The G20 Proposal on IMF Governance: Is there Progress?

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Discussion Paper No 439
March 2010
ISSN 0949-9962

Abstract

The G20 summits in 2009 have proposed major changes in governance of the International Monetary Fund (IMF). Most important seems to be the acknowledgment that the IMF in its current form lacks legitimacy and ownership. Accordingly, the G20 suggests a reallocation of voting shares to emerging and developing countries, an antedated reform of the quota system, a delinking of the managing director's election from regional origin and support for the Singapore quota and voice reform of 2006. Unfortunately, these reform decisions remain in part imprecise, they leave crucial issues untouched and they are not implemented, not even by several G20 countries themselves. So the intended reform takes the right direction but it must be implemented soon before any progress can be stated.

JEL-Classification: F 33 (International monetary arrangements and institutions)
Keywords: International Monetary Fund, governance, reform, quota system

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In response to the current worldwide financial and economic crisis the so-called "G20" group has emerged as the premier forum of economic policy makers. Since its first meeting in November 2008, the G20 has thus replaced the G8 group of large industrialized economies which had been established in the 1970s (starting as G5). The expansion from 8 to 20 members reflects the shift in economic weight in the world economy from the long-time industrialized countries to emerging economies.[1] Thus, it is assumed that the G20 is closer to a worldwide shared opinion on economic affairs than the former G8 had been. This should give the G20 more legitimacy and leverage in implementing its agenda in the world. The agenda includes a reform of IMF governance, which motivates analyzing this proposal of the world's leading policy forum (G20) for the world's leading international financial institution (IMF).

The reform of IMF governance is not just one issue among a set of reforms but a crucial focus point. The IMF is on center stage whenever proposals are made on stabilizing the international financial architecture because there is no other comparable institution existing. If, however, the IMF is so important for any reform agenda, then its governance is at the heart of any agenda. In a sense, IMF governance is of paradigmatic importance: whatever a proposal wants to achieve by reforming the international financial institutions, it will be reflected in its stance on IMF governance. Accordingly, massive interests and quite contradictory ideas are involved in the debate about IMF governance. This makes it even more interesting to see what the G20 has decided on this issue. We continue our analysis in three steps. First, we report what has been decided. Second, as a prerequisite to understand much of the heated debate, we introduce into the IMF's quota system which determines voting power of nations within the IMF. Third, we provide an assessment of the G20 reform proposal.

The G20's guideline

Before going into detail, it is worth remembering the spirit that pervades the communiqués that have been published after the three G20 summits having taken place so far.[2] It becomes very obvious that the "new" members of this international forum push for broader par-

[1] G20 participants are 19 countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom and USA) plus one representative of current EU Council presidency; meetings are accompanied by further representatives.

[2] These summits were held in Washington, DC (USA) in November 2008, in London (UK) in April 2009 and in Pittsburg (USA) in September 2009. The next summit is scheduled for June 2010.

ticipation of emerging and developing countries. These members have been successful as the G20 acknowledges a lack of legitimacy and ownership of international financial institutions, including the IMF. The London Communiqué for instance states: “We will reform their [the international financial institutions’] … governance to reflect changes in the world economy and the new challenges of globalisation, and that emerging and developing economies, including the poorest, must have greater voice and representation.” (G20, 2009b, No.20).

“Voice” and “representation”, “legitimacy” and “ownership” are keywords, indicating that most countries of the world do not see the IMF as “their” institution. Instead, the IMF is correctly regarded as the instrument of a small group of industrialized countries, in particular the United States and the European Union (see e.g. Barro and Lee, 2005; Dreher et al., 2009). This perception damages the IMF’s operations: if debtor countries have the impression that policies and conditions they are obliged to fulfill pursue other goals than their economic well-being, the legitimacy and credibility of IMF programs is undermined. Consequently, countries will be more reluctant in accepting these conditions or even hesitate to ask for IMF aid (cf. Bird, 2007).

The G20 proposal of four measures

In light of the acknowledged shortcoming, G20 has agreed on four measures towards improving IMF governance: (1) Shifting at least 5% of votes from over- to under-represented (emerging market and developing) countries (cf. G20, 2009c, No.21). (2) Accelerating the next general quota review (cf. G20, 2009a, p.1). (3) Delinking the election of the IMF’s managing director from regional origin (cf. G20, 2009b, No.20; G20, 2009c, No.21), and (4) putting forward the Singapore quota and voice reform which will be discussed below (cf. G20, 2009b, No.20). These measures will be introduced in the succeeding paragraphs.

(1) Vote shifting

The G20 agreed to a 5% shifting of votes towards under-represented countries, i.e. towards emerging and developing countries. The 5% shift aims at a better reflection of “members’ relative weights in the world economy” (G20, 2009c, No.21) regarding the vote distribution. As votes are mainly determined by quotas, the G20 refers to “using the current quota formula as the basis to work from” (G20, 2009c, p.3). This seems reasonable because the IMF’s system of quota formulas, i.e. the Calculated Quota System (CQS), was designed for the purpose “to guide the assessment of a member’s relative position” (IMF, 2009c). Consequently, the deviation of a country’s actual quota share from its CQS will be used as the

benchmark for under- and over-representation for an evaluation of a five percent shift of quotas.

