Journal of Global Economics
ISSN: 2375-4389

Cohen, J Glob Econ 2016, 4:1
DOI: 10.4172/2375-4389.1000175

Review Article Open Access

World Governance and the G-twenty: An Alternative Design

Cohen SI*

Department of General Economics, Faculty of Economics, Erasmus School of Economics, Netherlands

Abstract

An expanding globalization causes global failures, similar to economy failures encountered in the national economic system. Global failures take other forms, and are likely to be more severe in the future because of the entry in the world scene of leading countries that have distinctly different economic systems (for instance, China, India) from leading incumbents (US, EU), and because the new competition (country cum system) is likely to be perceived by newcomers and incumbents as a zero sum game. It is crucial in such circumstances to have a design of world governance that can respond adequately to global failures. The G-20 is one such design, but this is handicapped by its narrow scope (i.e., GDP), and undemocratic composition (selection of individual countries and not regional representation, next to being inconsistent and outdated). The paper formulates and applies an index of influence potential that combines population and GDP, and which is measurable at the region and country levels. The paper projects these applications for the near future, comes up with more representative participations by regions/countries in world governance, and explores effects of the changing distribution of influence potential on global development and economic systems.

Keywords: World governance; Country dominance; Regional power; Economic growth; Population size

Introduction

At the national level, microeconomics and welfare economics single out four categories of economy failures and search for remedies to combat them. The four economy failures in national economic systems relate to the presence of indivisibilities, uncertainties, externalities, and collective needs. Furthermore, welfare economics discusses and searches for corrections towards a just distribution of endowments.

At the international level, interactions between leading countries in the world economic system would be accompanied by global economy failures, similar to the economy failures encountered in the national economic system, as will be shown below by some examples. In the meantime, the current system of world governance is not sufficiently developed to deal with these global failures. Moreover, global failures are likely to be more severe in the future compared to today because of the entry in the world scene of leading countries that have distinctly different economic systems (i.e., China, India) from the systems of the leading incumbents (i.e., US and EU), and because application of the influence potentials of the leading newcomers and of the leading incumbents are likely to be perceived as a zero sum game.

The initiative of establishing and convening the G-20 is a response to the felt needs for greater effective global actions towards combating global failures. But the effectiveness of the G-20 framework is doubtful for various reasons assessed below, and hence, alternative frameworks for world governance need to be designed and appraised. This paper aims to lay the foundations for a more viable framework, and to apply them in designing an alternative to the G-20.

The outline of the paper is as follows. Section 2 sums examples of global failure and reviews current global governance for addressing these failures, and in particular the G-20. Section 5 discusses shortcomings of the design of the G-20 and presents an analytical framework for dealing with the shortcomings. Sections 6 and 7 apply the framework. Section 8 discusses a few aspects of the interactive influence of leading regions and countries in the near future. Section 9 concludes.

Global Failures and World Governance

Examples of global failures in indivisibilities abandon. Quite a number of tasks at the international level are indivisible and can be only operated by one or a couple of large countries, such as complex military operations, the internet network, mega space explorations, etc., and this gives monopoly power for the engaging lead country at the cost of the non-engaging countries. US is often the engaging country. Demands by leading newcomers for regulating these activities are likely to be challenged by the lead incumbent.

Examples of uncertainties and confidence failure in the world economy are encountered mostly in investment and finance. For instance, when giant enterprises from Brazil, Russia, China and India, some of them state sponsored, have solicited to buy and own US and EU enterprises; this is often seen in the incumbent countries as unfair play that allows emerging countries to control western interests. In reaction firms and states in the incumbent countries have tended to take concerted action and protective measures to avoid foreign takeovers (The call by Germany to veto takeovers of EU companies by Chinese and Russian state controlled companies is a case. French opposition to India's Mittal takeover of Arcelor is another, as well as the French policy of close collaboration between companies and the state to strengthen and consolidate French global industrial players. In the US Chinese takeovers in the energy sector were prohibited as in the case of the unsuccessful bid by the Chinese oil company CNOOC for the California-based oil producer Uncoal. However, in less strategic sectors, no obstacles were laid down when parts of American IBM were sold to China's LP). It is usually difficult to ascertain whether in such situations the national loss is a result of fair play or strategic trespassing. Whether protectionism is justified or not, counter protection usually follows, which weakens the economic systems of both incumbents and newcomers.

***Corresponding author:** Cohen SI, Department of General Economics, Faculty of Economics, Erasmus School of Economics, Rotterdam, Netherlands, Tel: +31 10 408 29 02; E-mail: cohen@ese.eur.nl

Received January 16, 2016; **Accepted** January 25, 2016; **Published** January 28, 2016

Citation: Cohen SI (2016) World Governance and the G-twenty: An Alternative Design. J Glob Econ 4: 175. doi:10.4172/2375-4389.1000175

Examples of negative externalities at the world level are numerous. At the micro level, an externality problem arises in situations when each agent acts to raise one's own benefits without taking account of the negative effects of the act on other agents. Where there are significant interdependencies between agent actions private and social interests diverge. To reach more efficiency and satisfaction for all agents the externalities need to be internalised, so that when both agents would interact again the externality effects would be incorporated in their mutual decisions. What applies at the micro level for two interacting agents applies also internationally. In general, occurrence of externality problems becomes more severe when the interaction involves competing countries that follow different economic systems. The credit crunch of 2007, followed by the financial meltdown of 2008 and the economic recession of 2008-9 is one example. The regulated foreign finance in some leading newcomers (i.e., Russia, China,) allowed their governments to accumulate large USD foreign exchange reserves. These USD reserves are mostly loaned back to the US economy allowing it to finance much more spending than economically permissible; some of this spending was backed by financially very risky warrants and regulatory loopholes. The credit crunch in the US that started with defaults in mortgage payments was sufficient to expose the financial risks of a world economy. The interdependent interactions between leading countries (with their economic systems having different rules of coordination and motivations) were basic ingredients of the externality failures behind the financial crises and the economic recession. Other externality problems next to risky finance, economic recessions, and trade protectionism, are global warming, cyber insecurity, war refugees, health hazards, whale protection, tax havens, diverging fiscal and regulatory regimes.

