

**Building a New Global Financial Institution:  
Equity-Vote Share in A South-South Development Bank**

By

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## **Introduction**

The potential creation of a South-South development bank (SSDB) provides us with a unique opportunity to devise governance and voting structure for a multilateral institution on the basis of principles and current & emerging economic reality. The focus in this note is on the key aspect of governance, the voting rights as determined by equity shares and the formula determining them. The distribution of power within a multilateral economic institution, the way it is governed, the rules, regulations and policies that it follows and/or recommends and the way these are applied depends (directly or indirectly), on the distribution of vote shares.<sup>1</sup> An equation of vote shares with quota shares balances rights and responsibilities of countries. A good formula ensures an equitable sharing of power among different countries. An alignment of the institutions power structure with global economic realities, is a prerequisite for institutional credibility and legitimacy in playing an active role in the global economy.

## **Motivation and Objectives**

The starting point for any analysis of the governance structure is the motivation for setting up such a multilateral institution and the objectives it is designed to achieve. What is the need for another Development Bank, when we already have the “World Bank” and “Regional development banks” such as the IADB, the AfDB and the ADB? The answer is in two parts. Firstly, the World Bank is neither able (due to lack of funds) nor willing (because it has reached its “exposure limits”) to fund the increasing requirements for medium-long term infrastructure finance in emerging and developing countries (EMDCs). The EMDCs have been asking for an increase in the capital of the World Bank for years. The Developed Countries (DCs) have after many years of foot dragging, reluctantly agreed to a minimal increase in this capital. This increase is however totally inadequate to generate enough loans to meet the infrastructure needs of the EMDCs. The developed countries neither have the fiscal space nor the political support/desire/will to provide more funds for economic development of the EMDCs. Further they are unwilling to consider any arrangement, such as increased equity contribution by emerging economies themselves that will increase the latter’s vote share in this institution. The second part of the answer is that there are now enough surplus funds in the emerging economies themselves (Current account and fiscal surplus countries) that could be channeled directly to other emerging economies (rather than through NY/London/Washington) if the institutional structures could be created. The South-South bank is one such institution that could help channel funds from Surplus countries to Deficit countries in the South. The funds would include a combination of equity and debt. A South-South Bank would help facilitate flows across different Geographical regions for instance from Asia to Africa.<sup>2</sup> Finally, a new global development bank can and must be designed to have a governance structure and developmental approach that is more credible to both providers and users of funds.

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<sup>1</sup> This is based on author’s two years on the board of a multilateral institution (an inside view).

<sup>2</sup> The existing Regional Banks, by definition, are constrained to operate within their region.

## Possible Formula

The basic objective of the South-South Development Bank (SSDB) is economic development that is to improve Global Social welfare through economic growth and increased supply of public goods and services. This in turn identifies the two key variables that are relevant to the governance of the SSDB, namely the ‘economy’ and ‘people’ of the World. The key variables for determining the equity share cum voting rights in the new institution must therefore be Economic size measured by Gross Domestic Product at Purchasing power parity and Population. The country share of GDP in world aggregate output correlates with the potential demand for loan funds for economic development, the funds that must be contributed for the equity of the institution and the voting rights that they deserve in a global economic institution. The country share of population in world population reflects the composition of the World’s public/people in whose interests the SSDB and the country governments are supposed to act and the mix of experiences, cultures and attitudes that must be reflected in the policies, rules and decisions that SSDB and the governments’ make.<sup>3</sup>

The SSDB is relatively irrelevant to the people and economies of the DCs as they are already developed.<sup>4</sup> Thus to be consistent with the motivation for and objectives of the SSDB, the formula that is designed to make use of these two variables must be such that it reduce their role relative to the formulas that they have used in the World Bank. A simple way to do this would be a simple formula ( $F_{min}$ ) that does this is as follows: Assign to each country (  $j$  ) a share that is the *minimum* of its share in World GDP and share in world population, then proportionately adjust (multiply all initial shares by the same factor  $m$ ) that makes the final equity shares sum to 100%, i.e.

$$\text{Share}_j = \text{Min} (\text{GDP share}_j, \text{Population share}_j).$$

$$\text{Share}_j(\text{adj}) = m * \text{Share}_j, \text{ where } m \text{ is such that } \sum_j (\text{Share}_j(\text{adj})) = 100\%.$$

A more conventional formula would be an *averaging* formula ( $F_{avg}$ ) that weights the GDP shares and the population shares equally (i.e. 50-50 weights). This provides a direct way of excluding the “North” from the equity of the bank, by assigning them a zero share in the equity and then using the average shares of the “South” to allocate equity shares ( $F_{avgo}$ ).

