt and large external debt and debt service requirements. As of end-2007, Hungary's public debt was about 66 percent of GDP, which ranks highest among the emerging market members of the European Union (see Figure 3 of the staff report). Total external debt is projected to be 106 percent of GDP at end-2008 (Table 3), which is higher than all but one of the five recent exceptional access cases (Table 4).<sup>3 4</sup> Given the size and maturity structure of external debt, total external debt service in 2008 is estimated at 28 percent of GDP (€ 29 billion), with public debt accounting for about one-sixth of external debt service. As discussed in the staff report, these high public and external debt burdens have increased the impact of global deleveraging on Hungary, and especially on the Hungarian banking system.

<sup>3</sup> Hungary's external debt includes intercompany loans for FDI, which are projected to account for 20 percent of total external debt at end-2008. Public external debt comprises foreign-currency and domestic-currency denominated debt to non-residents, with foreign-currency denominated debt projected to represent 18.5 percent of GDP at end-2008, equivalent to one-half of total public external debt.

<sup>4</sup> The exceptional access cases used as comparators in this paper are five of the six arrangements approved since the exceptional access procedures were put in place (Argentina, Brazil, Georgia, Turkey, and Uruguay). The 2008 extended arrangement for Liberia also involved exceptional access. However, this arrangement was different from other exceptional access cases since, in this case, exceptional access was granted in the context of Liberia's clearance of arrears to the Fund.

**Table 3. Hungary: External Debt, 2005–2008**

		2005	2006	2007	2008 1/
(In millions of euros)					
Total External Debt		66,608	81,428	98,266	112,951
of which :	Public	26,440	30,376	33,415	39,894
	Private	40,168	51,052	64,851	73,057
Net External Debt		30,372	38,280	48,756	54,696
(In percent of GDP)					
Total External Debt		75.0	90.4	97.2	106.4
of which :	Public	29.8	33.7	33.0	37.6
	Private	45.2	56.7	64.1	68.8
Net External Debt		34.2	42.5	48.2	51.5

Sources: Hungarian authorities and IMF staff estimates.

1/ Projected to end-2008.

**Table 4. Debt Ratios in Recent Exceptional Access Cases 1/**  
(In percent of GDP)

	Total External Debt	Public External Debt	Debt to IMF
Argentina (2003)	129.0	82.5	12.2
Brazil (2003)	38.6	21.5	5.1
Turkey (2005)	35.0	17.8	3.0
Uruguay (2005)	82.0	60.8	13.8
Georgia (2008) 2/	34.6	21.0	2.8
Hungary (2008) 3/	106.4	37.6	4.2

Sources: Board Documents and IMF staff estimates.

1/ Ratios for the year indicated in parenthesis. Year in parenthesis corresponds to the year of approval of the last IMF arrangement with each country.

2/ Projected for end-2008, including PRGF resources.

3/ Projected for end-2008, assuming first drawing under proposed SBA.

## II. THE NEW SBA—RISKS AND IMPACT ON FUND FINANCES

### A. Risks to the Fund

4. **Hungary's proposed access is relatively high and front-loaded compared with recent exceptional access cases.**<sup>5</sup> Hungary's outstanding use of the Fund's GRA resources would reach 406 percent of quota upon approval, and continue to rise to 1015 percent of quota in February 2010. Relative to quota, the peak exposure to Hungary would exceed all recent exceptional access cases aside from Turkey (Figure 2, panel A). While Hungary's proposed access level lies between those proposed for Iceland and Ukraine, Hungary's access is more front-loaded (Figure 2, panel B).

5. **If the proposed SBA is drawn in full, Hungary's total outstanding use of Fund resources will represent 10 percent of GDP.** Access under the proposed SBA is much greater than Hungary's previous exposures to the Fund (Table 2). From its first purchase, Hungary's outstanding use of Fund resources would be 4.2 percent of GDP, higher than the comparable ratios for all the current large users of Fund resources as of end-September 2008, except for Liberia (Table 5). Hungary's outstanding use of Fund resources in terms of GDP would reach about 10 percent upon completion of the arrangement in early 2010 (Table 6), roughly in the middle of recent exceptional access cases (Table 4).