Finally, the list of newly arising collective needs at the world level is increasing and includes space insecurity, violation of human rights, poverty reduction, fighting terrorism, exploiting ocean resources, and controlling nuclear capabilities. The collective actions required to satisfy these needs are perceived differently in countries with different economic systems and/or in different phases of economic development.

In short, global failures are imminent and require global governance that fixes indivisibilities, promotes confidence, internalizes externalities and organize collective actions to attend to newly arising collective needs at the global level. What are the responses in terms of world governance to the challenges of global failures? The current global governance system was shaped in the advent of WWII, and has undergone a few additions changes since then. The United Nations General Assembly consists of 193 member states. The UN Security Council consists of five permanent members with veto rights: China, France, Russian Federation, the United Kingdom, and the United States, and ten non-permanent members elected for two-year terms by the General Assembly. These are currently Argentina, Australia, Chad, Chile, Jordan, Lithuania, Luxembourg, Nigeria, Korea, and Rwanda. Political analysts view this list of 5 permanent plus 10 rotating members as obscure. Next to the above there are well functioning international agencies on trade, finance, law, and all areas of major social and economic activities, and intermittent conferences on newly rising global challenges.

The latest development in global governance was the establishment of the G-20, which is a forum of political leaders of the 20 leading economies in the world. The members of the G20 are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the European Union. Spain is an honorary member. Together, they represent about two-thirds of the world's population, 85 per cent of global gross domestic product and over 75% of global trade. The president of G-20 rotates annually. Each year the G20 president invites several guest countries to participate in G20 events and contribute to the agenda. The work of G20 members is supported by several international organizations that provide policy advice. The G20 also regularly engages with the non-state sectors. The G-20 is an important addition to world governance, even though memberships are not fully consistent with the GDP figures.

However, there are four major shortcomings in the G-20 approach which are not solvable within the G-20 approach, and to which the paper will offer alternatives. The first shortcoming is that current membership is inconsistent with factual data on economy greatness. The second shortcoming is that economic power of nations are dramatically and rapidly changing, making it necessary to take a forward looking prospective of the relative strength of leading powers. The third shortcoming is that focus on the GDP criterion does not reflect the real influence potential of countries when we perceive the world as an interactive process of voluminous agents. Population matters. The fourth problem is that a selection based on individual countries cannot command global authority or legitimacy because it does not consider regional power or regional representation, respectively. The solution to these problems is to incorporate the last three arguments in a broad analytical framework that can be consistently applied to select a more effective governance forum than the current G-20. The next section elaborates on the four problems and presents the broader analytical framework.

The G-20: Problems and Remedies

The first problem is that G-20 memberships are not fully consistent with the GDP figures. For instance, Netherlands ranks as number 18 in the world GDP, but it is not included. Latest estimates of the GDP show Nigeria to surpass South Africa, but South Africa is included and Nigeria is excluded. The inclusion of Argentina is also problematic as its GDP does not fall in the top 20. Next to EU individual countries the EU as a whole is also a member, which involves double counting. Spain is added as a hosing country. The number is actually 22 and not 20. These can be perceived as minor problems relating to definition consistency and can be remedied over time, but there will be frictions and lobbying complications when some de facto members (and their presidents) are dropped for the sake of greater consistency.

The second problem is that that as the current top dominant countries, US and EU, are replaced by newcomers such as China and India whose political and economic systems are differently orientated than the leading incumbents, the current governance rules of the G-20 need to adapt to different orientations. Functionality requires world governance should reflect not only the current but also the prospective influential power of the dominating country (ies)/systems; hence, institutions of world governance should be forward looking in terms of both representation and rules. The G-20, in both its composition and operation, is not sufficiently forward looking, and underestimates the pace and magnitude of the leadership replacement tendencies. This is demonstrated in Table 1, the displacement hypothesis, which was first launched by Wilson and Purushothaman, and known as the BRIC report, stated that the upcoming large economies of China and India would have greater magnitudes of GDP than US and Japan in the near future [1]. Today, the projected displacement timeline of BRIC-2003 is best described as outdated when compared with the latest revisions. For instance, ten years later, PWC adapted the same

GDP in terms of PPP (2011 US$bn)						GDP in terms of MER (2011 US$bn)					
2011		2030		2050		2011		2030		2050	
US	15,094	China	30,634	China	53,856	US	15,094	China	24,356	China	48,477
China	11,347	US	23,376	US	37,998	China	7,298	US	23,376	US	37,998
India	4,531	India	13,716	India	34,704	Japan	5,867	India	7,918	India	26,895
Japan	4,381	Japan	5,842	Brazil	8,825	FRG	3,571	Japan	6,817	Brazil	8,950
FRG	3,221	Russia	5,308	Japan	8,065	France	2,773	Brazil	4,883	Japan	8,065
Russia	3,031	Brazil	4,685	Russia	8,013	Brazil	2,477	FRG	4,374	Russia	7,115

Source: PWC Economics (2013) World in 2050, the BRICS and beyond, Price Waterhouse Coopers.

Table 1: Displacement expectations.

BRIC model to more updated and accumulated data, and improved methods of forecasting future foreign exchange rates [2]. The PWC (3013) forecasts, summarized below, show the displacement to occur much earlier than was thought, in spite of the recently observed slowness in the tempo of leading developing countries. It is predicted that the GDP of China would overpass the GDP of US in 2017, in terms of purchasing power parity and by 2027 in terms of market exchange rates. India would come close to US in 2050, and a long way ahead of the next batch of medium-sized countries in Table 1.

It is likely that the incumbent leading countries (for instance, US, EU) may oppose changing the rules of the game, surrender influential power, or accommodate to the newcomers.(China, India). The problem of world governance becomes more complex with the expected change of the guards in world leaders. Signs of increased tension in world governance are already showing off especially when important appointments in international agencies are due, and when agendas for collective actions are prepared.