When the Breton-Woods institutions were set up, the USA was in such a strong position that it would have dominated both institutions. It chose not to base the shareholding on country shares in GDP, so as to reduce its own share. This however, also had the negative fallout of creating an incredibly complicated formula that continues to bedevil rational reform efforts. The best way to address this issue is to explicitly limit country shareholding to a maximum of 15% (say).<sup>5</sup>

<sup>3</sup> See Virmani (2011a) or Virmani (2011b) for a detailed annunciation of principles in the context of reform of an existing global economic institution.

<sup>4</sup> At a first level. At the next level their short term reduction in intermediation profits would be offset by longer term gains from faster development of the low and middle income countries.

<sup>5</sup> The minimizing formula ( $F_{min}$ ) will in a decade or so result in the largest share holder(s) having a share that is less than 15%, making the limit redundant from then onwards.

The calculated equity shares would be based on the previous year's data on GDPppp and population and be automatically recalculated every year. The actual adjustment could be made every two years through addition or subtraction of equity contributions. The equity determined by the formula would not be an obligation but a maximum equity that any country can hold in the SSDB. Individual countries do not have to take the equity if they do not have the money or the inclination to do so, but would have their vote share correspondingly reduced! The unsubscribed equity would then be reallocated to participating governments using the same method as used in the formula, with a corresponding increase in their vote share.

A potential borrower does not have to be a share holder to borrow funds for development. There would be no link between the equity share contribution and the maximum permissible borrowing though there may be prudential limits based on GDP and population and perhaps other variables.

### Illustrative Calculations

Tables 1 and 2 summarize the equity cum vote shares arising from the different formulas using 2011 data from IMF WEO. The first formula ( $F_{min}$ ) reduces the equity/vote share of High income countries by a larger amount than the second formula ( $F_{avg}$ ). However most of the gain accrues to the Upper middle income countries whose equity/vote share becomes higher than its share in GDP or population (table 1). The second formula ( $F_{avg}$ ) in contrast results in a somewhat lower reduction in the share of the High income countries to 35.8%, but distributes the gain more evenly among the other categories of countries. The low income countries receive a higher equity/vote share of 6.6% compared to 2.4% (in  $F_{min}$ ). If the "North" does not participate in the SSDB ( $F_{avgo}$ ), the lower and middle income countries get a share higher than the best of the two base cases,  $F_{min}$  and  $F_{avg}$  (table 1).

Table 1: Equity cum vote Shares resulting from different allocation Formulas

Country <u>Income Groups</u>	<u>Equity/vote shares using formula</u>				<u>Unadjusted</u>			<u>Share in World</u>		<u>Share in South</u>	
	$F_{avgo}$	$F_{avg1}$	$F_{min}$	$F_{avg}$	$F_{avgo}$	$F_{min}$	$F_{avg}$	<u>GdpPpp</u>	<u>Pop</u>	<u>GdpPpp</u>	<u>Pop</u>
Low Income (LICs)	9.1	7.7	2.4	6.6	7.9	1.3	6.4	1.3	11.6	2.4	13.4
Lower Middle Inc.	34.2	28.4	22.2	24.3	31.8	11.7	23.8	11.7	35.9	22.2	41.5
Upper Middle Inc.	47.1	36.4	45.2	33.3	52.0	29.6	34.6	32.6	36.6	61.9	42.2
High Income (HICs)	9.5	27.5	30.1	35.8	8.2	15.9	35.1	54.4	15.9	13.4	3.0

Several developed country governments may choose not to participate in the equity of the bank as their legislatures will not sanction the funds. For instance if the USA choose not to subscribe, the remaining participants equity/vote share would go up, improving the share proportion of lower and middle income countries(  $F_{avg1}$ ). This improves further if the 'North' does not participate at all in the equity of the SSDB ( $F_{avgo}$ ).

The ranking of the top shareholders arising from the formulas is given in table 2. The most important result is that the rich countries neither have a majority in the top 5 nor in the top 10. This is a precursor of what should happen in institutions like the World Bank and the IMF. In going from  $F_{min}$  to  $F_{avg}$ , the ranking of South Africa, an upper

middle income country and Nigeria, a lower middle income country, change dramatically, with the former moving down twelve places and the latter moving up ten places. Other significant changes in top 30 ranking are for Iran (-10), Thailand (-8), Turkey (-7) and Pakistan (+7). If the share holding is restricted to the South ( $F_{avgo}$ ), then most countries get a higher share than in either base scenario (table 2).