(2) Antedated general quota review

The Fund's Articles oblige the IMF to accomplish general quota reviews every five years (cf. IMF, 1993, Art.III §2(a)). The last review was finished in the beginning of 2008. Thus, the following 14th review needs to be accomplished until 2013. In light of the need for a quota adjustment, G20 leaders called for acceleration of the forthcoming review and finishing it until January 2011, i.e. at least two years ahead of schedule. However, in light of the "difficult and time consuming" (Manuel, 2009, p.14) negotiations, the time frame from making the decision at the London Summit in March 2009 until finishing the negotiations in January 2011 is narrow and thus very ambitious.

(3) Election of the managing director

With respect to the US-EU consensus of choosing the IMF's managing director,[3] the London Communiqué and the Pittsburgh Leaders' Statement stress that future criteria for electing the heads of all international institutions need to be based upon qualifications instead of regional origin (cf. G20, 2009c, No.21; G20, 2009b, No.20). This decision marks a caesura in the Fund's history and follows the unanimous recommendations of the G20 Working Group 3 (cf. G20 Working Group 3, No.28), Stiglitz Commission (cf. Stiglitz, 2009, p.95), the Manuel Group (cf. Manuel, 2009, No.34), the IEO (cf. IEO, 2008, No.84) and many critics (cf. Truman, 2006, pp.78-80).[4] The decision not to restrict the proposal of an open and merit-based election only to the IMF but to all international institutions is wise. EU countries would hardly support a reformed election process for the Fund if the US claim for an American World Bank president endured. However, the G20 communiqués do not provide details of such a process or the criteria included. Neither do they determine a deadline for implementing these processes. Both institutions' heads (Mr. Zoellick as president of the World Bank and Mr. Strauss-Kahn as the Fund's managing director) are elected until 2012. However, already

[3] Historically, the position of the World Bank's president is held by an American while the IMF's managing director is a European.

[4] In preparation for the G20 summits, several groups were formed, including the G20 Working Group 3 directly appointed by G20 finance ministers, the Issing Committee established by the German government, the de Larosière High-Level group assigned by the European Commission, and the Manuel Committee that was put in place by the IMF's managing director Strauss-Kahn.

at his election, Mr. Strauss-Kahn was presumed to be the last European holding the office of the managing director (cf. Kläsgen, 2007).

(4) Implementing the Singapore reform

The last measure that was decided by G20 leaders with respect to governance reform is the support of the Singapore quota and voice reform. While the London Communiqué states a commitment of G20 countries for implementing Singapore reforms, the call for implementation of the reform package was much more pressing at the most recent Pittsburgh Summit: "We must urgently implement the package of IMF quota and voice reforms agreed in April 2008" (G20, 2009c, No.21).

In April 2008 the IMF's Board of Governors approved a quota and voice reform package that was first discussed by members at the Fund's 2006 annual meeting in Singapore. This package includes five elements (see Table 1). In the meantime, one of these elements has been already implemented. The first round ad hoc quota increase was realized in 2006 and aimed at leveling imbalances of the four countries that were "most underrepresented members" (IMF, 2008b, p.1), i.e. China, Korea, Mexico, and Turkey. It distributed SDR 3.81 billion of quotas, i.e. 1.8% of IMF's total quotas (cf. IMF, 2006).

A second element partially being implemented in the meantime is the additional staff (but not alternate executive directors yet) for each of the two constituencies representing African members (cf. IMF, 2008a, p.12). According to the IMF, the heavy workload of these constituencies which is caused by the large number of represented countries and the importance of IMF funding for these countries justifies this decision. Indeed, by number of countries, they are the largest constituencies representing 20 and 23 members respectively (while this adds up to only 3.01% and 1.35% of total votes) at the Executive Board. Hence, the decision seems reasonable but is only a minor aspect of the reforms.

Beyond these two elements, the element of so-called "second round" ad hoc quota increases based on the new formula is picked up by the 5% quota reallocation endorsed by the G20. Thus, there are two elements of the Singapore reform package still open which refer to the redistribution of voting power: the creation of a new quota formula plus the tripling of basic votes. Discussing the quota formula requires an understanding of the IMF quota system.

The IMF quota system

The quota which each IMF member country receives has four functions: first, it determines access to funding by the IMF, second, it determines obligations to the IMF, third, it

determines the number of votes in the Board of Governors (in combination with the basic votes) and, fourth, it determines the share of Special Drawing Right (SDR) allocations. So, quotas are important in various respects which are reflected in the way how the quotas are calculated.

The concrete formula for quota calculation presently consists of five sub-formulas with similar ingredients each but different weights given to them (cf. IMF, 2008b). Thus, the formula looks quite complicated and it is not obvious at all why it is constructed in its present way. The only explanation for its present form is that it is a grown formula where IMF member countries have to agree on and thus fight for their interests by pushing for certain formula elements that support the own country's weight. Despite this process which can only be understood as a series of political compromises, one can still recognize why the certain elements are considered by the formula. In detail, there are five elements as can be seen from Table 2.