The third problem with the G-20 approach is that GDP criterion is a poor indication of the influence potential of a particular country in the context of an interactive world of voluminous populations. Interactive influence is not only the result of the relative size of economic transformations but also the result of the relative size of the transforming populations. We elaborate below on proposed remedies.

In Cohen, microeconomic foundations are set for formulating a *Dominance Index (DI)* to express the interactive influence of an entity *y* on other entities of the same kind *y'*, denoted by DI_y [3,4]. An entity can be a firm, town, a country, or a world region. In this paper we shall adapt this index to the contexts of countries and regions, and in the next section we shall apply it and demonstrate its empirical implications.

The index has two arguments as shown in eq. 1: the relative share of agents in *y* among all *y'*, and the relative share of transformations in *y* among all *y'*.

$$DI_y=(\omega_1 A_y+\omega_2 C_y) \quad (1)$$

In this equation, there are two share parameters that reflect on the influence potential of a particular country in an interactive world of all countries. A_y is the share of the population in country y, with respect to all populations in all countries *y'* . C_y is the share of commodities transformed in country *y*, with respect to all transformed commodities in all countries *y'*, or in other words, the share of the GDP of country *y* in the world GDP. Eq. 1 proposes that the greater the shares of the population and GDP in a particular country the greater is the influence potential of that country relative to other countries. In this equation, ω_1 and ω_2 are equal weights applying to these two shares, whereby $\omega_1 + \omega_2 = 1$. The value of DI_y is a proportion, and $\Sigma\, DI_y = 1$. An entity which scores a very high value of the index tends to dominate the other entities. Once the index for an entity reaches a critical mass the influence potential of that entity can be expected to benefit from network externalities and to become practically the dominant player among all entities. There are different views concerning the likely value of the critical mass. A value of $3/4^{th}$ is among the most quoted in the literature on a critical mass, cf. Simon [5]. There is thus justification for fixing the value of this threshold at 0.8, or thereabout.

The dominance index relates to the interactive influence of one entity on other interacting entities.

Regulative influence is another type of influence potential. This refers to a situation in which an entity or country *y* happens to stand higher in relation to *y'* in the hierarchy of countries; allowing *y* to set behavioral rules typical of *y* that other countries *y'* should abide with. In this way, the behavioral type of *y* overrides *y'*, allowing the further spread of behavioral norms of *y* at the cost of those of *y'*. The interactive influence represents the results of *horizontal* contacts. Regulative influence is a *vertical* relationship. It is not feasible to quantify measures of regulative influence along the lines of interactive influence due to mounting difficulties in standardizing diversified measures of regulation. It is likely that there is a positive association between the two notions of influence potential, in the sense that a country powerful in interactive influence would in the long run become generally powerful in regulative influence. This will add to the importance of the dominance index. There is also ground for speculating that the nature of the horizontal channels makes their effect more endurable as they are generated via experiencing, learning and adoption. The contribution of horizontal channels towards converging behavioural patterns across countries is likely to be more influential and more permanent than that of vertical channels. In the case of vertically accommodated behavioural attitudes, the regulative influence can terminate abruptly if the regulative mechanisms become too demanding due to technological loopholes, or the rationale for the binding restrictions disappears, or the balance of power between *y* and *y'* reverses.

The fourth problem with the G-20 approach is that its loose selection of individual countries cannot command global authority or legitimacy because the selection does not consider regional power or regional representation. The G-20 approach ignores all the past progress made by mankind in defining constitutional democracy and representational rights. The world cannot be seen as a loose collection of individual countries. Ant individual country is allied to other countries and is as such a member of an interest group that has common interests. Ignoring this fact can result in an over accommodation for a specific group (for instance, the number of western industrial countries at 11 form together the majority in the G-20), at the cost of under accommodation of vast regions in Africa and Asia. In Cohen the world economy is divided into eight regional groups based on their shared type of economic system, common features and regional vicinity [4]. Some regional classification (Annexure), should form the basis for composing a constitutionally acceptable platform of a representative

world government. The Annexure distinguishes between two developed regions (the F-group consisting of firm centred western economies and the S-group consisting of state centred economies such as Russia and some former ex-Soviet Union countries), and six development regions specified as East Asia and Pacific (EAP), South Asia (SA), Central Asia and Caspian (CAC), Middle East and North Africa (MENA), Sub Saharan Africa (SSA), and Latin America and Caribbean (LAC). The classification corresponds closely with those operational at the World Bank and United Nations.

Applications

In this section we display results of applying the Dominance Index, DI, to data sets of GDP and population for all countries. First, DI is estimated for all countries and aggregated for the two developed and six development regions (Table 2). The sum of DI over all regions is 100%. The thing to observe about DI at the level of region/world in the periods 2000 and 2012 is the reduction in the value of DI for the developed regions, with the firm centred countries (F-countries, i.e., US, EU, Japan) losing a lot while state centred countries (S-countries, i.e., Russia) gaining a little, mainly due to the recovery after years of recession following the collapse of the communist regime. The main gainers are the development regions. For, example, DI for the developed regions diminished from 50.7 in 2000 to 42.2 in 2012 (a reduction of 16%, column 7), the development regions reversed their subordinate position of 2000 and acquired a majority in 2012 (as they moved from 49.3 to 57.6). The DI of the development regions of EAP, CAC, MENA and SSA increased by between 36% and 41%, the increase in SA and LAC was lower at 24% and 16%. If Table 2 would be computed for the world situation half a century ago a totally different picture would come out, with F-countries (i.e., the western countries), S- countries (i.e., Soviet Union and allies) and the developing countries having more or less equal levels of DI at 33% each. In this context, the two major changes in recent world development are the catching up of developing countries with western countries and the disintegration of the ex- Soviet Union and allies.

Secondly, the Dominance Index is also computable for individual countries within each region. The sum of the relative shares of population and GDP, when applied to each country within a region, gives the degree of interactive influence of each country in the region. The higher the index of a leading country x the greater is x's influence in passing the behavioural features of x to follower countries. The leading country is likely to become the one and only one dominant player in the region once a threshold value of DI is passed; which related literature suggests to be around 80%. Once this threshold is passed there is a surge in the likelihood that the behavioural features of the dominant player spread vigorously and ending up as the standard mode in follower countries. Behavioural features cover organizational and institutional features of the economic system.

