

INTERNATIONAL MONETARY FUND

**Financial Risk in the Fund and the Level of Precautionary Balances**

Prepared by the Finance Department

(In consultation with other departments)

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## I. INTRODUCTION<sup>1</sup>

1. This paper examines financial risk in the Fund and the level of precautionary balances. At the 2002 review of the Fund's policy on precautionary balances, Executive Directors supported a doubling of the target for precautionary balances to some SDR 10 billion, and the maintenance of the present system of accumulating these balances. Also at that time, the Board called for a further review to determine whether a more analytical approach for assessing the appropriate level of precautionary balances in the General Resources Account could be formulated. The rationale for holding precautionary balances and for assessing their adequacy depends heavily on the Fund's risk containment policies and characteristics of the Fund's exposure. Thus, the decision taken by the Board in 2002 on the target for precautionary balances is examined in this broader context.

2. The paper is organized as follows: Section II briefly reviews the Fund's financial structure and the policies that safeguard the use of Fund resources. Section III discusses the level and evolution of Fund exposure and the implications for the financial risks the Fund faces. Section IV summarizes different possible approaches to assessing the target level of precautionary balances. Section V summarizes the main conclusions of the paper. Section VI outlines issues for discussion for Executive Directors. A background paper<sup>2</sup> provides comparisons of the various approaches to risk management pursued by different classes of financial institutions and relatedly describes credit risk modeling techniques based on value-at-risk (VaR) approaches and financial scenario analysis.

## II. FUND FINANCIAL OPERATIONS AND POLICIES ON USE OF FUND RESOURCES AND MITIGATING RISK

3. This section briefly describes the Fund's financial structure and financing through the General Resources Account as a backdrop for discussing the policies in place governing use of Fund resources while mitigating financial risk.

### A. The Fund's Financial Structure

4. **The Fund is a cooperative intergovernmental financial institution of 184 member countries and the responsibilities of the Fund to those members as set out in its Articles are as follows:**<sup>3</sup>

- To give confidence to them by making the general resources of the Fund temporarily available to members under adequate safeguards, thus providing them with

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<sup>1</sup> This paper was prepared by Ydahlia Metzgen, Sheila Bassett, Frank Lakwijk, Paul Ross, Sherwyn Williams, Sarosh Khan, and Anna Ter-Martirosyan.

<sup>2</sup> See *Financial Risk in the Fund and the Level of Precautionary Balances—Background Paper*.

<sup>3</sup> See Article I of the IMF's Articles of Agreement.

opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity; and

- In accordance with the above, to shorten the duration and lessen the degree of disequilibrium in the international balances of payments of members.

These responsibilities confer special features on the Fund as a financial institution. Most notably, the Fund's lending has a public goods purpose to promote stability in the international financial system. In this context, the Fund provides financing to members experiencing balance of payments difficulties to help restore confidence and macroeconomic stability necessary for sustained economic growth. The recent significant changes in Fund policies on access aim to meet the financing needs of Fund members in light of capital account crises while safeguarding Fund resources as discussed below.

5. **Member governments and other creditors have agreed to treat the Fund as a preferred creditor to help achieve its purposes.** Preferred creditor status is fundamental to the Fund's financial responsibilities and the Fund's financing mechanism as this means that members give priority to repayment of their obligations to the Fund over other creditors thus protecting the reserve assets that other members have placed in the custody of the Fund. Preferred creditor status has been recognized as benefiting not just Fund members but official and private creditors alike by allowing the Fund to assist member countries in regaining a sustainable financial path and helping to promote orderly resolutions to debt problems, when needed (Box 1).

6. **Table 1 provides a snap shot of the Fund's General Resources Account (GRA).<sup>4</sup> The balance sheet reveals some basic relationships:**

- Credit outstanding is broadly equal to members' reserve tranche positions.
- The pool of resources available to the Fund from quota subscriptions is not all used for financing. This pool of resources is revolving and some of it has already been used. In addition, some currencies cannot be used for financing.
- Precautionary balances consisting of reserves and balances in the Special Contingent Account (SCA-1) are less than 10 percent of credit outstanding.
- Gold provides fundamental strength to the Fund's balance sheet. However, the External Audit Committee has indicated that it would not be appropriate to include the Fund's gold holdings in the definition of precautionary balances.

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<sup>4</sup>Low income countries may also borrow through the Poverty Reduction and Growth Facility (PRGF) at a concessional interest rate. This facility, where the Fund serves as trustee, is separate from the GRA.

Table 1. Balance Sheet of the General Resources Account, as of October 31, 2003

(In billions of SDRs)

Assets		Resources and Liabilities	
Credit outstanding	69.8	Quota subscriptions represented by:	
Useable currencies	95.0	Reserve tranche positions	71.1
Other currencies	46.7	Useable currencies	95.0
Total currencies	211.5	Other currencies	46.7
		Total quotas	212.8
		Precautionary balances <sup>1</sup>	6.0
		Reserves of the GRA	4.5
		SCA-1	1.5
SDR holdings	0.7	Other liabilities	0.5
Gold holdings	5.8		
Other assets	1.3		
Total GRA	219.3	Total GRA	219.3

Source: Financial Statements, International Monetary Fund (<http://www.imf.org/external/fin.htm>).

<sup>1</sup>After adjusting for IAS 19 related accounting gains.

7. **GRA financing and repayment are effected through a “purchase-repurchase” mechanism.** The borrowing member purchases from the Fund currencies of members in strong financial positions (which are reserve assets or currencies to be converted into reserve assets) in exchange for its own currency. The Fund has a claim on the borrowing member to repurchase its currency (represented by the use of Fund credit on the asset side of the balance) in exchange for reserve assets. The other member that provided the reserve assets has a claim on the Fund, called a reserve tranche position shown on the liability side of the balance sheet. The currency that is provided in the financing is either a freely usable currency (U.S. dollar, euro, Japanese yen, and pound sterling) or the creditor member (if so requested by the borrowing member) exchanges its currency for a freely usable currency. Creditor members’ reserve tranche claims can be encashed upon demand to obtain a freely usable currency from the Fund.

### **Box 1. The Fund's Preferred Creditor Status**

Preferred creditor status refers to members' willingness to accord the Fund priority when paying debts, and the agreement or acquiescence of other creditors to this situation. It is reflected in the fact that (i) members have generally remained current on their obligations to the Fund while they were incurring arrears or received debt rescheduling or debt reduction from other creditors; and (ii) the value of the Fund's financial claims in the GRA on members has never been reduced. This forbearance is exercised by creditors for policy reasons and creditors have not legally subordinated their claims to those of the Fund.

The concept of the Fund's preferred creditor status is confirmed in the Paris Club, where official bilateral creditors exclude the multilateral financial organizations from the rescheduling process. The rationale for this is to insulate multilateral financial organizations from the risk of nonpayment and restructuring so that they can provide financing, without risk premia or collateral, when other creditors would not be willing to do so.

The Fund, in particular, provides balance of payments support to allow members to adjust without resorting to measures that are destructive to national and international prosperity. Since Fund-supported programs provide a framework of policies for medium-term balance of payments viability, the existence of such programs has been considered essential by creditors to provide assurances that the sovereign would have the capacity to repay any restructured debt over the medium term. From the sovereign debtor's perspective, remaining current with the Fund has also been considered as essential to unlock additional financing—or debt relief—from other official creditors.

Preferred creditor status is important to the Fund and more generally to the international financial community, as its absence would force fundamental changes in the financial conduct of the Fund and the overall functioning of the international financial system. If the Fund were no longer a preferred creditor, the risk on its lending would increase and the funds made available by creditor members could no longer be regarded as risk free. If reserve positions in the Fund are not regarded as fully liquid and of the highest quality, members cannot treat them as part of their international reserves, which is crucial for the Fund's financing mechanism to operate. This in turn would mean that the Fund's financial structure would need to be completely overhauled and the Fund's ability to provide support to members would be critically impaired and subject to interruption, and with it the ability to resolve crises and prevent contagion.

The Fund protects its preferred creditor status and the need for its resources to revolve through a variety of safeguards, including its strategy on overdue financial obligations. Reflecting the cooperative nature of the Fund, in addition to preventive measures, the strategy on overdue financial obligations aims to assist members in clearing arrears to the Fund through intensified collaboration in order to help member countries adapt their policies and obtain financing to clear arrears as soon as possible. In cases where member countries are not actively cooperating with the Fund in seeking a solution to their arrears problems, the Fund's arrears strategy provides for sanctions of increasing intensity, culminating in the compulsory withdrawal from the Fund by the member.

8. **The financing of the Fund is based on an exchange of reserve assets (foreign exchange assets for a reserve tranche position).** Reserve tranche positions are liquid claims on the Fund that earn a market-related rate of interest (remuneration) based on the SDR interest rate,<sup>5</sup> which is covered by the interest paid by members with outstanding credit.<sup>6</sup> All members that provide financing to the Fund under the Financial Transactions Plan (FTP) have the right to call on their reserve tranche and withdraw their funds on very short notice solely upon representation of a balance of payments need (Box 2). Hence, reserve tranche positions have the dual characteristic of being both a part of the Fund's resources and also a part of members' international reserve assets. From the perspective of its members, the financing of the Fund has been safe and entirely risk-free. The SDR-rate based interest paid by the Fund reflects the return on the most creditworthy government paper. Interest paid is thus market based, but does not include a country or credit risk premium.