The element "GDP" reflects the size of an economy, "reserves" reflect the country's ability to support IMF financing, "current payments" and "current receipts" are considered to account for openness and thus for relevance to IMF operations and the "variability of receipts" is seen as a measure of vulnerability and thus of potentially needed IMF support. Overall, the consideration of these elements does not seem to be misleading although their weighting is open to discussion.

Calculatory quotas as benchmark

If we now take the present CQS as benchmark for a shift in power as envisioned by the G20 we receive a surprising result. Figure 1 shows the 15 most over-represented and 15 most under-represented countries by plotting the difference between the CQS and the actual quota share on basis of 2006 data (still reflecting the current status). Singapore for example holds approx. 0.4% of quotas while calculated quotas entitle it to approx. 1.9%; China holds approx. 3.7% of quotas in comparison to calculated 5.2%. Astonishingly, more than half of the 15 most under-represented countries are EU members (8 out of 15). At the top of Figure 1 are the over-represented countries. Saudi Arabia for instance holds more than three times the quotas of the calculated value (3.2% instead of 1%); Russia holds approx. 2.7% of quotas which is also considerably more than the calculated share of approx. 1.5%.

Overall, if this definition was used for leveling quota shares, it is not the developing countries which were beneficiaries of a 5% shift (apart from China or Korea for example) but mainly EU countries. Following the IMF's classification of developing and emerging economies (cf. IMF, 2009d) 70% of all developed countries (22 out of 31) are under-represented

while more than ¾ (117 out of 152) of the emerging and developing countries are over-represented. Hence, if the G20 leaders' aim is to give greater voice to developing countries, other indicators of under-representation need to be used. A starting point may be the new formula recently suggested by the IMF (2008e).

New IMF quota formula

Interestingly, an overhaul of the quota calculation process was agreed upon, although it has not been implemented so far. This was sought to be achieved by introduction of a new quota formula that supersedes the current system of five formulas. The aim of this new formula was a simpler and more transparent calculation that better reflects countries' relative economic weight (cf. IMF, 2008b, p.2). The new formula relies on the elements of the present formula but reduces the number of sub-formulas to one (IMF, 2008b). Moreover, it integrates current payments and receipts into a single openness measure and modifies the conversion weights for GDP calculation from 100% market rates to 60% market and 40% PPP exchange rates (see Table 3). This latter modification increases the weight of developing countries. Finally, the compression factor was mainly supported by small EU countries in order to offset the high correlation of size-related variables (cf. Colabella et al., 2009, pp.15-16).

The new quota formula represents a compromise. On the one hand, there is a desire for the quota calculation to follow the credo of simplicity (cf. Bénassy-Quéré et al., 2007, p.15). The less formulas and variables are used, the less complex the calculation becomes. On the other hand, quota calculation shall meet the requirements of multifaceted roles and (potentially contradicting) functions of quotas (cf. Bird and Rowlands, 2006, p.157). This requires more detailed calculations and may not be reflected by a simple formula.

If the new CQS is implemented without any changes, 115 developing and 15 developed countries will lose quota shares while 16 developed and 34 developing countries will gain quota shares and 5 countries' quotas do not change at all. Figure 2 displays the 30 countries having the highest gains and losses (in percentage point difference) from a change to new calculated shares. China is the member that would profit far the most by the new quota formula with an increase in quota share of about 3.7 percentage points. On the contrary, Saudi Arabia e.g. loses approx. 2.4 percentage points. Overall, the G20 ambition of increasing the share of developing countries would be only partially met by implementing the new IMF quota formula. Thus another instrument of redistributing votes towards developing countries is important, i.e. the increase of basic votes.

Increase of basic votes

The Singapore reform package indeed includes the tripling of basic votes for all members from currently 250 to 750 votes. The role of basic votes has always been debated between supporters of an UN-model (one country, one vote) and supporters of a bank model (votes according to economic power). On the one hand, greater voice for developing countries will increase acceptance of IMF work and conditions (cf. Mirakhor and Zaidi, 2009, p.284). On the other hand, too much voice for developing countries can create a situation in which debtor countries had more voice in the Fund than creditors. This could undermine developed countries' control which is needed for accepting their role as creditors (cf. Bird and Rowlands, 2006, p.169) and is sometimes considered endangering the Fund's credibility in the international financial system (cf. Rapkin and Strand, 2006, pp.313-314). Between these two poles (represented by Eichengreen, 2007, and Meltzer, 2007, respectively), the G20 has committed itself to shift weight towards the first position, i.e. to improve voice and representation.

However, in practice the role of basic votes has always been rather marginal. A reference point for this debate is the IMF's start when basic votes accounted for 11% of total votes in the year 1945. The maximal share of basic votes was about 15% in the 1970s and the minimum share is realized today with approx. 2% (cf. Momani, 2009, p.249). It follows that the suggested tripling of basic votes would lead to a 6% share of basic votes to total votes. Whether this is appropriate or any other share in the so far realized range between 2% and 15% is a political question.