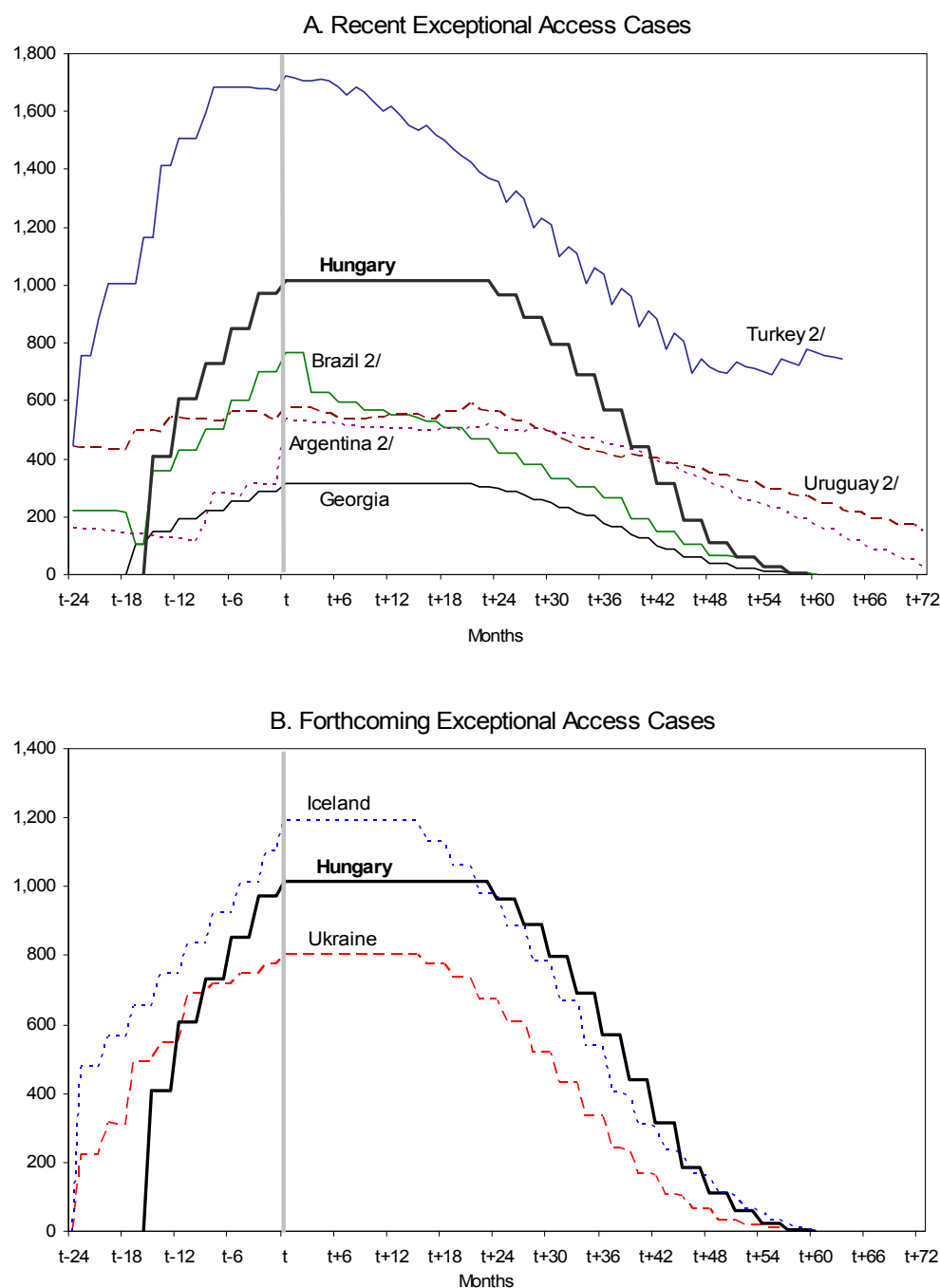
6. **The Fund will account for a significant share of Hungary's public external debt and debt service if the proposed SBA is fully drawn.** By end-2008, Hungary's outstanding use of Fund resources would account for 11 percent of public external debt, rising to 22 percent by end-2009 (Table 6). Given Hungary's already large debt service burden, payments to the Fund would put further strains on its external debt servicing capacity, with projected service under the proposed SBA peaking in 2013 at SDR 5.5 billion, accounting for 34 percent of public external debt service (5 percent of exports of goods and services).<sup>6</sup>

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<sup>5</sup> Currency holdings resulting from scheduled purchases under the proposed SBA would be subject to level-based surcharges of 100 basis points over the basic rate of charge (adjusted for burden sharing) on credit outstanding exceeding 200 percent of quota, and surcharges of 200 basis points on credit outstanding exceeding 300 percent of quota, from the approval of the arrangement until October 2013.