9. **As the institution that takes the risk, the Fund requires precautionary balances in line with its responsibility to provide financing to members in need but with adequate safeguards to its resources.** Fund financial assistance under the exceptional access criteria gives rise to high exposures and credit concentration which are the inevitable consequence of the Fund's mandate to be responsive to members' balance of payments adjustment and financing requirements under adequate safeguards. Precautionary balances are therefore necessary to provide confidence that members' reserve positions are safe and liquid from a balance sheet perspective (Box 3). It is vital that the soundness of the Fund's balance sheet, and in particular the "risklessness" of the liquid claims on the Fund—members' reserve tranche positions—are beyond question by its external auditors and more generally the Fund's creditor central banks and their auditors, as well as taxpayers and parliaments (Annex I). Precautionary balances also help assure that the Fund will meet International Accounting Standards by establishing value protection on its balance sheet against impaired credit.

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<sup>5</sup>The SDR interest rate is determined weekly and is based on a weighted average of representative interest rates on short-term debt in the money markets of the SDR basket currencies. Currently, the SDR basket currencies are the U.S. dollar, euro, the Japanese yen, and the pound sterling.

<sup>6</sup>A portion of a member's reserve tranche position, equivalent to 25 percent of its end-April 1978 quota (its "gold tranche"), is unremunerated.

**Box 2: The Financial Transactions Plan and Members' Reserve Positions in the Fund:  
Liquid and Riskless Claims**

**The Executive Board adopts a Financial Transactions Plan (FTP) for each upcoming quarter specifying the amounts of SDRs and selected member currencies to be used in purchases and repurchases expected to be conducted through the GRA during that period.**<sup>1</sup> The FTP draws on a wide range of countries reflecting the co-operative nature of the Fund. Participation is based on judgments on the strength of the member's balance of payments and reserve position because the member needs to be able to provide a freely useable currency if requested by the borrowing member. A member's consent to FTP participation is not required.

**In the GRA, the Fund receives reserve assets from members in exchange for a claim on the Fund** (reserve position). For this mechanism to operate, members must be able to consider Fund reserve positions as part of their reserve assets, which means that members must be assured that their reserve positions are fully liquid and readily available for use, if needed.

**The Fund's *Balance of Payments Manual (BPM 5)* defines reserve assets as *external assets that are readily available to and controlled by the monetary authorities for direct financing of payments imbalances. Reserve assets...comprise[s] monetary gold, SDRs, reserve position in the Fund, foreign exchange assets...and other claims....Two issues are paramount in the identification of reserve assets. First,... [that they] are at the effective disposal of monetary authorities. Second,...the assets controlled by the monetary authorities...are available for use—should the necessity arise.***<sup>2</sup>

**The liquidity and usability of members' international reserves are scrutinized by the auditors of monetary authorities that place their reserves with the Fund.** The auditors of the institutions that hold these reserves, usually central banks, will provide an opinion on the fair value of all assets on the balance sheet, including reserve positions in the Fund. For each asset, the auditors will ascertain its liquidity and realizable value. In order for the auditors to provide an opinion that the asset's fair value is equal to its book value, they must be fully confident that these claims are liquid and the realizable value equals book value.

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<sup>1</sup>The *Quarterly Report on Financing IMF Transactions* is posted on the Fund's external website three months after the end of the quarter.

<sup>2</sup>See Section XXI of the *Balance of Payments Manual, Fifth Edition, 1993, International Monetary Fund*.



### **Box 3: The Purposes of Precautionary Balances**

**Precautionary balances protect the Fund and its creditor members in the event that outstanding credit is impaired by providing a cushion to absorb potential losses resulting from non-repayment.** Precautionary balances also provide additional security to lenders under the NAB and GAB.

**Precautionary balances can be used to absorb income losses resulting from unpaid principal and charges.** The burden sharing mechanism has been established to absorb these losses in the first instance, but the capacity of this mechanism could be exceeded when credit outstanding is low and/or if large arrears were to be incurred. If burden sharing capacity were exceeded, the Fund would have two ways to continue paying remuneration to creditor members and administrative expenses: (i) by increasing the rate of charge, which at low levels of credit outstanding would need to be increased significantly, and for which it may be difficult to mobilize the needed 70 percent majority, or (ii) using reserves to absorb the losses.

**Reserves can also be used to absorb other losses unrelated to credit repayment.** Income losses might arise when a low level of credit was outstanding and if the rate of charge could not be raised sufficiently to cover expenses, due to the lack of the needed 70 percent majority. Reserves could also be used to cover expenses incurred because the Fund self-insures for certain risks, e.g., under the medical benefits and pension plans.

10. **An important feature of the Fund's lending is the revolving nature of its financing.** As the external position of a borrowing member improves, the member is obliged to return the resources back to the pool for use by other members. In the last few years, with the advent of large financing packages to help members weather capital account crises, the Fund has introduced policies to supplement the general policy on early repurchases, notably through surcharges and repurchase expectations (Table 2 and Table 3). As discussed below, assuring that the design and implementation of Fund policies on access set incentives for members to repay the Fund quickly as their balance of payments improve is essential to maintaining the revolving nature of Fund resources.

#### **B. Fund Lending Policies**

11. The Fund's Articles charge the Fund with implementing policies on the use of its general resources that will assist members to resolve their balance of payments problems. Since the early 1990s, a number of factors have driven changes in the Fund's financial role: the emergence of sometimes volatile private capital flows as a principal source of financing for emerging market countries; the increasing integration and liberalization of capital markets; and more generally, increasing globalization and growing financial interdependence of its members. In response to the changing global environment and nature of members' balance of payments difficulties the Fund has adapted its policies on Fund facilities, access, and conditionality.

##### **Facilities**

12. **In response to the Asian crisis, changes in access and in the terms of that access in the credit tranches were introduced.** For members facing capital account crises, new facilities with higher access, surcharges and a shorter repayment period, consistent with the

Table 2. Repurchase Expectations and Obligations

Instrument	Due Dates for Repurchases <sup>1</sup>		Installments
	Expectation basis	Obligation basis	
Credit tranches and Compensatory Financing Facility	2¼–4 years	3¼–5 years	8 quarterly
Extended Fund Facility	4½–7 years	4½–10 years	6 semiannual 12 semiannual
Supplemental Reserve Facility <sup>2</sup>	2–2½ years	2½–3 years	2 semiannual
Emergency assistance	None	3¼–5 years	8 quarterly

<sup>1</sup>A member not in a position to meet an expected payment can request the Executive Board to approve an extension up to the corresponding time in the obligations schedule.

<sup>2</sup>Under the initial terms of the SRF from 1997 to March 2003, repayments were expected 1 to 1½ years after each purchase with the possibility of extensions of up to 1 year.

revolving nature of Fund resources, were made available.<sup>7</sup> It was also thought that there was a need for insurance against the risk of contagion.

- a. The Supplemental Reserve Facility (SRF) was established in 1997 and aimed to address short-term disturbances in members with access to private capital markets from which a relatively swift recovery is expected. The SRF supplements resources made available in the credit tranches in order to provide financial assistance for exceptional balance of payments difficulties.
- b. The Contingent Credit Lines (CCL) facility was established in 1999 as a means of providing members with a precautionary line of defense against capital account problems that might arise from contagion. However, the CCL was not taken up and the Executive Board recently allowed the CCL to expire.<sup>8</sup>

13. **In considering the broader implications of capital account crises for the Fund, the link between large access and higher rates of interest on credit provided by the Fund became the underlying principle for Fund support for members requiring large financing packages.** A comprehensive review of Fund facilities showed that improvements

<sup>7</sup>See *IMF Board Completes Review of Fund Financial Facilities* (PIN No. 00/101, 11/30/00) and *Review of Fund Facilities—Follow Up* (8/31/00).

<sup>8</sup>See *IMF Concludes Discussion on the Review of Contingent Credit Lines* (PIN No. 03/146, 11/19/03).

in members' external positions generally were more rapid than envisaged for all types of balance of payments problems. Large access without explicit limits has been introduced under the SRF on the expectation of a short turnaround. Time-based repurchase expectations were also introduced for purchases in the credit tranches and under the EFF and CFF to encourage early repayment of Fund resources as external positions strengthen with the possibility of one-time extensions to an obligations basis (see Table 2).

14. **Finally, in line with the recognition of the need to set incentives for members with exceptional access to Fund resources to repay the Fund promptly when their external positions improved, surcharges above the basic rate of charge were introduced.** Surcharges apply to amounts drawn under the SRF and also—at lower rates—to drawings in the credit tranches and under the EFF above certain limits (Table 3).