Double majority as alternative

Another route of increasing the impact of less represented emerging and developing countries would affect the voting system. For example, the Stiglitz Commission (cf. Stiglitz, 2009, p.94) advocates more double majorities: accordingly, decision making does not only require a certain percentage of votes but also a certain share of members ("shares and chairs" (Stiglitz, 2009, p.94). Currently, a double majority (85% of votes and 60% of members) is only needed for an amendment of the Fund's Articles. From the Stiglitz Commission's viewpoint, double majorities should be used for a broader range of decisions to give greater voice to small members. A drawback of the double majority principle is that it renders decision making more difficult as it imposes more restrictions. Therefore, small members would have greater influence only in the sense of more blocking power.

Interestingly, the Manuel Group and the IMF itself support the double majority principle and in addition call for lowering the 85% voting threshold to 70-75% (cf. IMF, 2009b,

pp.15-18; Manuel, 2009, p.14). This connotes the abolishment of the present US de-facto veto (with its voting share of about 17%). Hence, this decision would require an amendment of Articles which itself requires the double majority of 85% of votes plus 60% of members, i.e. the United States would have to vote in favor of forgoing its own veto.

Is Singapore enough?

In any case, it seems highly questionable whether even a full implementation of the new IMF quota formula will be sufficient in reaching the objective, i.e. "to reflect changes in the world economy". As possible quantification for this objective, one may compare quotas to PPP-valued GDP. We do so by referring to three kinds of quotas. Figure 3 depicts the CQS that guided the decision of the last general quota review in 2006, the current quota distribution effective since 2006, the new CQS based upon the Singapore quota formula suggested in 2008 for selected countries/regions, and these countries' weight indicated by their relative share of world PPP-GDP in 2009.

Figure 3 shows marked differences between these four allocations of quota shares in the IMF. In some cases clear trends become obvious: starting with the European Union, its share would be declining due to a quota reform but seems to be still too high compared to its world share in PPP-GDP. By contrast, the United States is rather under- than over-represented. There are some further large countries that are obviously under-represented, including China, India, Mexico and Brazil. Japan seems to be properly represented. Africa is a more complicated case as it is over-represented according to economic criteria. The same applies to Saudi Arabia which received its high quota in the 1970s when high revenues from oil sales should be made beneficial for the IMF. In summary, the new IMF quota formula (agreed on in Singapore) reflects the relative economic weight more properly although it will hardly go far enough to give emerging and developing countries voice and representation.

The European quota problem

One of the biggest problems of present IMF quota discussion is the case of Europe. The 27 countries of the European Union presently have a quota share of about 32% and are thus the single most important force, if they can agree on their strategy. This must be seen as an anachronistic over-representation, sometimes criticized also by influential European policy makers, for example by Bini Smaghi (2006). To the emerging countries mentioned above the EU share must appear exaggerated as it reflects rather the world after World War II than its

present state. Even within the group of industrialized countries, the United States has roughly the same GDP and population but less than 60% of Europe's quota share.

The European over-representation is supported by the distribution of seats within the important IMF Executive Board where 24 executive directors basically agree unanimously on decisions (cf. Momani, 2009, p.250). Due to this decision making form it is important to have a voice. Therefore, all countries are organized in groups, so-called constituencies, which are represented by an executive director. Exemptions are only the five most important countries which do not form constituencies but command over "their own" executive director, including France, Germany and the UK. In addition to these three European countries, there are another five executive directors from Europe. In summary, Europe controls one third of seats in the Executive Board, largely reflecting the European quota share (which is larger than the 32% quota share of the EU27).

Seen from the capital and quota shares, the European representation makes sense and one can even claim that Europe is under-represented when benchmarked by the current CQS (see Figure 3). Nevertheless, seen from the viewpoint of representation, as aimed for by the G20, the European control share at the IMF of one third is absurd. If one takes for example the United States as a role model in this respect, the appropriate European representation may be one seat plus, the plus reflecting the diversity of nations and organizations within Europe.

Quota bargaining

We are well aware, that quotas have always been and will be allocated due to a political process. Nevertheless, the credibility of a policy institution such as the IMF would profit from orientation of decisions on transparent criteria. A prime example could be the allocation of voting shares which are derived from a certain amount of basic votes plus a quota derived from reasonable formula.

Seen from this consideration, it is disappointing that G20 leaders did not pledge for implementation of a reformed quota calculation system as the basis for the shift in representation. Moreover, it is unclear whether a 5% change is sufficient to level imbalances in representation. If we take for example the presently used CQS, the percentage point differences of under-represented countries (i.e. the differences between the current CQS value and the actual current quota share) add up to 15% of total quota share that would have to be realigned in order to reflect calculated quotas.

Notwithstanding, history tells that reaching consensus about the Fund's quota distribution has always been very difficult. Colabella et al. (2009, p. 9) point out in this respect that

former total quota increases followed the principle of "equiproportionality": quotas were increased in total to reflect need for augmented liquidity but were distributed in relation to previous quota shares, keeping the percentage distribution of quotas untouched. This is mainly the reason for actual quotas reflecting neither distribution nor absolute sum of calculated quotas. Thus, planned quota alignment needs to be viewed also in relation to historical achievements which dampen expectations. According to this lowered expectation one may assess a five-percent shift in quotas as a noteworthy consensus.

