



An Introduction to Capital Adequacy in IDA's Hybrid Financial Model

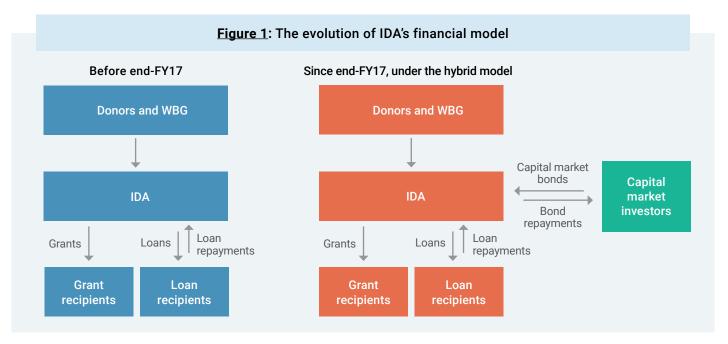
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The International Development Association (IDA) is the world's largest source of development finance for poor countries. IDA works with borrower countries to achieve sustainable growth so that they can chart their own future, free of donor support. By combining donor funding and other income with borrowing from capital markets, IDA was able to multiply donor contributions by a factor of 3.5 for IDA20, over the current three-year cycle.

This note explains how IDA's financial model works, with a focus on a key element-its Capital Adequacy Framework.

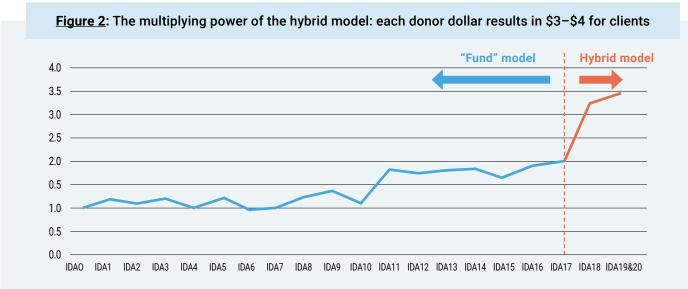
What is IDA's hybrid financial model?

From 1960, when IDA was created, until 2017, IDA's capacity to offer financing was determined by donor contributions, loan repayments, and "solidarity" (middle- to lower-income country) transfers from the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC). IDA's main concern was development, but from a financial standpoint it had to ensure that its cash inflows (mainly donor contributions and loan repayments) were larger than its cash outflows (mainly grants and loan disbursements). In 2017, as part of its 18th replenishment (IDA18), IDA introduced a hybrid financial model that enabled it to borrow from capital markets to substantially increase financing to its clients (see Figure 1).



Adding a new source of funding meant that IDA could significantly increase the volume of its commitments to clients. Client countries could use this financing to make life-changing investments and accelerate their efforts to achieve the Sustainable Development Goals.

Figure 2 illustrates how the hybrid model amplified IDA's capacity to make financial commitments (its "commitment authority"). A ratio of 1 indicates that the size of the commitment authority matches the level of donor resources provided. A ratio greater than 1 indicates that the commitment authority is higher than the level of donor contributions, as these are now supplemented by loan reflows and, as of IDA18, by debt issuance. These supplementary sources of finance are the primary reason for the major increase in the ratio in IDA18 (i.e. IDA market debt outstanding stood at about \$12 billion by the end of IDA18).



Note: IDA19 and IDA20 are combined as some of the IDA19 resources were carried over into IDA20.

This change in IDA's financial model meant that it could leverage its equity to access funds from the market—that is, use borrowed funds or debt to finance investments and operations. Leveraging, which involves combining capital, or equity, with debt to increase the volume of investments, gave IDA a financial multiplier effect unavailable to "grant-in, grant-out" funds.

While donor contributions have been in a similar range over a number of replenishment cycles, this innovative change in the financial model has enabled IDA to enlarge the pool of funding at its disposal. For example, IDA20 saw \$23.5 billion in donor contributions translated into a \$93 billion financing envelope, after factoring in a carry-over of \$11 billion from IDA19.

However, with the introduction of the hybrid financial model, donors and borrowers were no longer the only stakeholders in IDA. Investors, counterparties, and rating agencies were now also focused on IDA's financial health. This brought with it new requirements. To build and maintain the confidence of its new stakeholders, IDA added several risk management policies—the most critical being the Capital Adequacy Framework.

What is capital adequacy and why is it important?