Table 2: Country Equity cum Vote Shares resulting from different Formulas

Country	Equity/vote shares using formula				Unadjusted			Share in World		Share in South	
	$F_{avgo}$	$F_{avg1}$	$F_{min}$	$F_{avg}$	$F_{avgo}$	$F_{min}$	$F_{avg}$	<u>GdpPpp</u>	<u>Pop</u>	<u>GdpPpp</u>	<u>Pop</u>
China	15.0	15.0	15.0	15.0	24.3	13.6	16.7	13.6	19.7	25.8	22.7
India	15.0	13.7	10.3	11.7	15.3	5.5	11.5	5.5	17.5	10.3	20.2
United States			8.6	12.3	0.0	4.6	12.0	19.5	4.6	0.0	0.0
Brazil	5.1	3.4	5.4	2.9	4.4	2.8	2.9	2.9	2.8	5.6	3.3
Russia	4.7	3.0	4.0	2.6	4.1	2.1	2.5	3.0	2.1	5.7	2.4
Japan		4.6	3.5	3.9	0.0	1.9	3.8	5.8	1.9	0.0	0.0
Mexico	3.4	2.2	3.0	1.9	2.9	1.6	1.8	2.1	1.6	4.0	1.8
Indonesia	3.9	2.9	2.6	2.5	3.3	1.4	2.4	1.4	3.5	2.6	4.0
Germany		3.1	2.3	2.6	0.0	1.2	2.6	4.0	1.2	0.0	0.0
Iran	2.0	1.4	2.1	1.2	1.8	1.1	1.1	1.2	1.1	2.3	1.3
Turkey	2.1	1.4	2.0	1.2	1.8	1.0	1.2	1.3	1.0	2.5	1.2
France		2.3	1.8	1.9	0.0	0.9	1.9	2.9	0.9	0.0	0.0
United Kingdom		2.3	1.7	2.0	0.0	0.9	1.9	2.9	0.9	0.0	0.0
Italy		2.0	1.7	1.7	0.0	0.9	1.6	2.4	0.9	0.0	0.0
Thailand	1.5	1.0	1.5	0.9	1.3	0.8	0.9	0.8	0.9	1.5	1.1
Korea	2.6	1.6	1.4	1.4	2.3	0.7	1.3	2.0	0.7	3.7	0.8
South Africa	1.3	0.9	1.3	0.7	1.1	0.7	0.7	0.7	0.7	1.3	0.8
Spain		1.5	1.3	1.3	0.0	0.7	1.3	1.8	0.7	0.0	0.0
Egypt	1.5	1.1	1.3	0.9	1.3	0.7	0.9	0.7	1.1	1.3	1.3
Pakistan	2.4	1.9	1.2	1.6	2.1	0.6	1.6	0.6	2.5	1.2	2.9
Argentina	1.3	0.9	1.1	0.7	1.2	0.6	0.7	0.9	0.6	1.6	0.7
Colombia	1.1	0.7	1.1	0.6	0.9	0.6	0.6	0.6	0.7	1.1	0.8
Poland	1.4	0.9	1.1	0.8	1.2	0.6	0.8	1.0	0.6	1.8	0.6
Nigeria	2.1	1.7	1.0	1.4	1.8	0.5	1.4	0.5	2.3	1.0	2.6

## Conclusion

The creation of a new South Bank provides us with an opportunity to set up a governance structure that will be representative, fair and credible and last into the future. The current note has explored one aspect of governance, the equity formula and the distribution of equity/vote shares. Subsequent notes will explore other aspects of Governance such as the board of directors and the procedures for selection of top management.

## References

1. Virmani (2004), Arvind “Economic Performance, Power Potential and Global Governance: Towards a New International Order, Working Paper No. 150, ICRIER, December 2004.  
<http://www.icrier.org/page.asp?MenuID=24&SubCatId=175&SubSubCatId=233>.
2. Virmani(2011a), Arvind ““Global Economic Governance: IMF Quota Reform,” IMF Working Paper No WP/11/208, July 2011.  
<http://www.imf.org/external/pubs/cat/longres.aspx?sk=25198.0>
3. Virmani (2011b), Arvind “Global Economic Governance: IMF Quota Reform,” Macroeconomics and Finance in Emerging Market Economies, October 2011.