Table 3. Charges on Use of GRA Resources

Instrument	Basic rate <sup>1</sup> and surcharges	Service charge <sup>2</sup>	Commitment fee <sup>3</sup>
Stand-by and extended arrangements and first credit tranche	Basic rate plus 100 basis points (b.p.) for portion of credit over 200 percent of quota and 200 b. p. for portion over 300 percent of quota <sup>4</sup>	50 b. p.	25 basis points up to 100% of quota and 10 b. p. for amounts in excess of 100% of quota
Supplemental Reserve Facility	Basic rate plus an initial 300 basis point surcharge, which rises by 50 b. p. 1 year after first purchase and each subsequent six months to a maximum of 500 b. p.	50 b. p.	
Compensatory Financing Facility	Basic rate	50 b. p.	No
Emergency assistance	Basic rate	50 b. p.	No

<sup>1</sup>Set as a proportion of the weekly SDR interest rate and applied to all outstanding GRA credit during each financial quarter.

<sup>2</sup>Levied on each purchase. No service charge is paid on reserve tranche drawings.

<sup>3</sup>For arrangements, charged up front on the amount that may be drawn during each (annual) period. Refunded on a proportionate basis as drawings are made.

<sup>4</sup>Surcharges apply only for credit outstanding as a result of purchases made after November 28, 2000.

## Access

15. **Implementation of access policies is a key risk-mitigating device.** The level of access to GRA resources is based on balance of payments need, the capacity to repay the Fund, the amount of outstanding credit, and the track record in using Fund resources and implementing Fund-supported programs.<sup>9</sup> Quota-based quantitative limits on access are also used to ensure uniform treatment of members. The current limits take the form of an annual limit of 100 percent of quota and a cumulative limit of 300 percent of quota on the level of Fund credit outstanding in the credit tranches and under the EFF. In exceptional circumstances, the Fund may approve access in the credit tranches or under the EFF in excess of the limits. There are no access limits that apply to the SRF.

16. **In response to the risks posed by more integrated financial markets including large and reversing capital flows, the Fund provided large amounts of financing well above the established access limits** (e.g., Mexico in 1995, Asian crisis in 1997–98,<sup>10</sup> Russia in 1998, and more recently, in Brazil, Turkey, Argentina, and Uruguay). In light of this experience, in 2003 the Fund strengthened the **exceptional access framework** to help elaborate clearly the conditions and terms for members' access to Fund resources in capital account crises; and to evaluate capacity to repay the Fund. Under the framework, four substantive criteria would normally have to be met:<sup>11</sup>

- the member is experiencing exceptional balance of payments pressures on the capital account;
- a rigorous and systematic analysis indicates a high probability that debt will remain sustainable;
- the member has good prospects for regaining access to private capital markets within the time Fund resources would be outstanding so that the Fund's financing would provide a bridge; and
- there is a reasonably strong prospect of success for the member's policy program.

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<sup>9</sup>See *The Chairman's Summing Up at the Conclusion of the Discussion on Criteria for the Amount of Access in Individual Cases*, December 6, 1983. These criteria continue to apply, mutatis mutandis, under the current access limits.

<sup>10</sup>Given the size of the problems, Fund financing needed to be combined with large parallel bilateral official financing packages for Mexico and in the Asian crisis which helped to keep access to Fund resources lower than would have been the case in the absence of such financing.

<sup>11</sup>See *IMF Concludes Discussion on Access Policy in the Context of Capital Account Crises; and Review of Access Policies in the Credit Tranches and the Extended Fund Facility* (PIN No. 03/37, 3/21/03).

For purposes of the framework, access under any policy in excess of the limits applying to access in the credit tranches and the EFF is considered exceptional. There was also a strong underlying presumption that exceptional access should be under the SRF rather than on credit tranche terms to strengthen the incentives for temporary use particularly in light of the extension of the maturities under the SRF decided in 2003.

**17. Two requests for exceptional access (Argentina and Brazil) have been approved by the Fund Board under the new procedures.**<sup>12</sup> Key to the decisions taken was separate assessments of (i) the member's adherence to these criteria and (ii) the risks to the Fund and to the Fund's liquidity position. These cases triggered deep debate by Executive Directors on key aspects of the implementation of the exceptional access framework's criteria. Specifically, in the case of Argentina, exceptional access was provided notwithstanding the assessment that the debt sustainability criterion was not met. This decision was consistent with recognition by the Board that where debt restructuring is needed, the substantive criteria for exceptional access in capital account crisis would generally not be met and, in rare circumstances, exceptional access may still be warranted.<sup>13</sup> In the case of Brazil, exceptional access was approved on a precautionary basis in the credit tranches—implying longer repayment periods and lower surcharges than under the SRF—given that there was potential rather than actual balance of payments need. Under current rules, SRF financing cannot be approved in a precautionary setting and several Directors have raised concern about this aspect of the SRF design.<sup>14</sup>

### Conditionality

**18. Guidelines on conditionality in Fund-supported programs were adopted by the Board in 1968 (and revised in 1979 and 2002).** Conditionality is the framework that assures Fund financing is being used in support of an agreed program. Conditionality helps ensure that members drawing on the Fund adopt adequate policies to cope with their balance of

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<sup>12</sup>See *Argentina—Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding and Argentina: Request for Stand-By Arrangement and Request for Extension of Repurchase Expectations—Staff Report; Assessment of the Risks to the Fund and the Fund's Liquidity Position and Report on Exceptional Access for Request of Stand-By Arrangement—Staff Supplements; Staff Statement; Press Release on the Executive Board Discussion; and Statement by the Executive Director for Argentina* (Country Report No. 03/392, 12/19/03) and *IMF Approves 15-Month Extension, and US\$6.6 Billion Augmentation of Brazil's Stand-By Credit* (Press Release No. 03/217, 12/15/03).

<sup>13</sup>Such circumstances could arise in cases where: (i) the member is not in a position to make significant net repurchases to the Fund and there are large scheduled repurchase obligations and (ii) there is a need for additional financing to support the member's strategy for limiting economic disruption associated with debt reduction. See *IMF Concludes Discussion on Access Policy in the Context of Capital Account Crises; and Review of Access Policies in the Credit Tranches and the Extended Fund Facility* (PIN No. 03/37, 3/21/03).

<sup>14</sup>On December 12, 2003 in the context of the Board's consideration of the fifth review under the Stand-By Arrangement for Brazil the topics of exceptional access in a precautionary setting and the justification for use of credit tranche resources rather than SRF resources was highlighted and it was agreed to return to this topic in early 2004.

payments problems and enable them to repay the Fund within the designated repurchase period. New conditionality guidelines were established in September 2002 with the aim of streamlining and focusing conditionality so as to enhance the success and effectiveness of Fund supported programs, to promote national ownership of reforms, while safeguarding Fund resources.<sup>15</sup> Appropriate conditionality underpins the catalytic role of Fund financing and the confidence enhancing aspects of Fund-supported programs.

19. **In addition, Fund safeguards assessments, which focus on central banks of borrowing member countries, are an *ex ante* mechanism aimed at preventing the possible misuse of Fund resources and misreporting of information.** The policy was initiated on an experimental basis in March 2000 and then became permanent in April 2002.<sup>16</sup> These assessments consider the adequacy of five key areas of control and governance within a central bank: external audit mechanisms, legal structure and independence; financial reporting framework; audit mechanism; and system of internal controls. The framework's benchmarks are derived from the Fund's *Code of Good Practices on Transparency in Monetary and Financial Policies* and relies on International Accounting Standards (IAS), International Standards on Auditing (ISA) and the Fund's data dissemination standards. Remedial measures to strengthen the financial controls of a member's central bank may become part of Fund conditionality and they provide assurance that use of Fund resources will be as intended and that the reporting of monetary program data to the Fund will be reliable.

### C. Ensuring Adequate Liquidity and Buffers Against Risk

20. **Policies aimed at ensuring adequate liquidity to meet the demand by members for Fund credit and to safeguard the liquidity of reserve tranche positions complement the Fund's lending policies in helping to ensure the Fund's sound financial position.** These policies aim at managing liquidity given the Fund's limited resource base, while ongoing regular assessments of the adequacy of the Fund's resource base help to assure sufficient financial resources to fulfill the Fund's responsibilities.

21. **Five-yearly regular reviews of quotas, established under the Articles, are designed to meet several key objectives, including the adequacy of the Fund's quota resources.** In August 2003, the Fund Executive Board submitted a progress report to the International Monetary and Financial Committee (IMFC), in accordance with the resolution of the Board of Governors of January 2003 to conclude the Twelfth General Review of

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<sup>15</sup>See *IMF Executive Board Approves New Conditionality Guidelines* (Press Release No. 02/43, 9/26/02).

<sup>16</sup>See *IMF Adopts Safeguards Assessments as a Permanent Policy* (Press Release No. 02/19, 4/5/02), *Safeguards Assessment—Review of Experience and Next Steps* (2/15/02), and the accompanying *IMF Panel of Experts on Safeguards Assessments* (2/02).