Next, Table 3 shows leading country configurations in the two developed and six development regions. In order not to enter into unnecessary details we limit the presentation to the two most leading countries in each region. Within the F-group, the population is about evenly divided between non-European and European countries. The share of the GDP that goes to non-European is about 10% higher than the European, but this difference is shrinking. The result is a DI in 2012 that gives the non-European a greater influence at 56% against the European at 44%. As the last column shows, this difference shrank over the past 12 years by 2 percentage points (pp).

Computation of the dominance index for the S-region shows Russia dominating with a DI of 75.7% in 2000, and increasing to 78.3% in 2012. This is very close to the situation where the threshold of 80% is likely to be passed, allowing an anchored dominance. The next on line is Ukraine, with only 16.4% in 2000, and declining to 14.7% in 2012. Other countries have very limited and declining influential powers, and can be practically skipped in discourses on world development.

In the EAP region, in 2012, China constituted 80.1% of the total population and 73.9% of the total GDP, resulting in a DI of 74%; in 2000 the DI was 71%, a rise by 5pp. Indonesia follows with a long distance at DI of 10%, that is maintained at that level in 2012. The huge size and the positive change of DI in China mean that DI in most other EAP countries, is not only tiny, but is shrinking as well. DI of Thailand and Malaysia fell by -31% and- 30%, in Philippines by -15%, and in Vietnam by -2%, not shown in table. The DI level of 74% of China is indicative of an overwhelming Chinese influence in the region, but short of the 80% threshold. It is most likely that the future development of the economies of the EAP region will increasingly mirror the impact of the Chinese economy; and increasingly more systemic features of China will be adopted in the EAP region.

In the SA region, in 2012, India has about 75% of the total population, and stands stable at this share. The ratio of (GDP of India)/ (GDP of SA) is 80.7% and had a rising tendency. Taken together, DI for India in 2000 was at 76% in 2000, and rose to 78% in 2012. The next country is Pakistan with a DI index of 11%, and has been falling. Other countries show also a decreasing DI, last column. The dominance index of India at about 78% is an overwhelming Figure that may predict an eminent stronghold of the Indian economy on the SA region.

	Population, %		GDP, %		Dominance index		
	2000	2012	2000	2012	2000	2012	Change, %
F-region	17.4	16.0	79.5	62.7	48.5	39.4	-18.7
S-region	3.6	3.0	0.9	3.1	2.2	3.1	36.2
EAP	25.7	28.3	5.8	14.7	15.8	21.5	36.0
SA	19.6	23.4	1.9	3.2	10.8	13.3	23.5
CAC	2.7	3.2	1.2	2.4	2.0	2.8	39.6
MENA	3.5	4.5	2.6	4.1	3.1	4.3	40.5
SSA	9.4	13.0	1.0	1.8	5.2	7.4	41.0
LAC	7.5	8.6	6.9	8.0	7.2	8.3	16.3
World total	100.00	100.00	100.00	100.00	100.0	100.0	
World total values	6102	7044	32873	72682			

Table 2: World regions: population shares, GDP shares and Dominance Index, %.

	Share in total population		Share in total GDP		Dominance Index		
	2000	2012	2000	2012	2000	2012	Change, %
F-group							
Non-European	50.8	51.9	65.4	60.5	58.1	56.2	-3.3
United States	27.9	29.2	39.9	36.3	33.9	32.7	*-3.6*
Japan	12.6	11.9	18.4	13.3	15.5	12.6	*-18.6*
European	49.1	48.1	34.6	39.5	41.9	43.8	4.5
Germany	8.1	7.5	7.3	7.7	7.7	7.6	*-2.1*
France	6.0	6.1	5.1	5.8	5.6	6.0	*6.8*
S-group							
Russia	68	68	84	88	75.7	78.3	3.5
Ukraine	23	22	10	8	16.4	14.7	-10.2
EAP							
China	69.5	67.7	71.7	80.1	70.6	73.9	4.6
Indonesia	11.4	12.3	8.6	8.2	10.0	10.3	2.5
SA							
India	75.4	75.0	76.1	80.7	75.8	77.8	2.7
Pakistan	10.4	10.9	11.8	9.8	11.1	10.3	-7.1
CAC							
Turkey	32.9	32.9	65.0	46.1	48.9	39.5	-19.3
Iran	34.3	34.0	24.7	32.3	29.5	33.1	12.3
MENA							
Egypt	26.9	25.5	11.5	8.8	19.2	17.2	-10.5
Saudi Arabia	8.2	8.8	21.7	23.9	15.0	16.4	9.5
SSA							
Nigeria	18.5	18.5	13.5	19.8	16.0	19.1	19.8
South Africa	6.6	5.7	38.6	28.9	22.6	17.3	-29.1
LAC							
Brazil	33.2	32.6	28.5	38.6	30.9	35.6	15.4
Mexico	19.8	19.9	30.6	20.2	25.2	20.0	-20.5

Table 3: Leading countries in world regions: population shares, GDP shares and Dominance Index, %.

In the Central Asia and Caspian region, CAC, Turkey and Iran are numbers one and two, with DI at 49% and 30% in 2000, but the gap closed down rapidly to give respectively 40% and 33% in 2012; partly because population and GDP have grown at higher rates in Iran than in Turkey, and partly because other oil rich countries in the region gained in interactive influence (DI in Kazakhstan, Azerbaijan and Turkmenistan changing by 40% to 60%, not shown. The dominance profile in CAC can be described as that of a majority based duo leadership, which allows the two leading countries to exercise major influences. Together, Turkey and Iran account for 74% of total dominance in CAC in 2012, which is comparable to that of Russia in S-group, China in EAP and India in SA. The duo leadership can lead to rivalry between Turkey and Iran in acquiring more economic and political influences in this and neighbouring regions.