<sup>6</sup> The figures on debt service used in this report correspond to the schedule on an obligations basis, in line with the guidelines stipulated in Review of Fund Facilities—Proposed Decisions and Implementation Guidelines (EBS/00/216, 11/3/00). Under the obligations schedule, the first repurchase is scheduled to take place in February 2012, 3¼ years after the first purchase under the arrangement. Under the policy on time-based repurchase expectations, there is an expectation that repurchases of holdings resulting from purchases in the credit tranches and the EFF, including under exceptional access, will adhere to the expectations schedule, and an extension from the expectations to the obligations schedule would require a decision by the Executive Board.

**Figure 2. Fund Credit Outstanding in the GRA around Peak Borrowing 1/**  
(in percent of quota)



Source: IFS, Finance Department, and IMF staff estimates.

1/ Peak borrowing is defined as the highest level of credit outstanding for a member, in percent of quota. Month  $t$  represents the month of the highest historical credit outstanding (in percent of quota). For Argentina,  $t$  is September 2001; for Brazil, September 2003; for Turkey, April 2003; and for Uruguay, August 2004. For Georgia,  $t$  would be reached in February 2010. For the countries in Panel B,  $t$  would be reached in February 2010 in the case of Hungary, and October 2010 in the cases of Iceland and Ukraine. For comparability, projected repurchases are assumed to be on an obligations basis.

2/ Projected repurchases (on an obligation basis) as of May 2005. Schedules do not show large early repurchases made by Argentina, Brazil, and Uruguay in 2005-06.



**Table 5. Fund GRA Exposures**

	SDR Millions	Quota	GDP 3/	In Percent of	
				Total GRA Credit	
				As of end-Sep. 2008	After approval of arrangements in panel B 4/
A. Top five borrowers as of end-September 2008					
Turkey 1/	5,898.7	495.1	1.2	77.9	38.4
Dominican Republic 1/	350.2	160.0	1.2	4.6	2.3
Liberia 1/	342.8	265.3	59.4	4.5	2.2
Sudan 1/	220.9	130.2	0.6	2.9	1.4
Georgia 1/	161.7	107.6	2.0	2.1	1.1
B. Forthcoming exceptional access cases					
Iceland 2/	560.0	476.2	5.1	...	3.6
Hungary 2/	4,215.0	405.9	4.2	...	27.5
Ukraine 2/	3,073.1	224.0	2.6	1.0	20.0

Sources: Finance Department and IMF staff estimates.

1/ Fund credit outstanding as of September 30, 2008.

2/ Fund credit outstanding after the first purchases of the proposed SBA. For Ukraine, includes credit outstanding as of end-September 2008.

3/ Staff projections to end-2008.

4/ Numerator is Fund credit outstanding as of end-September 2008 for countries in panel A, and Fund credit outstanding as of end-September 2008 plus the first purchase under the proposed SBA for countries in panel B. Denominator is the sum of total Fund GRA credit outstanding as of end-September 2008 and the first purchases of the three proposed arrangements in panel B.

**7. Moreover, there are considerable risks to Hungary's capacity to repay the Fund. The main risks would include:**

- **Accelerated capital outflows.** The program is based on certain rollover rates for the funding of foreign-owned banks and for other debts—including those of domestic banks—which, if not realized, could lead to exchange rate overshooting, exacerbating pressures on households, corporates, and banks, and causing a sharper-than-envisaged slowdown in growth. The resulting deterioration in private sector balance sheets would undermine prospects for rebuilding foreign reserves.
- **The process of global deleveraging.** It is very difficult to predict the impact of current developments in international financial markets on investors' exposure to emerging markets in the medium-term. The depth and pace of recovery from global deleveraging will have a bearing on Hungary's ability to mobilize resources from international capital markets.
- **Inadequate program implementation.** Notwithstanding the recent progress in fiscal consolidation and the improvement in the external current account, it will be challenging to sustain the envisaged fiscal adjustment in the context of a sharp slowing in growth and given the government's lack of a parliamentary majority.