Quotas without an increase in quotas.<sup>17</sup> In September 2003, the IMFC welcomed the Executive Board's progress report on quotas, representation and voice and asked the Fund to examine these issues further, and agreed to review progress at its next meeting.<sup>18</sup>

22. **As noted, the Fund mobilizes reserve assets through the FTP.** Member country participation in the FTP, an obligation of membership, changes over time in the context of quarterly reviews. An all time high of forty-five members accounting for 77 percent of total quotas (including most advanced economies and 19 developing countries) currently participate in the FTP.<sup>19</sup>

23. **The Fund's liquidity position relates to the resources which are available for new lending to members.** The one-year forward commitment capacity (FCC) introduced in December 2002 provides an indication of the Fund's lending capacity.<sup>20</sup> The Fund conducts semi-annual reviews of its liquidity position based on this measure of liquidity. The FCC includes a prudential balance (equal to 20 percent of the quotas of FTP participants and any amounts activated under borrowing arrangements) which is intended to indicate a level of uncommitted usable resources that the Fund would normally not expect to use to make financial commitments. This balance serves two purposes: (i) to maintain adequate liquid resources to safeguard members' right to draw on their reserve positions in the Fund on demand in the case of balance of payments need; (ii) protecting against an erosion of the resource base, which occurs when members are no longer in a position to participate in the FTP because of a deterioration in their external position.

24. **The Fund's own resources—quota subscriptions—can be supplemented through current borrowing arrangements—the NAB and GAB.** The NAB can only be activated to forestall or cope with an impairment of the international monetary system or to deal with an exceptional challenge to the stability of that system.<sup>21</sup> The GAB are only activated when the NAB participants do not agree to an activation or for the benefit of a GAB participant.<sup>22</sup>

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<sup>17</sup>See *Report of the IMF Executive Board to the International Monetary and Financial Committee on Quotas, Voice and Representation* (9/12/03) and Board of Governors' *Resolution No. 58-1*.

<sup>18</sup>See Press Release No. 03/159, 9/21/03.

<sup>19</sup>See *Financing IMF Transactions—Quarterly Report—September 1-November 30, 2003* (3/1/04).

<sup>20</sup>The FCC is defined as the Fund's stock of usable resources less undrawn balances under existing arrangements, plus projected repurchases during the coming 12 months, less a prudential balance intended to safeguard the liquidity of creditors' claims and to take account of a possible erosion of the Fund's resource base.

<sup>21</sup>It requires agreement of participants representing 80 percent of total credit arrangements of participants.

<sup>22</sup>The NAB and GAB decisions and some of the relevant background notes on borrowing are available in "Selected Decisions of the International Monetary Fund, Twenty Sixth Edition," pages 397–450.

25. **Finally, as discussed above, the Fund’s precautionary balances serve as a defensive buffer to help protect the value of members’ reserve positions in the Fund.** In the event of non-repayment by a member using Fund credit, the Fund’s precautionary balances can offset impaired credit on its balance sheet and absorb potential losses, including from unpaid charges and losses related to self-insurance against certain risks.

### III. FUND FINANCIAL RISK AND DEVELOPMENTS IN FUND EXPOSURE

#### A. Evaluating Fund Financial Risk

26. **All financial institutions face risks in their funding and lending operations.** In evaluating the financial risks faced by the Fund, comparisons with other financial organizations can help to understand some of the special risk characteristics of the Fund.<sup>23</sup> These special characteristics suggest different interpretations for the Fund of some financial concepts—including credit risk and credit concentration—that are standard in examining commercial financial institutions or multilateral development banks.

27. **The Fund does not face market (exchange and interest rate) risk in its lending and funding operations with its members.** The value of the Fund’s credit and resources is not affected by changes in interest rates and exchange rates as they are denominated (and repayment calculated) in SDRs and carry variable interest rates. The Fund is distinct from the World Bank and other multilateral lending organizations in that it does not borrow on international financial markets and is not rated by the international rating agencies.<sup>24</sup>

28. **The principal financial risks faced by the Fund are arrears** (Box 4). In practice, the Fund has never suffered a loss on an outstanding credit to a member but has faced protracted arrears. In response to concerns about rising arrears in the 1980s, the Fund adopted an explicit strategy to deal with overdue obligations. This strategy, initiated in 1990, is comprised of three elements: prevention of arrears, collaboration in clearing arrears, and remedial measures against continuing arrears in cases where active cooperation is lacking. The rights approach to arrears clearance is an integral part of the cooperative strategy.<sup>25</sup>

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<sup>23</sup>See Background Paper.

<sup>24</sup>The Fund’s Articles do allow the Fund to undertake private market borrowing to supplement its resources. Such a move could shift the Fund’s financial structure from a purely quota-based system to one that relies also on privately borrowed resources. This has not been seen as desirable by the Fund’s members.

<sup>25</sup>Eligibility to use the rights approach was restricted to the eleven members that had protracted arrears to the Fund at end-1989.



#### **Box 4. Financial Implications of Protracted Arrears**

When arrears (overdue financial obligations) became significant in the early 1980s, concerns arose about the effect on the Fund's income. To avoid an overstatement of actual income, the Executive Board decided in March 1985 that charges due but not settled from members in arrears to the Fund for six months or more ("protracted arrears") were to be reported as deferred, rather than current, income. The loss of income due to deferred charges has been covered specifically under the burden sharing mechanism since May 1986.<sup>1</sup> Prior to that time, income foregone was made up by setting a higher overall rate of charge. Under the burden-sharing mechanism, quarterly adjustments are made in the rate of charge (upward) and the rate of remuneration (downward) to generate equal amounts from debtors and creditors to compensate the Fund for income loss due to deferred charges during each financial quarter. Deferred charges are currently about SDR 16 million a year and the compensating adjustment in the rates of charge and remuneration is 1 basis point for each.

An additional adjustment is made under the burden sharing mechanism to the rate of charge and the rate of remuneration to finance allocations to the Special Contingent Account (SCA-1), established to strengthen the Fund's financial position. The SCA-1 allocation has been SDR 94 million per year since 1999 and the adjustment for this purpose has recently been about 7 basis points (for each rate). The SCA-1 together with the General and Special Reserves constitute the Fund's precautionary balances in the GRA.

The Fund's Articles of Agreement do not permit it to recognize value impairment in its balance sheet in the form of general or specific provisioning until all steps provided for in the Articles (i.e., in connection with the withdrawal of a member) have been completed. Until then, the Fund's claim on a member, which is accounted for by the SDR value of the Fund's holdings of the member's currency, is not affected by arrears or failure by the member to comply with the maintenance of value requirement.<sup>2</sup>

The Fund's Articles of Agreement recognize the possibility of a loss only after the withdrawal of a member.<sup>3</sup> In case of withdrawal of a member in protracted arrears, a loss is expected to occur as the member would not have repurchased the Fund's holdings of its currency as required and would not likely make good the loss incurred by the Fund in selling those holdings. The loss to the Fund would be equal to the difference between the SDR value of the claim on the member and its market value. Specific provisions against possible losses could be established only after a member in arrears withdraws. However, precautionary balances in the form held by the Fund are allowed beforehand and fulfill the same function by protecting the Fund against value impairment.

If arrears by a large borrower were to occur, the size of the Fund's precautionary balances relative to the overdue principal is important. Precautionary balances that are sufficient to offset the overdue principal would safeguard the Fund's reputation as the central international financial institution by demonstrating that it maintains a strong balance sheet even under adverse circumstances. It would also buttress the status of reserve positions in the Fund as high quality international reserve assets.

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<sup>1</sup>Contributions under the burden sharing mechanism are reimbursable.

<sup>2</sup>See *Valuation of Assets in the General Resources Account – Provisioning and Write-Off – Legal Considerations*, SM/86/106, 5/16/86.

<sup>3</sup> Schedule J, paragraph 6.

29. **Since the mid-1980s, 25 members have at some time been in protracted arrears to the Fund's GRA.** Most are now PRGF-eligible, although six may be classified as middle-income countries.<sup>26</sup> Since the initiation of the Fund's cooperative strategy on arrears, there have been 8 new cases of protracted arrears in the GRA, of which 1 remains currently in arrears (Zimbabwe). The peak amount of credit outstanding to any one member in protracted arrears has been SDR 0.6 billion, and the peak amount of total overdue obligations by members in protracted arrears has been SDR 3.4 billion. As of January 2004, there are five members in arrears in the GRA (Iraq, Liberia, Somalia, Sudan, and Zimbabwe).<sup>27</sup>

30. **Given the successful implementation of the Fund's arrears strategy to date, estimation of possible future losses is thwarted by actual experience as no loss has been incurred.** At the Fund, it is also the case that implicit in assigning probabilities of going into arrears or default would be an underlying country credit rating system for individual Fund borrowing members and the Board has consistently viewed such an approach as undesirable. This contrasts with the experience of other financial institutions for which some average rate of payments arrears or default can provide the basis for determining a probable loss function for the future. These loss functions are based on estimated country or credit risk premia. Financial institutions then carry reserves to guard against such losses and can provision against them as the probability of loss increases.

#### **B. Developments in Fund Exposure and Credit Concentration**

31. This section reviews developments in Fund exposure and credit concentration in light of the capital account crises since the mid-1990s. As of end-2003, Fund credit outstanding was about SDR 65 billion (or US\$90 billion). This represents about 30 percent of total Fund quotas; 4 percent of developing countries' external debt; and 5 percent of developing countries' exports of goods and services.<sup>28</sup>

32. **During the last 25 years, Fund exposure has risen on average in nominal terms though at an increasing rate since the mid-1990s** (Figure 1). Peaks in Fund credit have been associated with major international developments such as the debt crises in the early 1980s and the crises in emerging market countries in the 1990s. As noted, key policy changes for access and Fund facilities have influenced the growth in Fund exposure.