In MENA, there are no dominating players comparable in size to the regions examined above. The two leading countries in MENA, which are Egypt and Saudi Arabia, mastered in 2012 less than one-third of the total population of the region. Together they account for only about one-third of the total GDP. Their DI's are limited to 17% and 16%, respectively. The sum of this duo leadership does not go beyond 33%. The dominance profile of MENA is best described as a minority-based duo leadership. Various factors such as the sparsely populated geographically wide space, transport barriers, the oil rich versus non-oil rich economies, public approvals of authoritarian national governments, and absence of dominant players in the region tended to undermine unifying factors such as common religious, language and cultural traits.

The sparsely spread distribution pattern of DI among the member countries in SSA, is similar to that in MENA, and is best described as a minority-based duo leadership. Together, the two leaders, which are Nigeria and South Africa, command a dominance of only 36%, which is about the same as the duo leadership in MENA. Nigeria has a DI of 19% and leads in the upper belt (followed by Ethiopia with a distance of 12 pp, and growing at a lower rate, and 22 other countries with diminishing influence), South Africa has a DI of 17% and leads in the lower belt (followed by Angola with a comparable distance of 12pp, but shooting up with a record growth of 129%, and 22 other countries with diminishing influences). Cultural, religious, political and not least geo-physical barriers stand in the way of greater interaction and integration between SSA countries, and restrict the eventual enlargement of dominating influences of leading countries.

The LAC region, consisting of 41 countries, is the most integrated development region. The two leaders are Brazil with DI at 36%, and Mexico at 20%. Together, these two leading countries command a DI

of 56%, which qualifies the LAC region to be described as having a majority-based duo leadership, similar to the case of the CAC region. The trend shows Brazil rising and Mexico falling. Other interesting results to point out are the decreasing DI of Cuba and of Argentina.

We presented earlier in Table 2 the Dominance Index of leading regions, *r*, at the world level, *w*; the operation can be expressed as (*r*/*w*); and we presented in Table 3 the DI for leading countries, *c*, at the regional level, *r*; this operation can be expressed by (*c*/*r*). This section deals with leading countries at the world level, or (*c*/*w*). Calculation of the Dominance Index for (c/w) is straightforward. It is obtained by multiplying DI results for (r/w) in Table 2, by DI results for (c/r) in Table 3, giving the value of DI for each country at the world level, as found in Table 4.

Although leadership patterns in the country/region context differ between the regions, some common features are present, significant, and meaningful in understanding and managing world development. One feature is that the DI of US as the leading country in the F-region, is at 33%, which compares very poorly with DI for leading countries in the S-region, in EAP and in SA, that is Russia at 78%, China at 74% and India at 78%, respectively.. It is directly seen that the degree of influence which US can practice in the F-region is much more limited than what the other three countries can do in their respective regions. The influential power of Russia, China and India in their regional groups is more than twice the influential power of US in the F-group (i.e. 74/33=2.2). Although Russia dominates the S-region by 78%, it is a special case. The S- region itself has become quite tiny in the total world stage, with a modest DI at 3%.

A second feature is that one can speak of a majority-shared duo leadership in the regions of CAC and LAC (with leading countries Turkey and Iran in CAC, and Brazil and Mexico in LAC). Country leadership in these two regions is highly contested. The leadership pattern is otherwise in the regions of MENA and SSA, which are characterized by minority-shared duo leaderships. The combined DI of leading countries like Egypt and Saudi Arabia in MENA, and Nigeria and South Africa in SSA do not go beyond 33% and 36%. The dispersed DI in these two regions is a reflection of multi-faceted fragmentations. Various intraregional barriers stand in the way of regional integration.

A third feature relates to the DI of countries at the world level. While in 2000 US preceded China by 7.3 pp (18.3-11.0, column 3), this ranking reversed in 2012 with DI in China at 15.4 and US at 13.7, due to higher growth in China of both the population and GDP. The same applies for the relationship between Japan and India. While Japan was ahead of India in the DI in 2000, this reversed in in 2012. The predicted dates for the respective displacements of US and Japan with China and India with regard to the size of the GDP, which were postulated to occur between 2020 and 2030 in Table 1, are likely to take place about

	Population share, %		GDP share,%		Dominance index, %	
	2000	2012	2000	2012	2000	2012
World total	100.0	100.0	100.0	100.0	100.0	100.0
F-group	17.4	16.0	79.5	62.7	48.5	39.4
United States	4.9	4.7	31.8	22.7	18.3	13.7
Japan	2.2	1.9	14.6	8.3	8.4	5.1
Germany	1.4	1.2	5.8	4.8	3.6	3.0
France	1.1	1.0	4.1	3.7	2.6	2.3
S-group	3.56	2.98	0.94	3.15	2.25	3.06
Russia	2.40	2.04	0.79	2.77	1.60	2.41
Ukraine	0.81	0.65	0.10	0.24	0.45	0.45
EAP	25.7	28.3	5.8	14.7	15.8	21.5
China	17.9	19.1	4.2	11.7	11.0	15.4
Indonesia	2.9	3.5	0.5	1.2	1.7	2.3
SA	19.6	23.4	1.9	3.2	10.8	13.3
India	14.8	17.6	1.4	2.6	8.1	10.1
Pakistan	2.0	2.5	0.2	0.3	1.1	1.4
CAC	2.73	3.19	1.25	2.36	1.99	2.78
Turkey	0.90	1.05	0.81	1.09	0.85	1.07
Iran	0.94	1.08	0.31	0.76	0.62	0.92
MENA	4.02	4.52	2.65	4.09	3.34	4.31
Egypt Arab Rep.	0.94	1.15	0.30	0.36	0.62	0.76
S Arabia	0.33	0.40	0.57	0.98	0.45	0.69
SSA	9.4	13.0	1.05	1.8	5.2	7.4
Nigeria	1.7	2.4	0.14	0.4122	0.9	1.4
S Africa	0.6	0.7	0.40	0.5	0.5	0.7
LAC total	7.46	8.64	6.86	8.00	7.16	8.32
Brazil	2.48	2.82	1.95	3.09	2.22	2.95
Mexico	1.47	1.72	2.10	1.62	1.79	1.67

Table 4: Population shares, GDP shares and Dominance Index of leading countries at world level, %.

a decade earlier when the Dominance Index is considered instead, the difference wholly due to the population effect.