Missing implementation

However, the bottom-line of any reform is its implementation. What has become of the Singapore reform process which has been confirmed by the G20? The outstanding Singapore reform can only be implemented by an amendment of the Fund's Articles (cf. IMF, 2009c) and thus requires double majority, i.e. ratification by 60% of all members (i.e. 111 countries) that represent more than 85% of total votes. Therefore, the support of G20 members is important in order to put forward ratification of the reform package. This is especially true because the Singapore reforms were meant to be a two-year reform process, i.e. it should already have been completed in 2008 (cf. IMF, 2006). However, it did not happen before the G20 met. What has happened since then?

Several months have passed since the London Summit and the first statement of pushing Singapore reforms in April 2009. But as of January 29, 2010, only 55 members have ratified the amendment (cf. IMF, 2009a), representing slightly more than ¼ of all members and 68% of total votes (see Figure 4). Among these are only twelve G20 countries, i.e. seven G20 countries have not ratified the resolution yet.[5] Still, if these countries ratify the reforms there will be only 62 countries with almost 79% of total votes. Another 49 countries holding more than 6% of total votes need to ratify the reform package before it is fully implemented. If one compares these requirements to the current "momentum" in ratification cases as shown by Figure 4, there is doubt that the reform will be implemented in a timely manner despite G20 support. The more time elapses and the more the economy recovers from the crisis, the less urgent pushing the reforms will be perceived.

[5] These are Argentina, Brazil, Indonesia, Russia, Saudi Arabia, South Africa, and Turkey.

Conclusion

Overall, the G20 decisions on governance reforms are modest compared to several earlier proposals (see Frenkel and Menkhoff, 2000) and most of the claims have already been raised for a long time. Moreover, the decisions remain in part imprecise (e.g. the criterion of under-representation). In addition, several points that triggered large criticism remain untouched (cf. Hefeker, 2006). For instance, the intended reforms do not address decision making rules. Voting majority thresholds and the scope of double majorities are left unchanged. The United States would remain a veto country even if the new calculated quota shares were implemented one-to-one and basic votes were tripled. Another concern refers to quota calculation, which may be streamlined and simplified but which is – according to most proposals – still completely based on economic factors. By construction, this cannot ensure representation of poor countries as aimed for by the G20.

Yet, G20 decisions take the right direction. While they underperform with respect to expectations and claims that where voiced in some fields, they can be seen as a remarkable first step in comparison to historical achievements. However, they only deserve any applause if they will be implemented soon. Otherwise there is no progress at all.

References

Barro, Robert J. and Jong-Wha Lee (2005), IMF programs: Who is chosen and what are the effects?, Journal of Monetary Economics, 52:7, 1245-1269.

Bénassy-Quéré, Agnès, Sophie Béreau, Yvan Decreux, Christophe Gouel and Sandra Poncet (2007), IMF quotas at year 2030, CEPII Working Paper, 2007-12.

Bini Smaghi, Lorenzo (2006), IMF governance and the economy of a consolidated European seat, in: E.M. Truman (ed.), Reforming the IMF for the 21st century, Special Report 19, Peterson Institute.

Bird, Graham (2007), The IMF: A bird's eye view of its role and operations, Journal of Economic Surveys, 21:4, 683-745.

Bird, Graham and Dane Rowlands (2006), IMF quotas: Constructing an international organization using inferior building blocks, Review of International Organizations, 1, 153-171.

Colabella, Andrea., Di Stefano, Enrica and Claudia Maurini (2009), The reform of IMF quotas: the way towards the 2008 resolution, Questioni di Economia e Finanza (Occasional Papers) – Banca D'Italia, No. 24.

Dreher, Axel, Jan-Egbert Sturm and J.R. Vreeland (2009), Global horse trading: IMF loans for votes in the United Nations security council, European Economic Review, 53:7, 742-757.

Eichengreen, Barry (2007), A blueprint for IMF reform: More than just a lender, International Finance, 10:2, 153-175.

Frenkel, Michael and Lukas Menkhoff (2000), An analysis of competing IMF reform proposals, Intereconomics, 35:3, 107-113.

G20 (2008), Declaration: Summit on Financial Markets and the World Economy, G20 Final Communiqué, Washington, DC., November 15, 2008.

G20 (2009a), Declaration on delivering resources through the international financial institutions, Annex to Final Communiqué, London, April 2, 2009.

G20 (2009b), The Global Plan for Recovery and Reform, G20 Final Communiqué, London, April 2, 2009.

G20 (2009c), Leaders' Statement: The Pittsburgh Summit, Pittsburgh, PA, September 24-25, 2009.

G20 Working Group 3 (2009), Reform of the IMF – Final Report, March 4, 2009.

Hefeker, Carsten (2006), Inadequate IMF reform, Intereconomics, 41:5, 238-239.

IEO (2008), Governance of the IMF: An Evaluation, Independent Evaluation Office, Washington, D.C.

IMF (1993), Articles of Agreement of the International Monetary Fund, Washington, D.C.

IMF (2006), IMF Executive Board Recommends Quota and Related Governance Reforms, IMF Press Release No. 06/189.

IMF (2008a), Quota and Voice Reform – Key Elements of a Potential Package of Reforms, Statistical Appendix, and Summing of the Board Meeting, February 26, 2008, International Monetary Fund, Washington, D.C., February 26, 2008.

IMF (2008b), Reform of IMF Quotas and Voice: Responding to Changes in the Global Economy, Issues Brief, 01/08.