33. **Fund credit has also risen on average relative to total Fund quotas** (see Figure 1) from about 20 percent in 1980 to about 30 percent during the last 25 years. However, the variability in Fund financing over time is not insignificant and this has become more

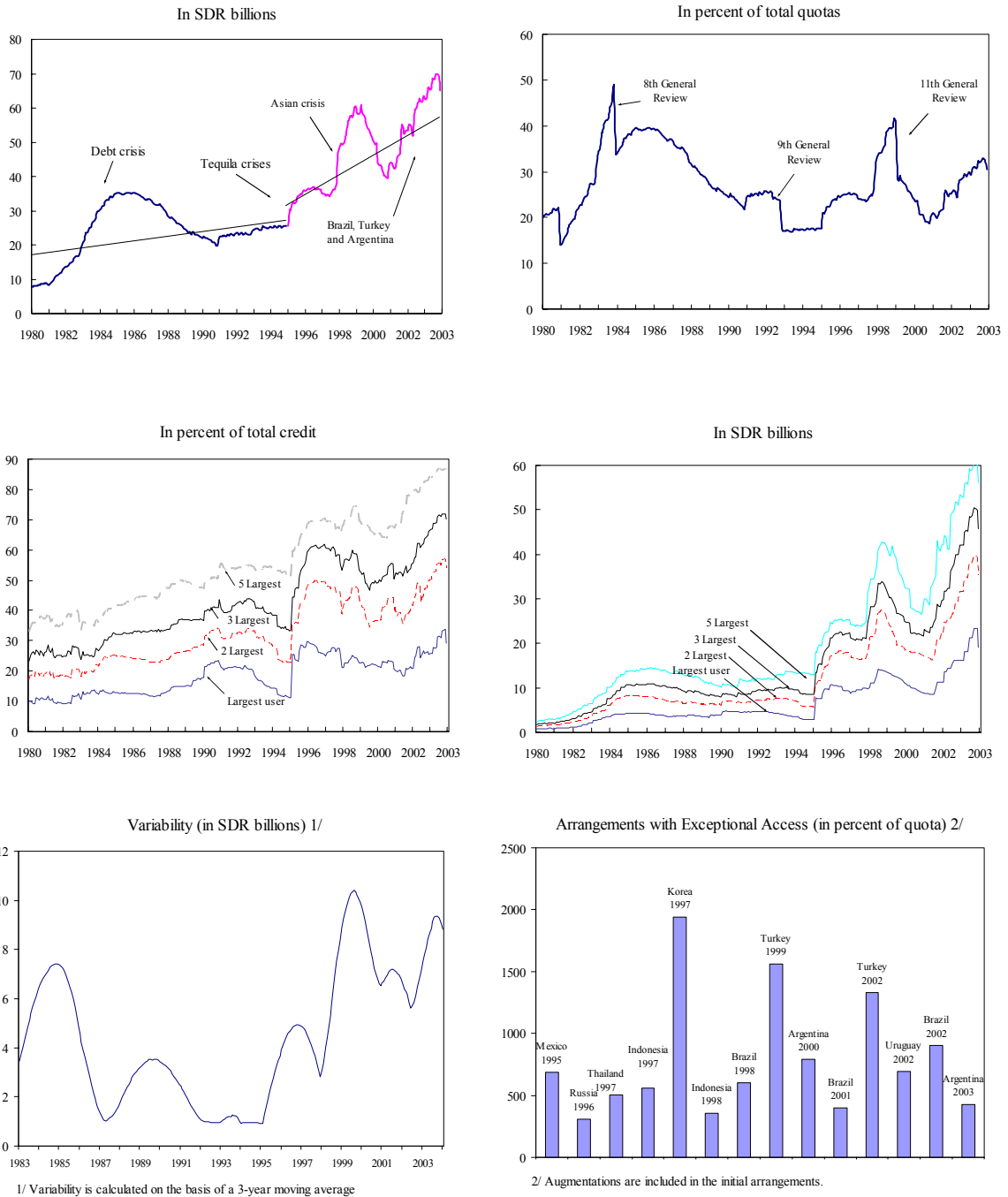
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<sup>26</sup>Dominican Republic, Iraq, Jamaica, Panama, Peru, and Yugoslavia.

<sup>27</sup>Iraq owes SDR assessments which are due to the GRA.

<sup>28</sup>*World Economic Outlook, September 2003.*

Figure 1: Developments in Fund Credit in the GRA, 1980-2003



Source: IMF Finance Department.

pronounced in the last two decades including when standardized with respect to macroeconomic aggregates such as external debt and exports of goods and services.

34. **Although evidence is limited, the price incentives (surcharges) that apply to use of SRF resources relative to credit tranche and EFF resources appear to have prompted early repayment of SRF resources.** Those member countries with both outstanding credit tranche (or EFF) and SRF credit that have made advance repurchases to the Fund—namely Brazil, the Russian Federation, and Korea—repaid SRF resources prior to credit tranche or EFF resources.<sup>29</sup> For Brazil, the authorities made large advance repayments of its SRF resources in 2000 and 2002, but did not repay early credit tranche resources. In the case of Korea, the outstanding SRF resources in 1999 were repaid first and when the level of its

Selected Advance Repurchases of SRF and SBA Resources, 1999 - 2002 1/  
(In millions of SDRs)

		Advance Repurchases		Total Repurchases 1/	
		SRF	SBA	SRF	SBA
Brazil	2000	3,256	0	5,074	0
	2002	3,317	0	3,317	271
Korea	1999	5,650	0	7,900	0
	2001	0	4,372	0	4,372
Russia	1999	338	0 2/	675	2,426 2/
	2001	0	1,887 2/	0	2,998 2/

international reserves were only about one-half of the level of reserves in 2001. Similarly, the Russian Federation made advance repayments of its SRF resources in 1999 followed by advance repayments of only part of its non-SRF resources in 2001 even though reserves had tripled between 1999 and 2001.

Source: Staff estimates.

1/ Total of scheduled and advance repurchases.

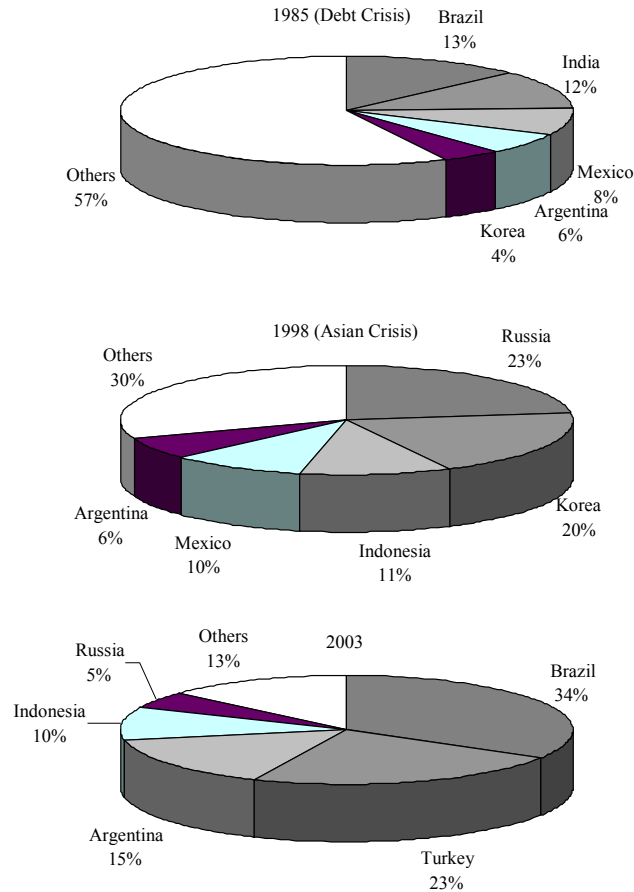
2/ Amounts include SBA, CCFE, STF and EFF repurchases.

35. **The concentration of Fund credit among a small number of members has been a consistent characteristic of the Fund's exposure through time.** The largest debtor has accounted for no less than 9 percent of Fund credit since 1980. Similarly, Fund exposure to the 5 largest debtors averaged 41 percent of total credit in the 1980s, gradually rising to average about 60 percent in the 1990s.<sup>30</sup> There are some noteworthy aspects of the high concentration in the most recent years, although it is not unprecedented, because of their potential financial and balance sheet implications (Figure 2):

<sup>29</sup>There were three other cases of countries with use of both SRF and credit tranche resources. In the case of Argentina, there were no advance repayments; for Uruguay, there were no advance repayments and undrawn SRF resources were cancelled; and in the case of Turkey, the SRF resources were repaid early but were exceeded by purchases of credit tranche resources, thus no repayment was made on a net basis.

<sup>30</sup>High concentration is not unprecedented. In the period 1965–71, and again in 1977–79, the Fund extended financial assistance to the United Kingdom which accounted for the bulk of outstanding credit, along with a few Latin American countries.

Figure 2: Five Largest Borrowers  
(In percent of total GRA credit)



Source: IMF Finance Department.