A fourth interesting observation is on how the influence potential of the firm centred countries, F-group, is distributed between the non-European group (US, Japan, etc.), and the EU group et al. The DI of the F-group was 48.5% in 2000, with 30.4% held by the non-European group, and 18.1% in the EU group. In 2012, the total is diminished to 39.3% with 23.1% held by the non-European group and 16.2% held by the EU group. The results show that within the F-group, European countries have gained and non-European countries have lost in influence potential, over the last decade.

A fifth category of result relates to the significantly low influence potential of Russia at the world level, which is only 2.4 pp. This is in the neighbourhood of the DI for countries like France, United Kingdom, Indonesia and Brazil. Also striking is that the conversion of the DI at the region level to the DI at the world level benefits the relative position of Nigeria with respect to South Africa. In 2012, Nigeria had a DI at the world level of 1.4 pp, compared to South Africa at 0.7 pp; in 2000 the figures were 0.9 pp and 0.5 pp. This happened because the DI profile of South Africa is more sensitive to the conversion. The results show also a widening in the DI gap between the two leading countries in LAC, to the advantage of Brazil and the disadvantage of Mexico. A similar widening in the DI gap is found between the two leading countries in MENA where Saudi Arabia is advantaged and Egypt is disadvantaged. In the case of CAC, Iran is catching with Turkey in their DI at the region and world levels.

An Alternative Composition of G-20

Responsive actions to global failure require global governance that is fairly representative of regional and country interests. A world polity, for example G-20, that circles around individual countries with the highest GDP is ineffective in a world of 193 countries with 173 of them not participating. We worked our way by focusing on eight world regions that were shown to be internally converging, as is empirically validated in Cohen (2015) The structural and performance variation among member countries of these regions were shown to be decreasing as well, with the rare exception of the SSA region regarding some elements. The starting point in a representative global governance should be the influence potential of the eight regions and not individual countries. Once that starting point is resolved, the next step is to descent to regional representation which is indeed at the country level.

It is instructive to demonstrate how the composition of a world top of presidential leaders (to be entrusted with coordinating global governance and resolving global failure) along our lines of thought would look like. Our list will be very different from the above mentioned G-20, for several reasons. First, we employ influence potential based on population and GDP, which is more democratic and more real. Second, our starting point will be regional representation, followed by naming countries, which is more democratic, and more logic. Third, subject to explicitly set minimum and maximum rules, our outcome regarding representation is straightforward. This is not the case with G-20, which includes countries that do not qualify for the GDP criteria, and excludes others which do qualify, pointing thus to manipulated selections (For instance, Nigeria is left out, and South Africa is included while the latest GDP figures show Nigeria ahead of South Africa. The place of Argentina is disputable, while Netherlands had a GDP within the top 20. The group is in fact 20 +1, as it includes a permanent position for Spain, which is an arbitrary accommodation). Fourth, a forum of 20 top leaders is too big to be effective. Our list ends up with 16 members.

DI in global governance applies a step by step approach in constructing our list. By eliminations it ends up in a list of G-16. The list consists of US, Japan, Germany, France, United Kingdom (for F-group), Russia (for S-group), China, Indonesia (for EAP), India, Pakistan (for SA), Turkey (for CAC), Saudi Arabia (for MENA), Nigeria, South Africa (for SSA), and Brazil, Mexico (for LAC). The G-16 allows also for shared/rotating memberships in the case of some regions, as indicated in the bottom line of Table 5.

It is noted that this list of G-16 leading countries accounts for about two-thirds of the full scale of the world DI, with the rest of the countries, about 180 controlling one-third of the world DI. There is a rationale for supplementing the G-16 by a chamber of regional ambassadors who can represent the interests of the countries in the region other than that of the leading country. We refer here to the EU in the F-group, the ASEAN in EAP, SARC in SA, OAU in SSA, the Arab League in MENA, etc. A chamber of eight regional ambassadors (say, the presidents of the above mentioned organizations) can be installed to that effect, call it R-8, and it can convene on a regular basis in much the same way as the G-16, and cooperate together in fixing global governance and global failures. Such an arrangement is already accommodated in the G-20 with respect to the EU; and it proves essential for streamlining policies at the country, regional and world levels. The notion of two chambers, which is a conventional practice in national governance, is applicable and adaptable to world governance.

Finally, DI values in 2012 were used as benchmark in the listing of the G-16 leading countries. As the influence potential of countries changes over time, the list would require updating, which implies establishing a scheme of changing membership based on influential power.

	F-group	S-group	EAP	SA	CAC	MENA	SSA	LAC	Outcome
1. DI	39.4	3.1	21.5	13.3	2.8	4.3	7.4	8.3	100
2. DI/5	7.9	0.6	4.3	2.7	0.6	0.9	1.5	1.7	20
3. Rounding	8.0	1.0	4.0	3.0	1.0	1.0	2.0	2.0	22
4. Max, min.	8.0	1.0	2.0	2.0	1.0	1.0	2.0	2.0	19
5. Interregional fairness	5.0	1.0	2.0	2.0	1.0	1.0	2.0	2.0	16
6. Leading Countries	US Japan Germany France UK	Russia	China Indonesia	India Pakistan	Turkey	SArabia	Nigeria SAfrica	Brazil Mexico	14
7. Intraregional fairness/rotation					Turkey/ Iran	SArabia/ Egypt			

Table 5: Dominance Index of different countries.

Applying DI in global governance: Region/country composition of world top.

The interesting thing about the number of 20 is that when the full range of the dominance index of 100 pp is divided by 20, this gives right to claim one position in G-20 for a bunch of 5 pp on the dominance index. The table below displays regional DI's in row 1 and dividing by 5, the regional are obtained in row 2.

A number of refinements can be applied to this table. The rounding off of the regional claims guarantees the S-region and CAC one position each even though their claim is 0.6 of a position each, but that means that world leadership positions is increased to 22. The rounding off of the claims is in row 3.