Capital adequacy refers to the ability of a financial institution, such as a bank, to meet its financial obligations and absorb potential losses. It is a measure of financial strength and stability. In simple terms, capital adequacy ensures that banks have enough capital to cover their risks and protect investors, such as depositors or bondholders. Capital adequacy is crucial for maintaining the stability and soundness of financial institutions.

The capital adequacy of a bank is typically measured by calculating the ratio of its available capital to the capital required to cover losses. In the case of unregulated banks such as multilateral development banks (MDBs), capital requirements are determined by the institution's desired credit rating and risk appetite. The World Bank, of which IDA is part, is an MDB. If an MDB wants to benefit from a triple-A credit rating, enabling it to borrow at the lowest rates, it needs to maintain the highest capital standards. Banks that do not maintain high capital adequacy levels typically have lower ratings and borrow at more expensive rates.

Why capital adequacy is important for MDBs

- **Financial stability:** Capital adequacy helps maintain the stability of the financial institution by providing a cushion against unexpected losses. Sufficient capital ensures that the bank can absorb losses without jeopardizing its ability to meet its financial obligations.
- Protection of investor funds: Capital adequacy is crucial for safeguarding investor funds typically those of bondholders. Adequate capital acts as a buffer to protect these investors if the bank experiences financial distress. It ensures that investors have confidence in the safety of their funds.
- Risk management: Capital adequacy is closely linked to risk management. Banks with higher capital levels are better equipped to manage risks and withstand adverse economic conditions. Adequate capital allows banks to absorb losses from credit defaults, market volatility, and other unexpected events.
- Credit ratings and investor confidence: Sound risk management, including capital adequacy policies, is an important qualitative factor when credit-rating agencies assess MDBs and other financial institutions. Higher credit ratings and adequate capital levels in turn enhance investor confidence in financial institutions.

What is a triple-A credit rating and why is it important?

IDA, IBRD, and IFC all have triple-A credit ratings. This is a rating assigned by credit-rating agencies to indicate the highest level of creditworthiness and financial stability of a financial entity. It signifies that the entity has a very low risk of defaulting on its financial obligations. To determine an entity's creditworthiness, credit-rating agencies assess various factors, including financial strength (such as capital adequacy), risk management practices, debt repayment history, market reputation, economic conditions, and in the case of MDBs, strength of shareholder/donor support.

Triple-A is the highest rating an entity can receive. For MDBs, a triple-A rating offers several benefits:

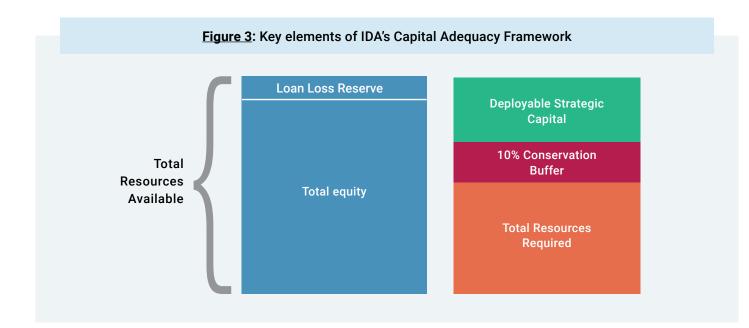
- Access to funding: A triple-A rating enhances a bank's ability to raise funds from the market, particularly in times of market stress when MDBs may be called upon to support client countries experiencing debt distress.
- Investor confidence: A triple-A credit rating instills confidence in investors and helps to maintain a wide and stable investor base, which is particularly important for MDBs that have financial operations across multiple markets and currencies.
- Lower borrowing costs: Banks with a triple-A rating can borrow funds at lower interest rates than banks with lower credit ratings. This can reduce an MDB's cost of capital and allow it to on-lend to clients at favorable levels, which is particularly important for countries that are financing loans with long repayment periods and may face debt sustainability concerns.

What are the key elements of IDA's Capital Adequacy Framework?