- Since 2000, the share of credit extended to the largest borrowers has increased markedly (see Figure 1) triggering questions in some quarters of the Fund's vulnerability to credit risk. In November 2003, credit to the three large borrowers exceeded an unprecedented 70 percent of total credit. In comparison, 16 debtors accounted for 70 percent of credit outstanding in 1980.
- The top 3 debtors to the Fund have changed through time. However, since 2002, they have remained the same.
- Credit outstanding to the largest user of Fund resources stood at nearly one third of total Fund credit outstanding at end-2003. Essentially, all of this borrowing had taken

place over a two-year period marking a large increase in the Fund's exposure in absolute terms to a single debtor and in a short time period.

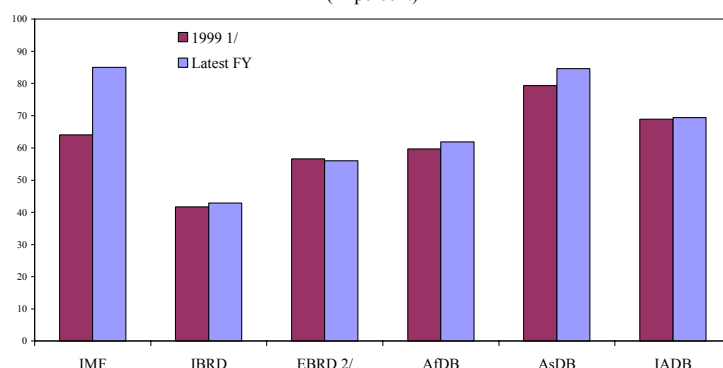
- The share of Fund credit in the external debt of large debtors (such as Argentina, Brazil, and Turkey) is also sizeable. One large borrower recently failed to promptly repay the Fund.<sup>31</sup>

Fund and IFI Shares in Public External Debt, 2003  
(in percent)

	Fund	World Bank	Other IFIs
Argentina	13	8	9
Brazil	20	6	8
Turkey	27	6	5

Source: Staff estimates and *WEO*.

Figure 3. Credit Outstanding for the Top 5 Debtors - IMF and other IFIs  
(In percent)



1/ Data are end-FY 2000 for IMF and IBRD, and end-FY 1999 for all other IFIs.  
2/ EBRD amounts include all operating assets in member countries.

- The Fund's share of the public external debt (and debt service) of the top three borrowers has increased significantly since 2000. In contrast, the shares of other IFIs including the World Bank have declined.

debtors is larger than the share of the top five borrowers from the World Bank and most other international financial institutions and this exposure has grown more rapidly for the Fund than it has for other IFIs (Figure 3).

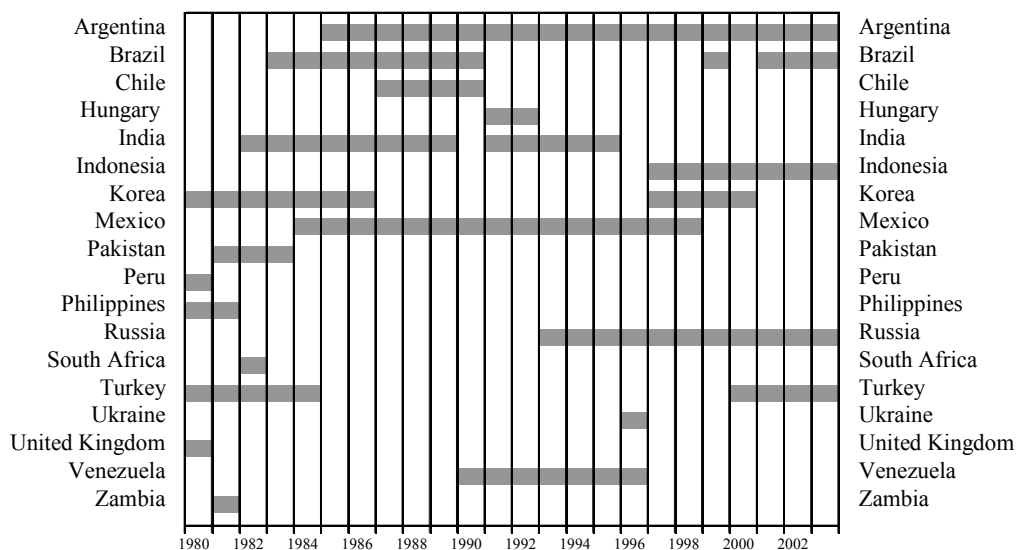
- The Fund's exposure to its top 5

- Reflecting the revolving nature of Fund credit outstanding, for the most part the top 5 debtors to the Fund have changed in composition since the 1980s (Figure 4).

<sup>31</sup>On September 9, 2003, Argentina failed to meet a SDR 2.09 billion repurchase obligation to the Fund and went into arrears. At that date, Argentina's gross international reserves stood at about SDR 9.9 billion. Argentina cleared its overdue obligations on September 11, 2003. In January 2003, Argentina cleared arrears on loan repayments to the World Bank amounting to US\$795.5 million that were due since October 15, 2002.

However, there have also been a few countries consistently among the top five debtors.

Figure 4: Top Five Borrowers, 1980-2003 1/

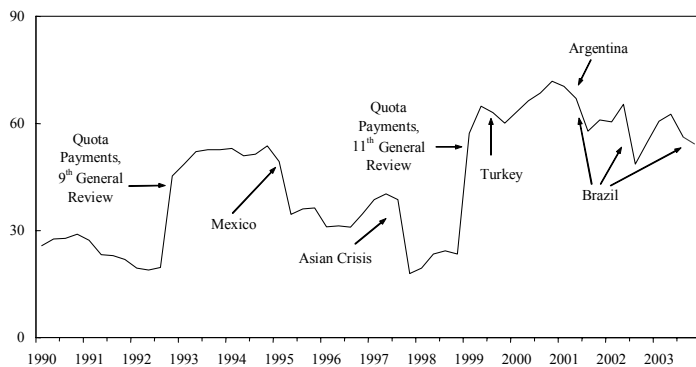


1/ Based on end of period data.

- The increased concentration in Fund exposure has been associated with prolonged use of Fund resources in the GRA by a number of middle-income countries with access to international capital markets. In fact, one of the three largest users of Fund resources (Argentina) is a prolonged user of Fund resources. By end-2004, Brazil will have had an arrangement with the Fund for six years running, one shy of the benchmark to be considered a prolonged user and Turkey will have had arrangements with the Fund for more than five years.<sup>32</sup>

<sup>32</sup>See *IMF Concludes Discussion on Prolonged Use of Fund Resources* (PIN No. 03/49, 4/9/03).

Figure 5. IMF One-Year Forward Commitment Capacity, 1990-2003  
(In billions of SDRs)



Source: IMF Finance Department.

- The approval of large arrangements and the increase in the use of precautionary arrangements over the last 5 years has had a significant impact on the Fund's liquidity position and forward commitment capacity (Figure 5). The Board approved the first precautionary arrangement with exceptional access in the credit tranches in 2003 for Brazil.

36. **Looking ahead, it is difficult to predict the demand for Fund credit and thus changes in concentration.** However, there are some indications that credit concentration may remain a prominent feature of the Fund's loan portfolio. The provision of relatively inexpensive Fund financing for longer duration especially under credit tranche rather than SRF terms could suggest that the current (historically high) concentration could remain a characteristic of the Fund's loan portfolio going forward. The most recent developments—the shift in repurchases of SDR 21 billion from an expectations to an obligations basis for the three largest debtors; and the approval of two successor arrangements with exceptional access—also point in this direction. Moreover, the composition of the largest debtors may change less rapidly than in the past.

37. **Exceptional access to Fund resources by countries with large quotas has inevitably increased the risks arising from concentration in the Fund's portfolio.** That is, the main risk to the Fund is that a single large debtor could stop payment with considerable adverse impact on the Fund's financial position. The risk is highlighted by the fact that in 2003 arrears were incurred, albeit temporarily, by a large debtor. In addition, Fund credit outstanding is volatile and the credit capacity of the Fund is higher than actual Fund exposure. This means that the size of the Fund's portfolio can change dramatically over a short time horizon and that assessments of the riskiness of the Fund's portfolio will change over time.

38. **It bears recalling, however, that it is difficult to quantify the credit risk that the Fund faces—including from concentration in exposure.**<sup>33</sup> However, specific features of the Fund's institutional framework suggest that high credit concentration is inevitable and does not embody the same degree of risk for the Fund as it would for other financial

<sup>33</sup> See Background paper, Chapters II and III.



institutions. That is, while portfolio diversification is an important and universal risk mitigation rule for financial institutions, for the Fund diversification is not an objective *per se*. Rather, the Articles of Agreement charge the Fund with assisting a cooperating member—including in very difficult circumstances. The Fund needs to mitigate the risks involved in concentration and have adequate precautionary balances.