IMF (2009a), Consents to the Proposed Amendments of the Articles of Agreement (Jan. 29, 2010), available at http://www.imf.org/external/np/sec/misc/consents.htm [accessed 02/02/2010].

IMF (2009b), IMF Governance – Summary of Issues and Reform Options, International Monetary Fund, Washington, D.C., July 1, 2009.

IMF (2009c), IMF Quotas, Factsheet, Washington, D.C., Oct. 2009.

IMF (2009d), World Economic Outlook Database – WEO Groups and Aggregates Information, available at http://www.imf.org/external/pubs/ft/weo/2009/02/weodata/groups.htm#oem [accessed 11/11/2009].

Kläsgen, M. (2007), Der letzte Europäer, Sueddeutsche Zeitung, September 29, 2007.

Manuel, Trevor (2009), Committee on IMF Governance Reform – Final Report, Washington, D.C., March 24, 2009.

Meltzer, Alan (2007), A blueprint for IMF reform: What is worth retaining?, International Finance, 10:2, 177-182.

Mirakhor, Abbas and Iqbal Zaidi (2009), Rethinking the governance of the International Monetary Fund, in: J.M. Boughton and D. Lombardi (eds.), Finance, Development and the IMF, Oxford et al.: Oxford University Press, 265-303.

Momani, B. (2009), Proposing IMF reforms for low-income countries, in: J.M. Boughton and D. Lombardi (eds.), Finance, Development and the IMF, Oxford et al.: Oxford University Press, 247-264

Rapkin, David P. and Jonathan R. Strand (2006), Reforming the IMF's weighted voting system, The World Economy, 29:3, 305-324.

Stiglitz, Joseph E. (2009), Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System, United Nations, New York, September 21, 2009.

Truman, E. M. (2006), Overview on IMF reform, in: E.M. Truman (ed.), Reforming the IMF for the 21st Century - Special Report 19, Peterson Institute, 31-126.

Table 1: Elements of the Singapore Reform Package

Element	Description
first round ad hoc increase	initial (first round) ad hoc increase in quotas for the most under-represented members: China, Korea, Mexico, and Turkey
new quota formula	replacing the current five-formula system by one new quota formula to achieve a more simple and transparent calculation that better reflects countries' relative economic weight
second round ad hoc increase	second round of ad hoc quota increases based on the new formula
additional alternate executive directors	additional alternate executive directors for the two African chairs represented on the IMF's Executive Board
tripling of basic votes	tripling of basic votes to counteract the erosion of basic votes' importance

Table 2: Elements of Current Quota Formulas (the CQS)

Variable	Description
Y	GDP at current market prices
R	twelve-month average of gold, foreign exchange reserves, SDR holdings and reserve positions in the IMF
P	annual average of current payments (goods, services, income, and private transfers) for a recent five-year period
C	annual average of current receipts (goods, services, income, and private transfers) for a recent five-year period
V	variability of current receipts, defined as one standard deviation from the centered five-year moving average, for a recent 13-year period

Figure 1: 15 most under-represented and 15 most over-represented Countries measured by Percentage Point Difference of Actual Quota Share from CQS