The next refinement relates to applying maximum and minimum rules for regional inclusion in the world top. In filling the regional quota with leading countries it is logical to keep to indivisibility principles, which means that a qualifying country can claim/send one position/president only irrespective of the height of its DI (this can be viewed as fixing a maximum), and that a minor country cannot obtain a position just because it belongs to a region with a high quota that is boosted by membership of a super power. For example EAP has high quota because of China and Indonesia. This should not give Philippines, Thailand, or Vietnam the advantage of inclusion in the world top, unless such a country manifests a high DI of its own. A similar situation applies to SA where India outflanks its neighbours. For inclusion, indivisibility requires thus fixing a minimum DI for country/region, of say 5%. Application of maximum and minimum rules gives row 4.

The application so far reduces the membership positions of EAP and SA below their regional claims, by 3 seats. Interregional fairness would require applying an equivalent reduction of membership positions of the F-group from its regional claim, from 8 to say 5. This results in a total membership of 16 seats as shown in row 5, which is more operational than 20.

The G-16 countries roll out automatically from applying the above accommodations to the DI results for 2012. The outcome is specified in the table below, row 6.

There are instances in some regions where the included country has a DI that is marginally higher but practically equal to that of the next country in line. Turkey is marginally higher than Iran in the CAC region. The same applies for Saudi Arabia and Egypt in MENA. Intraregional fairness may require shared or rotating membership in the G-16, as displayed in row 7.

Interactive Influence of Leading Regions and Countries in the Near Future

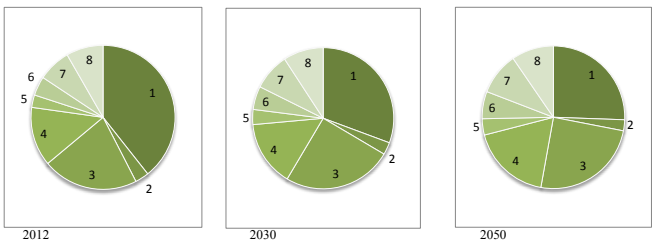
The future distribution of potential influence among competing regions and leading countries, as expressed in the Dominance Index will change, and this can have significant impacts on world development and the prospects of the firm intensive economic system and other economic systems in the future. In this section we project the main tendencies in the distribution of DI among regions and countries in the near future, and comment on their impact.

The starting point is the influence potential of the eight regions as indicated by our calculations of DI(r/w). Table 6 gives the changing influence potential of the eight regions in 2012, and their projections to 2030 and 2050. In doing these projections, we took PWC (2011) as our source of projections for the GDP of leading countries, which we expanded to give regional aggregates based on the past trends derived from Table 3, and we made use of the work done by United Nations Demographic Division, which is the primary source for population projections. These two types of projections are employed to compute DI for leading countries for 2030 and 2050, giving the results in Table 6, and reproduced in Figure 1. The focus of the presented results is to view the changing world development and influence spheres from the angle of regional influences. While the displacement discussions have been preoccupied with the situation of individual countries, such as China and India versus US, EU and Japan, we contend here that deliberations on global governance are better served when the focus is on world groups rather than on individual countries. Figure 1 shows the F-group of countries to be continue dominating in 2012, 2030, and in 2050 as well. In 2050, the value of DI for the F-group is projected at 25.6 pp, which is slightly higher but practically equal to the DI of EAP at 24.8 pp. This is a projected future situation of shared leadership that has a trajectory of some 38 years before the shared leadership is to be realized. The lengthy horizon of the trajectory gives ample opportunities for the two leading regional groups to adapt to each other in redesigning global governance and responding collectively to challenges of global failures.

Would intercourse between parties with equal influential powers lead to more confrontation or more understanding? It is generally true that when the contending parties have influential powers that are more or less equal, as suggested in Figure 1 for 2050, and perceive the situation as such, the parties will be more inclined to use reason and knowledge and adopt cooperative attitudes in managing collective actions and avoiding bilateral frictions. Under a skew distribution of influential powers it is more likely that a non-collaborative attitude emerges. Figure 1 predicts a future world in 2050 with a more equal balance of influence than in 2012; and thus feeds the expectation that in the long run the new country/systems competition will be more collaborative. Furthermore, the collaborative scenario is collectively superior to an

2012		2030		2050	
F- group	39.4	F- group	30.6	F-group	25.6
EAP	21.5	EAP	25.0	EAP	24.8
SA	13.3	SA	15.0	SA	18.2
LAC	8.3	LAC	9.2	LAC	9.6
SSA	7.4	SSA	8.5	SSA	9.6
MENA	4.3	MENA	5.3	MENA	6.2
S-group	3.1	CAC	3.4	CAC	3.7
CAC	2.8	S-group	2.8	S-group	2.5
World total	100.0	World total	100.0	World total	100.0

Table 6: Projected distribution of the Dominance Index by world region: 2012, 2030, and 2050.



Key: 1 = F-group, 2 = S-group, 3 = EAP, 4 = SA, 5 = CAC, 6 = MENA, 7 = SSA, 8 = LAC

Figure 1: Projected distribution of the dominance index by world region: 2012, 2030, 2050.

isolationist, protectionist or a non-collaborative one. The collaborative scenario promotes borrowing, testing and adaptation of successful institutions from one system to another; but also experimenting with new designs and institutions of global governance.

It is worth mentioning that the South Asia region is projected at the third position with DI at 18 pp, and LAC at the fourth position with DI at 10 pp. The displacement at the regional level is thus less striking than the displacement at the country level. Figure reveals other interesting features of world development as well. The underdog position of SSA is reversed by 2050, allowing SSA to catch up with LAC with the same influence potential of 10pp. MENA and CAC secure the sixth and seventh positions with DI at 6pp and 4 pp, respectively. The S-group, which is practically Russia, reaches no more than 2.5 pp, which is equivalent to one-tenth of the influence potential of either EAP or F-group.