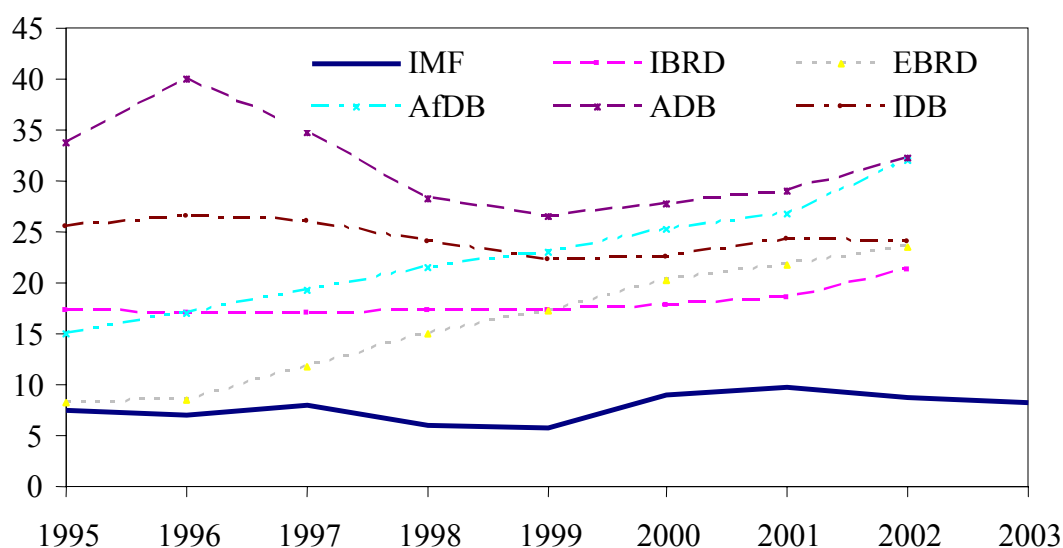
39. **More broadly, a member's commitment to adopt sound economic policies, enforcing Fund conditionality, and the safeguards in place** (including an assessment of a member's capacity to repay the Fund), reduce the riskiness of lending and of concentration to the Fund. In addition, it is the responsibility of Fund members benefiting from financial assistance to pay back the Fund as soon as temporary balance of payments problems are resolved and this has been the experience on average even for large exposures in the 1990s (Mexico, Thailand, Korea, and Brazil). The claims on some current large exposures (Indonesia and Russia) are also being repaid. Moreover, the large increases in Fund credit since 2000 in all but one case have been to members with strong payments records.

#### IV. THE LEVEL OF PRECAUTIONARY BALANCES

40. **The Fund's Executive Board decided in 2002 to double the target for precautionary balances and to maintain the system of accumulating these balances.** This judgment was based on recognition by Directors that credit risk to the Fund now derives primarily from large arrangements with middle-income countries and that this situation is different from the experience the Fund has had so far. Directors also noted other potential risks that pointed to the need for higher precautionary balances, including the risk of income losses resulting from unpaid charges exceeding the capacity of the burden-sharing mechanism, and from the Fund's increased responsibilities and related growth in administrative expenses. It was also observed that the Fund should be prepared for the possibility that adverse scenarios could materialize that resulted in disruption of payments to the Fund including from a large borrower. Since the Board took the decision to double the target for the Fund's precautionary balances there have been no material developments which suggest that this judgment should be reconsidered. However, the pace of accumulation would need to be kept under close review in light of uncertainties regarding the availability of, in particular, surcharge income and risk confronting the Fund.

41. **As of end-October 2003, the Fund's precautionary balances were about SDR 6 billion or 8.5 percent of credit outstanding** (Table 4 and Figure 6). The heightened credit risk facing the Fund, the relatively slow pace of accumulation of precautionary balances under the current system (Box 5), and the variability in this pace underscore the importance of the decision taken in 2002 to target precautionary balances at SDR 10 billion. In the period ahead, the terms upon which large access to Fund resources is approved—SRF as compared to credit tranche or EFF terms—will have implications for the Fund's surcharge income and thus for the rate of accumulation of precautionary balances (Annex II).

Figure 6. Precautionary Balances as a Percentage of Credit Outstanding - IMF and other IFIs 1/



1/ The Fund's precautionary balances include reserves and SCA-1, and are exclusive of SCA-2 and the accounting gains arising from the implementation of IAS 19 - Employee Benefits. For other international financial institutions, precautionary balances include provisioning.

42. **The Board adopted broad principles to assess the adequacy of precautionary balances though, as agreed by most Executive Directors, the guidelines are not to be used in a mechanistic way.** Precautionary balances should fully cover credit outstanding to members in protracted arrears and include a margin for the potential exposure to risk related to the credit that is in good standing.

43. **Nevertheless, in discussing the Fund's policy on precautionary balances, Directors asked staff to explore analytical frameworks for determining the target level of precautionary balances.** Accordingly, staff examined value-at-risk models and financial

scenario analysis to assess a target for precautionary balances aimed at covering credit risk (see the background paper, Chapters III and IV for details). The analysis of VaR models concludes that the underlying assumptions when applied to the Fund are problematic and tenuous at best which rules those out for direct use by the Fund in estimating a target level for precautionary balances. In particular, (i) models assume credit loan diversification as a key risk-mitigating rule; whereas for the Fund, diversification *per se* is not an objective for its lending; (ii) the models are based on a very large number of loans which is not and never will be a characteristic of the Fund's loan portfolio; and (iii) the probability distribution applied for the Fund would imply arbitrary assumptions given the Fund's preferred creditor status, its limited experience with protracted arrears or default, and its successful arrears strategy. The financial scenario analysis highlights the importance of precautionary balances under an adverse scenario involving nonpayment by a large debtor. Quantitative approaches can provide structure, help formalize, and deepen our understanding of the nature of the risks facing the Fund. However, such approaches all have significant shortcomings when applied to the Fund and cannot substitute for the judgment that must necessarily underpin decisions on the level of precautionary balances given the role of the Fund in the international financial system and its distinct nature as a financial institution.

## V. CONCLUSIONS

### 44. **Mitigating financial risk at the Fund rests heavily on the implementation of policies governing the use of Fund resources and the management of its liquidity.**

Changes in policies on access—specifically the introduction of the exceptional access framework—and in Fund facilities in response to the emergence of capital account crises have aimed at meeting members' needs for exceptional balance of payments financing while safeguarding Fund resources. Moreover, the assessment of the target level of the Fund's precautionary balances suggests that the target of SDR 10 billion and the path of accumulation are broadly appropriate. This latter assessment is predicated on:

- the evolution of the Fund's portfolio—in particular increased concentration among a few very large debtors. This has increased credit risk to the Fund in case of repayment difficulties of a large borrower.
- the need to ensure the soundness of the Fund's balance sheet and in particular the risklessness of members' reserve tranche positions by having sufficient precautionary balances to give confidence to its creditors.

Table 4. The Fund's Precautionary Balances in the GRA, 1990–2003

	End of Financial Year					End-Oct.
	1990	1995	2000	2002	2003	2003
	(In billions of SDR)					
Precautionary balances	1.6	3.2	4.0	4.6	5.4	6.0
:						
Reserves	1.4	1.8	2.8	3.3	4.0	4.5
General	0.4	0.4	0.9	1.3	1.9	2.3
Special 1/	1.0	1.4	1.9	2.0	2.1	2.2
SCA-1	0.2	0.6	1.1	1.3	1.4	1.5
SCA-2	--	0.8	--	--	--	--
Free reserves 2/	-1.0	0.7	3.1	3.7	4.7	5.2
Memorandum items:						
Credit capacity 3/	60.2	87.9	150.8	154.7	163.1	164.1
Credit outstanding	22.1	32.1	43.9	52.1	66.0	70.0
Credit in good standing	19.5	30.4	43.0	51.2	65.2	69.2
Arrears	3.4	2.8	1.9	1.9	1.7	1.7
Principal	2.6	1.7	0.9	0.9	0.7	0.7
Charges	0.8	1.1	1.0	1.1	1.0	1.0
	(In percent)					
Ratios of:						
Precautionary balances to credit capacity	2.7	3.6	2.6	3.0	3.3	3.6
Precautionary balances to credit outstanding	7.2	9.8	9.0	8.8	8.2	8.5
Free reserves to credit capacity	-1.6	0.8	2.0	2.4	2.9	3.2
Free reserves to credit in good standing	-5.0	2.2	7.1	7.2	7.2	7.5

Source: IMF Finance Department.

1/ After adjusting for IAS 19 related accounting gains. Adopted 2000.

2/ Precautionary balances in excess of arrears on principal and SCA-2.

3/ Quotas of members in the FTP and resources available under NAB/GAB, excluding the prudential level of uncommitted usable resources. Credit capacity is approximated by quotas of FTP participants.

- the current global environment and the Fund's credit capacity. Given the Fund's much larger credit capacity than credit currently outstanding, the appropriateness of these balances will need to be evaluated on an ongoing basis.

45. The analysis undertaken in the background paper also suggests that model-based approaches including VaR provide insights in considering the nature of the risks faced by the Fund. However, the assumptions that would need to be made in applications to the Fund are tenuous and suggest little promise for direct use by the Fund in estimating a target level for precautionary balances.