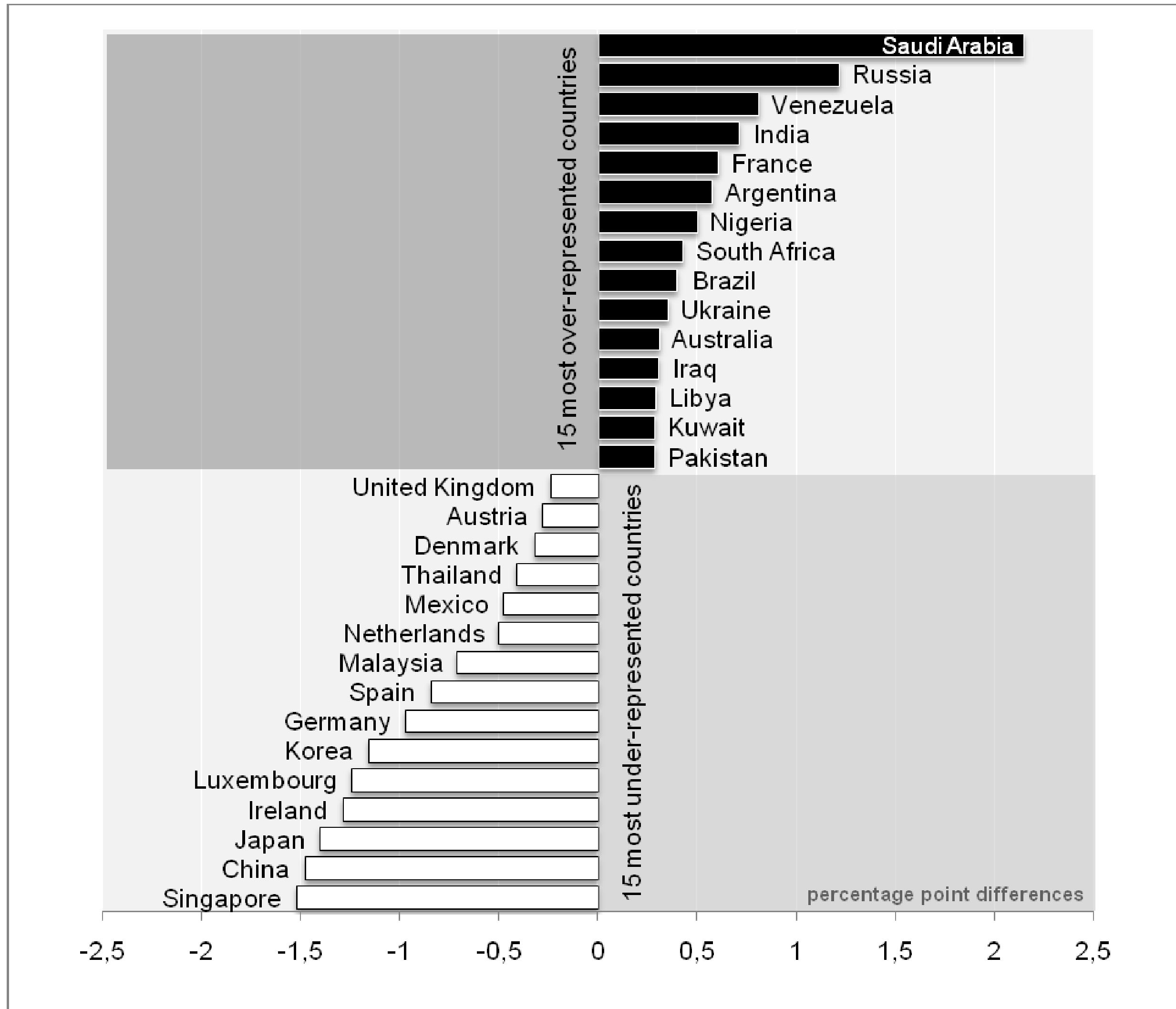

Table 3: New Quota Formula

$$CQS = (0.5Y + 0.3O + 0.15V + 0.05R)k$$

with	CQS	=	Calculated Quota Share
	Y	=	GDP converted at market rates (weight 60 %) and PPP exchange rates (weight 40 %) averaged over a three year period
	O	=	Openness measured by annual average of the sum of current payments and current receipts (goods, services, income, and transfers) for a five year period
	V	=	Variability of current receipts and net capital flows measured as standard deviation from centered three-year trend over a thirteen year period
	R	=	Reserves measured by twelve month average over a year of official reserves (foreign exchange, SDR holdings, reserve position in the Fund, and monetary gold)
	k	=	Compression factor of 0.95 (applied to the uncompressed calculated quota shares which are then rescaled to sum to 100)

Figure 2: 30 Countries with highest Gains and Losses by Change from Current Quota Share to New Calculated Quota Shares