**Table 6. Hungary—Impact on GRA Finances**  
(in millions of SDRs, at end of period unless otherwise noted)

	2008	2009	2010	2011	2012	2013	2014	2015	
<b>Exposure</b>									
Fund GRA credit outstanding to Hungary 1/	4,215.0	10,116.0	10,537.5	10,537.5	7,165.5	1,949.4	52.7	0.0	
Fund GRA credit outstanding to Hungary (percent of quota) 1/	405.9	974.2	1,014.8	1,014.8	690.1	187.7	5.1	0.0	
Fund GRA credit outstanding to Hungary (percent of total GRA credit outstanding) 2/	27.5	...	...	...	...	...	...	...	
Fund GRA credit outstanding to five largest debtors (percent of total GRA credit outstanding) 2/	91.9	...	...	...	...	...	...	...	
<b>Liquidity</b>									
One-year Forward Commitment Capacity (FCC) 3/	127,615.8	...	...	...	...	...	...	...	
Hungary's impact on FCC 4/	(10,537.5)	...	...	...	...	...	...	...	
<b>Prudential measures</b>									
Fund GRA credit outstanding to Hungary (percent of current precautionary balances) 5/	60.7	...	...	...	...	...	...	...	
<b>Debt and Debt Service Ratios 6/</b>									
Hungary's GRA credit outstanding (percent of total public external debt)	11.1	21.8	21.0	20.1	14.6	4.4	0.1	0.0	
Hungary's GRA credit outstanding (percent of GDP)	4.2	10.8	10.2	9.5	6.0	1.5	0.0	0.0	
Hungary's GRA credit outstanding (percent of gross international reserves)	22.7	53.2	53.5	46.7	27.6	6.8	0.2	0.0	
Hungary's GRA debt service to the Fund (percent of exports of goods and services)	0.0	0.4	0.6	0.6	3.9	5.1	1.7	0.0	∞
Hungary's GRA debt service to the Fund (percent of total public external debt service)	0.4	5.0	7.4	6.3	26.8	33.7	14.0	0.5	
<b>Memorandum items</b>									
Fund's precautionary balances 5/	6,938.6	...	...	...	...	...	...	...	
Fund's residual burden sharing capacity 7/	110.0	...	...	...	...	...	...	...	
Projected payment of charges to the Fund on GRA credit outstanding	21.1	355.0	538.5	542.4	486.0	244.5	36.8	0.5	
Projected debt service payments to the Fund on GRA credit outstanding	21.1	355.0	538.5	542.4	3,858.0	5,460.5	1,933.5	53.2	

Sources: Hungarian authorities, Finance Department, World Economic Outlook, and IMF staff estimates.

1/ Repurchases follow obligations schedule.

2/ Reflects Fund credit outstanding as of September 30, 2008, plus first purchases by Hungary, Iceland, and Ukraine.

3/ As of September 30, 2008. The Forward Commitment Capacity is a measure of the resources available for new financial commitments in the coming year, equal to usable resources plus repurchases one-year forward minus the prudential balance.

4/ A single country's negative impact on the FCC is defined as the country's sum of Fund credit and undrawn commitments minus repurchases one-year forward. It does not incorporate the possibility that Hungary would not remain the Financial Transactions Plan.

5/ As of end-April 2008.

6/ Staff projections for total public external debt, GDP, gross international reserves, and exports of goods and services, as used in the staff report that requests the proposed SBA.

7/ Estimated based on end-September data and taking into account the first purchases of Hungary, Iceland and Ukraine under their proposed programs. Burden-sharing capacity is calculated based on the floor for remuneration at 85 percent of the SDR interest rate. Residual burden-sharing capacity is equal to the total burden-sharing capacity minus the portion being utilized to offset deferred charges and takes into account the loss in capacity due to nonpayment of burden sharing adjustments by members in arrears.

## B. Impact on Fund Finances

8. **The proposed arrangement would have a significant impact on the Fund's liquidity.**<sup>7</sup> The proposed SBA would reduce the one-year forward commitment capacity (FCC) by SDR 10.5 billion, about 8 percent of the FCC of SDR 127.6 billion as of end-September (Table 6).<sup>8</sup> Moreover, in light of the sharp weakening in Hungary's external position, it would be proposed that Hungary be excluded from the forthcoming Financial Transactions Plan. Hungary's exclusion would have the effect of reducing the FCC by an additional SDR 0.8 billion.