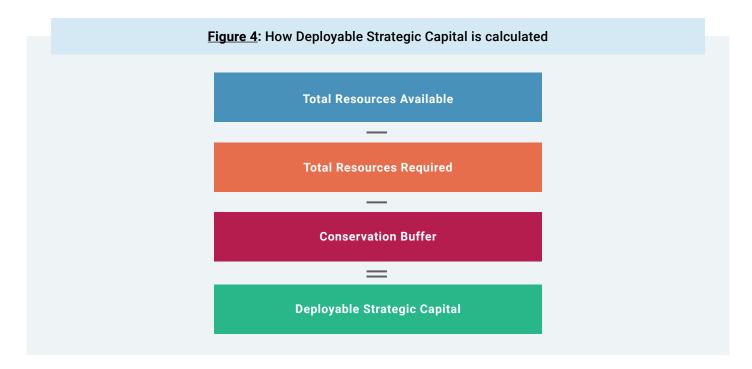
IDA's Capital Adequacy Framework is designed according to best practice to ensure IDA will have enough assets to cover its liabilities after a potential severe stress event. The framework has four main components (see Figure 3):

- Total Resources Available consists of IDA's existing equity and outstanding Loan Loss Reserve.¹
 It is a measure of IDA's equity that is available to cover losses during a stress event, such as an adverse credit shock affecting IDA's borrowers.
- Total Resources Required represents the minimum capital required to cover expected and unexpected losses associated with IDA's existing operations and assets. It includes a capital allowance to account for losses resulting from valuing IDA's concessional loan portfolio using market interest rates. The Total Resources Required is calibrated to a level that corresponds to IDA's target to maintain a triple-A credit rating.
- The **Conservation Buffer** serves as a prudential buffer, set at 10 percent of Total Resources Available.
- Deployable Strategic Capital is the main measure of IDA's capital adequacy. Figure 4 shows how it is calculated. Deployable Strategic Capital (DSC) is typically expressed as a percentage of Total Resources Available in the following ratio:





¹ The Loan Loss Reserve is an accounting term for a provision which reflects the expected losses inherent in its nonaccrual and accrual loan portfolios. The expected credit losses related to loans are calculated over the life of the instruments based on the expected exposures, the expected default frequency (probability of default to IDA), and the estimated loss in the case of default.



IDA's Board requires IDA to keep its Deployable Strategic Capital at levels higher than or equal to zero percent. While IDA's Board policy is to keep its Deployable Strategic Capital ratio at or above zero percent, IDA's level of Total Resources Required alone (equivalent to a DSC ratio of equal to or above negative 10 percent) is calibrated to target a triple-A rating.

How is Total Resources Required determined?

IDA's core business model involves lending to low-income countries on concessional <u>terms</u>, which means the loans carry below-market interest rates (typically at either a zero or low interest rate). Additionally, a significant portion of IDA's financing is provided entirely as development grants.

IDA's concessional financing model results in a number of financial risks which it needs to manage. Risks are mitigated through policies and procedures, but some are not possible to eliminate. These risks determine the size of the Total Resources Required in IDA's Capital Adequacy Framework.

The Total Resources Required is the minimum capital required to cover expected and unexpected losses associated with all of IDA's current operations and assets. It includes:

- **Expected and unexpected losses:** These losses are assessed under a stressed downside scenario.
- **Multiple risk types:** This includes credit risks in the development finance portfolio, market and counterparty risks in treasury operations, and operational risk.
- Concessional loan portfolio valuation: IDA typically provides loans in concessional terms with long repayment periods. The Capital Adequacy Framework aims to recognize how providing these loans affects the amount of capital IDA holds to support losses. The Total Resources Required therefore includes a capital allowance to reflect net losses that would result from valuing IDA's concessional loan portfolio in present value terms using market interest rates. This allowance is calculated using a stressed interest rate to account for a potential future rise in market interest rates. (*Present value* is the concept that a dollar received in the future is worth less than a dollar received today, due to factors such as inflation and the opportunity cost of investing that money elsewhere.)

 Development grants are provided by IDA to eligible countries to support development projects and do not need to be repaid, making these grants a key source of financing for the poorest and most vulnerable countries. Grants provided to clients effectively reduce IDA's equity on a one-to-one basis. The Total Resources Required includes a capital allowance to reflect expected equity reductions resulting from committed grants that have not yet been expensed.