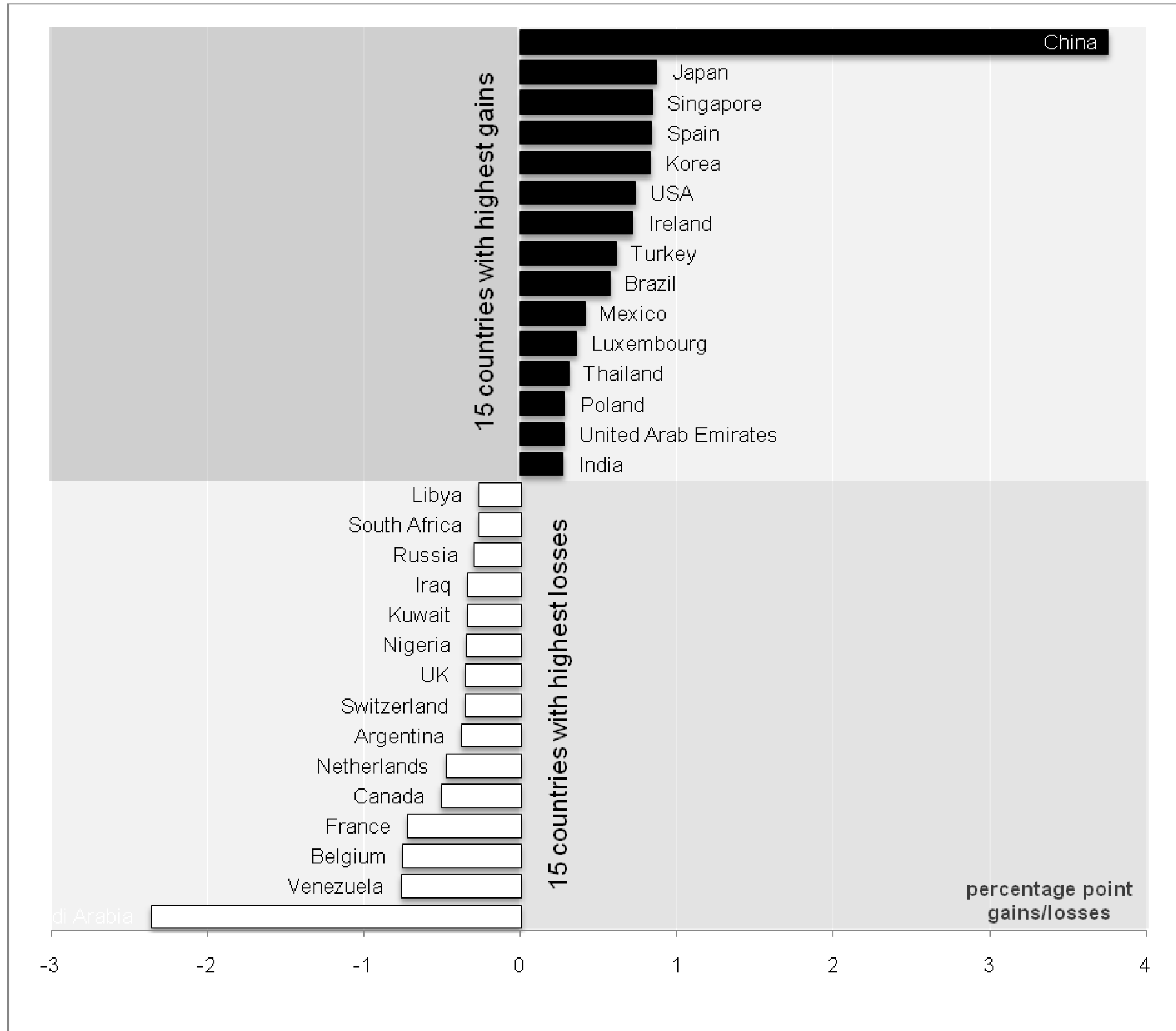

Figure 3: Current, Calculated and New Calculated Quota Shares of selected Member Countries in Relation to World GDP Share

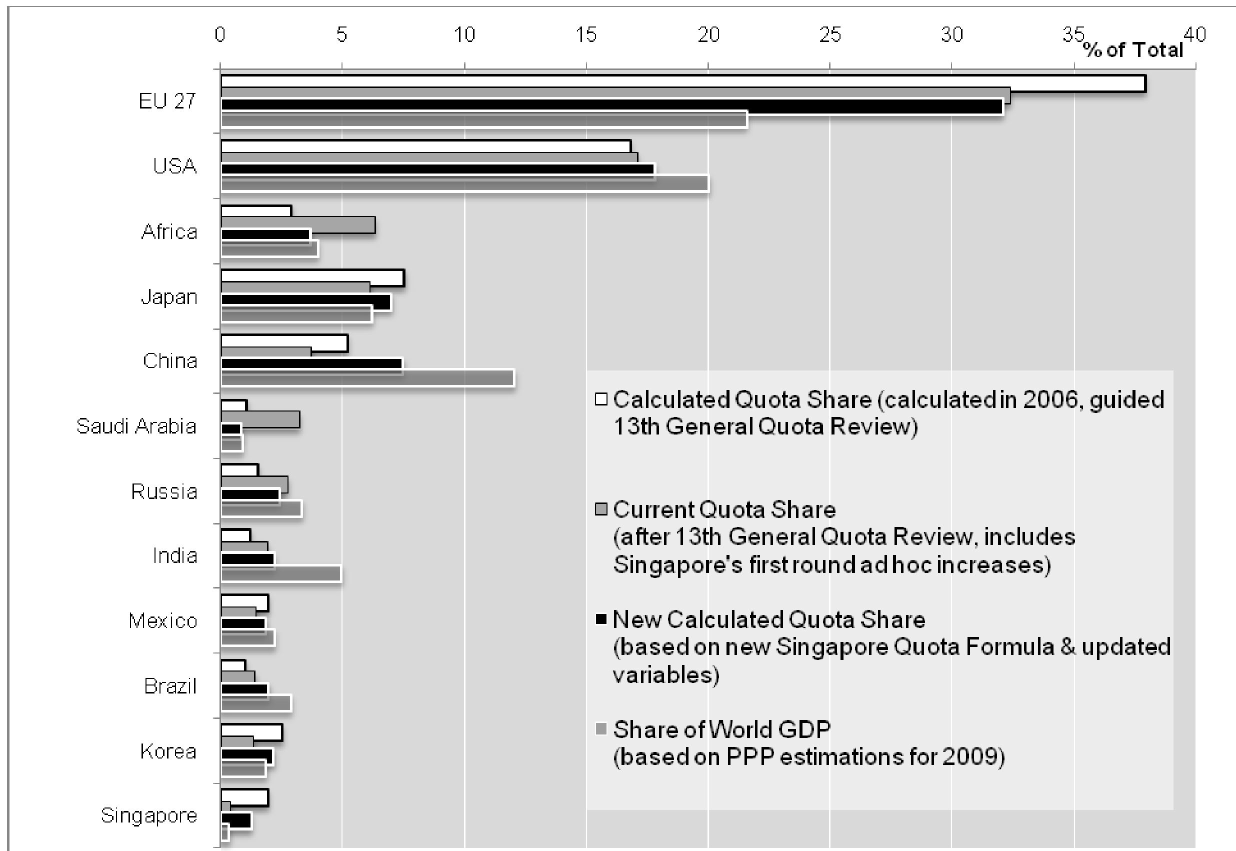

Figure 4: Ratification of the Singapore Reform Package by IMF Member Countries and by G20 countries