9. **Hungary may become the second largest exposure in the Fund's lending portfolio.** Assuming that first purchases are also made under the proposed arrangements for Iceland and Ukraine, Hungary's share of total Fund credit outstanding would be about 27 percent, second only to Turkey (Table 5). The share of total credit extended to the top-five borrowers was 92 percent as of end-September 2008, and this measure of portfolio concentration would be almost unchanged following the first purchases under these proposed arrangements (Table 6). Nonetheless, the concentration of the Fund's lending portfolio could change significantly if additional arrangements are approved.

10. **Potential GRA exposure to Hungary would also be high relative to the Fund's precautionary balances.** After the first purchase, GRA credit to Hungary would be equivalent to 61 percent the Fund's precautionary balances as of end-April 2008 (Table 6), and this exposure would rise to about 150 percent of current precautionary balances if the proposed SBA is fully drawn.

11. **If Hungary were to incur arrears on the charges accruing on its GRA obligations the Fund's burden-sharing capacity could be exceeded.**<sup>9</sup> Charges on Hungary's GRA obligations are projected at SDR 355 million in 2009, well in excess of estimates of the Fund's residual burden-sharing capacity assuming that first purchases are also made under

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<sup>7</sup> Indicators of Fund liquidity, adequacy of reserves, and impact on the burden-sharing mechanism are likely to change in light of some potentially large arrangements already agreed or under negotiation.

<sup>8</sup> The FCC is the principal measure of Fund liquidity. The (one-year) FCC indicates the amount of quota-based, nonconcessional resources available for new lending over the next 12 months. See The Fund's Liquidity Position-Review and Outlook, EBS/02/177 (10/15/02); BUFF/02/179 (11/4/02); and BUFF/02/68 (5/15/02). Following the creation of the Short-term Liquidity Facility (SLF), the calculation of the FCC will exclude repurchases falling due under the SL—see A New Facility for Market Access Countries—The Short-term liquidity Facility—Proposed Decision, SM/08/324, Supplement 1, (10/27/08).

<sup>9</sup> Under the burden-sharing mechanism, the financial consequences for the Fund arising from overdue financial obligations are shared between creditors and debtors through a decrease in the rate of remuneration and an increase in the rate of charge, respectively. The mechanism is used to accumulate precautionary balances in the special contingent account (SCA-1) and to compensate the Fund for a loss in income when debtors do not pay charges. The Executive Board has set a floor for remuneration at 85 percent of the SDR interest rate. No corresponding ceiling applies to the rate of charge. The adjustment for the SCA-1 was suspended, effective November 1, 2006, by the Executive Board (Decision No. 13858-(07/1), adopted January 3, 2007).

the proposed arrangements for Iceland and Ukraine (Table 6). However, the impact on the Fund's burden sharing capacity of potential overdue charges on outstanding purchases from this arrangement would decline if the Fund's loan portfolio were to expand.

### III. ASSESSMENT

12. **The proposed arrangement with Hungary entails significant financial risks to the Fund.** Access proposed under the arrangement aims to strengthen confidence in Hungary's ability to address the present environment of global deleveraging by bolstering its reserve position and thereby providing breathing space for the macroeconomic adjustment envisaged under the program to take hold and minimizing the risk of a run on Hungary's debt and currency markets. However, the proposed access represents a significant share of the Fund's liquidity, is at the high end of recent exceptional access cases, and is relatively front-loaded. A range of factors may impair Hungary's capacity to repay the Fund, including the potential for accelerated capital outflows in case of lower-than-expected rollover rates on external obligations, while challenges in program implementation could undermine the rebuilding of investor confidence. Hungary may also face difficulties in repaying the Fund on account of potential difficulties in securing adequate capital market access, against the background of Hungary's already high debt burden and the possibility that the pace of recovery from global deleveraging will be gradual, although such difficulties may be moderated by the continuing integration of Hungary's economy into the European Union. The Hungarian authorities' resolve to adhere to the policies contemplated in the proposed arrangement, their commitment to maintaining fiscal discipline in the long-term, and their readiness to take additional measures as appropriate to ensure the achievement of the objectives of their economic program, are key to mitigating these risks and safeguarding Fund resources.