The main financial risks faced by IDA

- **Country credit risk** is the main risk for IDA. It refers to borrower countries being unable to repay their loans or meet their financial obligations. IDA operates in countries with varying levels of economic and political stability, which can affect these countries' ability to repay their loans.
- Counterparty credit risk arises from IDA's financial operations, including investments and derivatives. It is the risk of the other party in a financial transaction defaulting on their obligations.
- Market risk includes interest and exchange rate risk. Interest rate risk is the potential impact of changes in interest rates on financial positions, including loans and investments. Exchange rate risk arises from fluctuations in currency exchange rates, which can affect the value of assets and liabilities.
- Liquidity risk is the risk of not being able to meet financial obligations due to a lack of cash or liquid assets, or the inability to access funding when needed. IDA manages liquidity risk by maintaining sufficient liquid assets and ensuring access to funding sources, including capital markets and donor contributions.
- **Operational risk** refers to potential losses arising from internal processes, systems, or human error.

IDA has rigorous systems in place to monitor, manage, and mitigate all these risks.

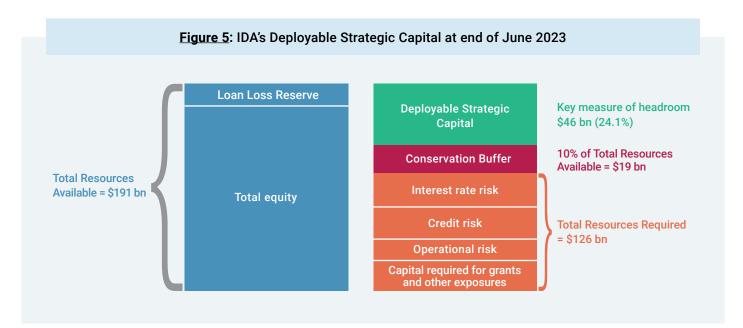
What is the purpose of IDA's Deployable Strategic Capital?

IDA's Deployable Strategic Capital model serves several purposes:

- Capital adequacy assessment: It helps IDA evaluate its capital position and determine whether it has sufficient capital to support its future commitments and operations.
- Risk management: It helps IDA manage credit, market, operational, and other risks. By evaluating these risks, the model helps determine the appropriate level of capital required to cover potential losses. While there are policies in place to manage and mitigate financial risks, some risks cannot be eliminated and these are combined into a single metric (via the Deployable Strategic Capital model) for management to monitor.
- Financial stability: It contributes to IDA's financial stability by ensuring that IDA maintains adequate capital reserves to cover its debts, even in a stressed scenario, while continuing to fulfill its commitments to member countries. The model helps build market confidence in IDA's financial operations. This helps IDA to maintain reliable access to market funding at competitive rates, which in turn enables IDA to provide stable and predictable financing to its clients while limiting its recourse to donor funds.
- Decision-making: The model provides valuable information for decision-making on resource allocation and financial planning. Different business strategies or lending plans can be compared directly with the Deployable Strategic Capital metric providing a single measure of risk. It helps IDA assess its capacity to provide financing for projects and support high-priority areas in less-developed regions.

What is the current size of IDA's Deployable Strategic Capital?

At the end of June 2023, IDA's Total Resources Available stood at \$191 billion, the Total Resources Required was assessed at \$126 billion, and the Conservation Buffer was \$19 billion. This resulted in a Deployable Strategic Capital of \$46 billion, or a ratio of 24.1 percent. Figure 5 illustrates this breakdown.



What causes Deployable Strategic Capital to change over time?

Deployable Strategic Capital is directly affected by changes to Total Resources Available and the Total Resources Required (see Table 1). Anything that increases Total Resources Available, such as donor contributions or positive income, will increase the Deployable Strategic Capital, all other things being equal. Conversely, items that reduce Total Resources Available, such as lower net investment income or higher operating expenses, will reduce the Deployable Strategic Capital. The opposite is true for the Total Resources Required. For example, if Total Resources Required increases due to larger exposures or higher risks, the Deployable Strategic Capital will decrease.

Major factors affecting the Deployable Strategic Capital include:

- Increased lending to riskier countries (e.g., with more focus on fragile, conflict-, and violence-affected (FCV) countries) or shocks to countries' credit profiles would increase capital requirements for credit risk and reduce IDA's leveraging capacity.
- Increased share of concessional loans (vs. loans with less concessionality) requires more capital for interest rate adjustment of loan portfolio.
- Increased grant financing due to higher volumes of FCV financing or worsening of client countries' debt sustainability assessment.