## VI. ISSUES FOR DISCUSSION

**This paper has reviewed Fund policies for mitigating what could be potentially large financial risks. In this context, the Fund established a framework for exceptional access in 2003. The Board will review the exceptional access framework separately in early 2004. Against this backdrop, Executive Directors may want to focus their discussion on the following issues.**

46. The appropriate implementation of the Fund's access policies on use of Fund resources, including the exceptional access framework established in 2003, are key in providing members with adequate resources to guard against negative events and to resolve their balance of payment problems when they occur. Associated with large access is increased Fund exposure, which raises financial risks to the Fund. It is therefore essential that the Fund continue to be treated as a preferred creditor by its members and their creditors, and that the Fund maintains adequate precautionary balances to assure that the Fund's financial position is beyond question. *Directors' views would be welcome.*

47. In circumstances where the Fund is accumulating adequate precautionary balances, maintains its burden-sharing mechanism, and implements its policies on overdue obligations, the Fund would be able to handle arrears by a member with large Fund credit outstanding if they, regrettably, were to occur. *Directors' views would be welcome.*

48. Value at Risk Models and other quantitative approaches can deepen understanding of the nature of the risks facing the Fund. However, assessing the adequacy of precautionary balances is ultimately a matter of judgment related to ongoing assessments of the Fund's exposure and the risks that it involves, and the policy framework on access to Fund resources in place to help mitigate those risks and safeguard Fund resources. *Directors' views would be welcome.*

### **Box 5. Accumulating Precautionary Balances**

**Recent increases in precautionary balances have continued to reflect primarily surcharge income and been near the pace that was foreseen in late 2002** when the Board agreed on a new target for precautionary balances of SDR 10 billion. SDR 0.7 billion of surcharge income was placed to the General Reserve in FY 2003 and a similar amount is projected to be available in FY 2004.<sup>1</sup> The bulk of surcharge income has been received in FY 1999 and FY 2002-04, when large amounts of credit were outstanding to a few borrowers.

**The composition of surcharge income has shifted over time from being generated by the time-based SRF surcharge, which ranges from 300 to 500 basis points, to the level-based surcharge on credit tranche resources, which is 100 or 200 basis points.** The shifting composition is due to the increasing provision by the Fund of exceptional access on credit tranche instead of SRF terms. The recent accumulation of precautionary balances would have been higher if exceptional access had been more on SRF terms (see Annex II).

**Other sources of precautionary balances—additions to the SCA-1 and regular net income—are much smaller than surcharge income.** The additions to the SCA-1 are constant at SDR 94 million a year and were agreed by the Board in 1999. Regular net income is determined as 5 percent of reserves at the beginning of the year, excluding additions to the SCA-1, and is SDR 108 million for FY 2004. Regular net income is placed to the Special Reserve.

**At the recent pace of accumulation of precautionary balances of some SDR 0.9 billion a year, it would take another 5 years or so to reach the target level set by the Board, but there is a wide margin of uncertainty on this timetable as it depends on the unpredictable flow of surcharge income over the medium term.** Surcharge income is inherently variable as borrowing by large users is generally related to capital account crises and, as experience shows, could be reversed rapidly when the situation improves, or increased if other members seek additional large scale assistance in coming years.

**Even though precautionary balances are to remain short of their target for some time, the Fund's role in the international financial system makes it likely that there will continue to be rapid changes in Fund credit concentrated on a few members.** Given the system of accumulating precautionary balances agreed by the Board, it is not possible to adjust the level of precautionary balances at the same time as credit and credit concentration change—although the rate of accumulation can be raised if necessary, including through increases in regular net income. The increased risk to the Fund when credit rises sharply therefore has to be anticipated well ahead of time and reflected, to the extent possible, in precautionary balances and their rate of accumulation. The current system of accumulating precautionary balances, in particular placing surcharge income to reserves, has been delivering needed increases. However, the pace of accumulation will need to be kept under close review in light of the uncertainties regarding the availability of, in particular, surcharge income and the risks confronting the Fund.

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<sup>1</sup>The cost of administering the PRGF Trust of over SDR 70 million a year is paid out of surcharge income. See *The Fund's Income Position, the Rate of Charge, Precautionary Balances, and Burden Sharing for FY 2003 and FY 2004* (4/4/03).

### INTERNATIONAL FINANCIAL REPORTING STANDARDS

**Accounting requirements:** International Financial Reporting Standards (IFRS- formerly referred to as International Accounting Standards) require that financial assets be measured and reported in the balance sheet at their fair (market) or realizable value. When an asset's face value exceeds the realizable value, adjustments are required to ensure that such assets are carried on the balance sheet at the recoverable or realizable amount. For example, if it is probable that amounts due will not be collected, an impairment of bad debt loss has been incurred and this needs to be recognized. Reductions in the value of an asset are normally charged against income and the asset values carried on the balance sheet are then reduced by the establishment of provisions. (In the Fund, such losses would be offset against the amounts held in the Special Contingent Account, established specifically to absorb such losses.)

Prudent financial and accounting practices furthermore necessitate that an adequate level of general reserves (generated by shareholder contribution or by the retention of earnings) be maintained, in addition to the specific provisions for value impairment, to ensure the viability and continued operation of an entity and provide protection against general business risk.

**Auditing Requirements:** The absence of the correct valuation of assets on the balance sheet in accordance with IFRS would cause an auditor to conclude that these assets are not fairly stated and, when such amounts are significant, this would result in a qualified audit report. Also, if the overall available resources of an entity were to be considered inadequate to guarantee continued operations or if there were to be considerable uncertainty about the ability of an entity to honor its liabilities, the auditor would have no choice but to express a qualified or adverse audit report on the overall financial statement.

### COMPARING SURCHARGE INCOME UNDER CREDIT TRANCHE AND SRF TERMS

**Surcharge income is the main source of accumulation of precautionary balances and varies with the terms on which Fund financial assistance is provided.** This annex discusses the difference in surcharge income received from a member when financial assistance is provided on SRF rather than SBA (credit tranche) terms. Surcharge income received from a member is higher when credit is provided on SRF instead of credit tranche terms primarily because the SRF surcharge ranges from 300 to 500 basis points while the level-based surcharge applicable to credit tranche resources is only 100 or 200 basis points.<sup>34</sup>

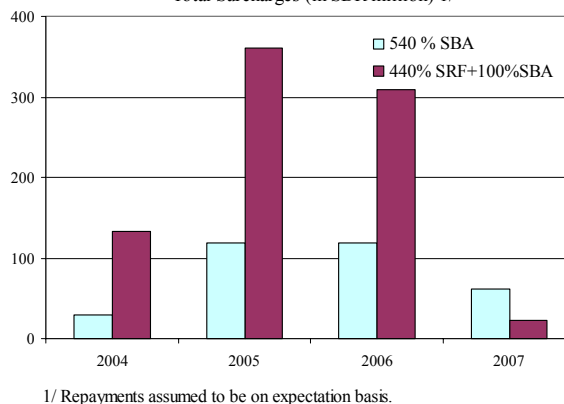
**Surcharge income received from a member is significantly higher when credit is provided on SRF terms rather than credit tranche (e.g., SBA) terms if the member had no previous use of Fund resources.** The level-based surcharge under SBA terms only begins to apply when credit outstanding reaches 200 percent of quota whereas the SRF surcharge applies to the entire amount of SRF purchases. The chart illustrates surcharge income in the hypothetical situation of an arrangement for a member with average quota and access—the average based on exceptional excess cases—and no outstanding Fund credit. Surcharge income received from this member in the first two

years of the arrangement would be 3 times higher if access were provided (to the largest extent possible) on SRF terms rather than credit tranche (e.g., SBA) terms.

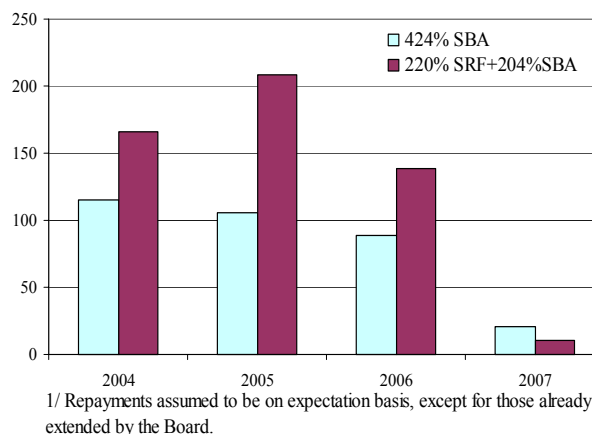
**The difference in surcharge income is smaller but still considerable if access is provided on top of existing UFR.** A recent exceptional access case, Argentina, is used to illustrate the difference.

In the case of Argentina, the new 3-year arrangement agreed in 2003 provided financing (of 424 percent of quota) wholly on credit tranche terms. The hypothetical

Hypothetical Member: UFC=0, Quota = SDR 2 billion,  
Access in 2004 = 540% of Quota (SDR 10.8 billion)  
Total Surcharges (in SDR million) 1/



Argentina: New Program with Access=424 % of Quota (SDR 8.9 billion)  
Total Surcharges (in SDR million) 1/



<sup>34</sup>In addition, level-based surcharges only apply to use of Fund credit arising from purchases made after November 28, 2000.



alternative that is considered here assumes SRF terms for the financing provided during the first year of the agreement (220 percent of quota). **Overall surcharge income received from Argentina in the first two years of the arrangement is nearly twice as high in the SRF alternative as it actually is projected to be.** (The two-year projection result is used as indicator of the difference in surcharge income since projections for longer periods are more dependent on assumptions).