Table 1: Factors that affect the level of Deployable Strategic Capital

Factors related to Total Resources Available	TRA	DSC
IDA receives higher capital through donor contributions, Multilateral Debt Relief Initiative compensation, or WBG transfers	+	+
IDA earns positive net income from its assets, such as investment income and loan revenue	+	+
IDA disburses more grants than planned to its client countries	+	+
Factors related to Total Resources Required	TRR	DSC
IDA issues higher volume of concessional loans or loans with higher concessionality	+	+
IDA borrows fixed rate bonds or enters interest rate swaps to match the fixed rate of its assets	+	+
There is a credit worsening of IDA countries	+	+
Donors provide guarantees to cover part of credit risk for IDA	+	+

Note: TRA = Total Resources Available; TRR = Total Resources Required; DSC = Deployable Strategic Capital.

How does a replenishment affect IDA's Deployable Strategic Capital?

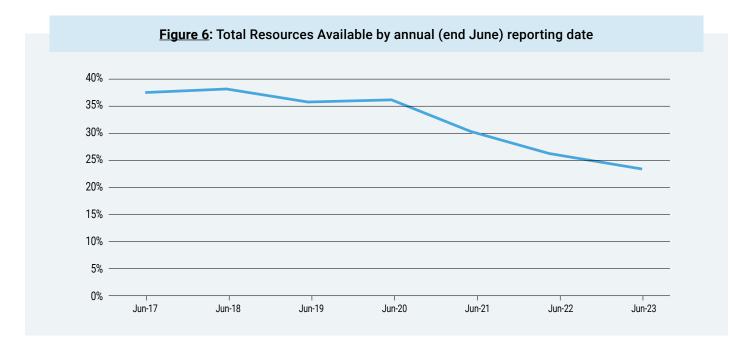
During an IDA replenishment, IDA members agree on a policy framework, on the amount of financing to be made available for the funding cycle, and on additional equity contributions required to meet these goals. A replenishment affects IDA's Deployable Strategic Capital in the following key ways:

- Donor contributions. Donors pledge to provide new contributions of equity over an agreed period. As these contributions are received, they flow into IDA's equity and provide more capital to support risks. This increases IDA's Total Resources Available and, in turn, its Deployable Strategic Capital.
- Financing volume. The amount of financing that is made available for clients in the new cycle inversely affects Deployable Strategic Capital. As loans are committed and disbursed, they increase the amount of risk in the portfolio, which in turn increases the level of required capital to cover the risks. Commitments of development grants require additional capital on an almost one-to-one basis. The more financing is provided, the more capital is required, and the larger the increase in Total Resources Required. This increase reduces the capital available for future financing—that is, the Deployable Strategic Capital.
- Policy framework. The policy framework for an IDA cycle can affect the size of the Deployable Strategic Capital after a replenishment. The Capital Adequacy Framework accounts for the level of concessionality provided in IDA financing. It does so by holding capital against potential losses resulting from valuing IDA's concessional loan portfolio using market interest rates. The more concessional the lending terms, the more capital needs to be set aside. This increases the Total Resources Required, a result reducing the Deployable Strategic Capital.

In summary, within an IDA replenishment, the Deployable Strategic Capital is determined by the net effect of the level of new equity contributions, the volume of financing provided, and the degree of concessionality provided in the financing. These factors directly affect the trajectory of Deployable Strategic Capital over time, with relatively higher lending volumes and concessionality driving it lower.

How has the Deployable Strategic Capital changed since IDA18?

Every quarter, IDA reports its Deployable Strategic Capital to World Bank management and external stakeholders as part of the release of its financial statements. IDA has gradually begun to leverage the equity since the start of IDA18. Over that time, IDA has increased its lending portfolio, financing additional disbursements by issuing debt in the capital markets (at end June 2023, IDA's market debt balance stood at about \$28 billion). This has been the primary cause of the Deployable Strategic Capital decreasing over time, as shown in Figure 6. The variance between periods reflects the impact of the factors described above.



Conclusion

The Capital Adequacy Framework is a critical element of IDA's hybrid financial model. IDA has calibrated its Deployable Strategic Capital model to target maintaining a triple-A credit rating, which enables it to provide large loans to clients at competitive or concessional rates and do so even in stressed market environments.

Within each replenishment, it is critical for IDA to strike the right balance between financing volumes, financing terms, and new resources provided by donors. If this balance is not achieved, the Deployable Strategic Capital may be pushed closer to its policy limit of '0', which is in place to protect IDA's triple-A rating and is critical for its business model. Ultimately, with each replenishment IDA faces a trade-off between the volume of financing and the financing terms to maintain its financial stability.