The last bunch of results is summed in Table 7, which gives the DI for leading countries at the world level for the near future. We show in Table 7 how the projected DI for the leading countries causes their ranks of influence potential to shift upwards and downwards in the near future. It is interesting to compare Table 1 with Table 7. The difference between the two tables is in the inclusion of an equal weight for the population effect, next to the GDP effect. This results in the up ranking of developing countries, with foremost among them are China and India with huge and rising populations, and the down ranking of US, Japan and high income European countries. The DI results show that sometime between 2000 and 2012, China surpassed US already, and by 2030 India is projected to be equal to, and thereafter surpass US. In 2030, China and India are numbers 1 and 2, followed by US, and after a distance, come Brazil, Indonesia, Japan, Nigeria and Mexico. The DI of leading EU countries is in the range 2.0% to 1.5%. The DI of Russia and Turkey are also in this range. All other countries in the rest of the world, next to Saudi Arabia and South Africa, are projected to have a dominance index at levels lower than 1%. Countries in the rest of the world hold together a DI amounting to 34 pp, which is projected to be stable.

Recapitulating on the positions of China and India in world leadership, it can be reemphasized that within their regions of influence they command a DI of the order of 75 pp, which are highest in the world. Next to their significant potential influence in the EAP and SA respectively, China is shown at the world level to have already bypassed US by 2012, and India is predicted to bypass US directly after 2030. Chapter 7 focussed on China and India. These changes will not pass unmarked in world development.

In what ways would the projected displacement of US, EU and Japan by China and India affect the economic systems of the leading incumbent countries and the economic systems of the leading newcomer countries? And how could the projected displacement affect world development and world governance?

In discussing these questions it is necessary first to sum up the crucial features of the socio-economic systems of US and EU as contrasted to those of China and India. As is well known, profit maximizing firms, markets and supportive institutions are the main driving agents in the US and EU; hence, our denotation of countries sharing this system by the F-group. In contrast, institutional behaviour in China and India incorporates greater influences from kinship and household settings when compared to US and EU. There is also greater collaboration between the higher strata of the firm and state subsystems in China and India compared to US and EU; this closer collaboration between firm and state agents at the top is partly due to close kin relationships between leading agents in leading firms and state agencies. Furthermore, persuasion settings seeking consensus are much more active in coordinating and streamlining the social system in China and India than in US and EU; which is logical, given the demographic dynamics and the multi polar differentiation of the social system in these two giant countries.

As the projections favouring the newcomers on the incumbents become a reality, the established institutions in US and EU are likely to come under pressure in such institutional areas as separation between business and government, free competition, transparent governance, merit goods, and social benefits of the welfare state. The fiscal budget may shift in favour of capital and firms at the cost of labour and consumers. The national economies are prone to apply more protectionism, cartelism, and state corporatism. The polity may also be affected by a weakening of decision-making in open parliaments and strengthened non-transparencies. The new country/system competition may work otherwise and motivate firms and states in F-countries to come closer, integrate, and reorganise with the object of raising performance of their national economies [6,7]. The reorganisation in F-countries may borrow features of the leading newcomers. Firm centred countries may let go and replace parts of the profit maximizing institutions with coordination mechanisms that rely on community sharing, politicized rent and persuasive settings. How far would this adaptation go? One view is that fundamental changes in F-countries cannot happen because given the embedded character of firm-oriented institutions; the cost of reorganization is higher than the benefit of breaking away from the embedded institutions and the historical path. The other view, based on interactive influence, allows for open-ended indeterminate courses, dependent on the degree of agent participation across the world regions and across competing regional systems, and if the returns in the competing regional systems are higher agents would either physically move to the better performing regional system, or institutionally redirect their own system to incorporate

2012		2030		2050		2012		2030		2050	
China	15.4	China	18.6	China	18.3	Indonesia	2.3	France	1.9	Russia	2.1
US	13.7	India	11.6	India	14.2	UK	2.2	Nigeria	1.9	Germany	1.6
India	10.1	US	11.5	US	10.3	Mexico	1.7	Mexico	1.9	France	1.6
Japan	5.1	Japan	3.4	Brazil	3.3	Nigeria	1.4	UK	1.8	UK	1.5
Germany	3.0	Brazil	3.3	Indonesia	3.0	Turkey	1.1	Turkey	1.4	Turkey	1.5
Brazil	3.0	Indonesia	2.7	Japan	2.3	S. Arabia	0.7	S. Arabia	0.8	S.Arabia Arabia	1.0
Russia	2.4	Russia	2.3	Nigeria	2.2	S. Africa	0.6	S.Africa Africa	0.6	S. Africa	0.8
France	2.3	Germany	2.2	Mexico	2.2	Others world	35.0	Others	33.9	Others	34.1

Table 7: Projected changes in the influence potential of leading countries, as measured by the Dominance Index, %. Total = 100.0%.

elements from elsewhere. It very much depends on the relative shares of the dissatisfied versus loyalists.

The new country/system competition would have also consequences for leading newcomers. Given their growth premium in the future, there may be less incentive for the newcomer country/systems to incorporate, test or adapt some of the institutions that proved successful in the context of the F-countries such as those of the competitive entrepreneurship, welfare state, medical insurance, and parliamentary democracy. This would imply a low degree of interaction between the economic systems which limits their evolution. But if the incumbent leading countries in the F-group would take initiating steps in an adaptation process, this can engage leading newcomers in a mutual process of co-adaptations and co-integration, which would make global governance a lot easier.

Speculation on what will happen in the future, considering the huge uncertainties in world development and the multitudes of intervening factors, is not a worthwhile activity and loses relevance in terms of developing action rationales and policy intentions. What is more relevant in terms of policy is to bolster favourable conditions for all agents in all regional systems so as to allow agents to digest, compare and evaluate what is happening across the regional systems, and so as to allow agents to decide freely on entering, exiting, voicing, or reforming across the regional systems. Whatever outcome is realized at the end of the day regarding the prospects of a particular regional system is logical and defendable if the outcome is the result of fair starts, undistorted processes, comparative evaluations and rational choices. These conditions are vital for the natural evolutions of the regional systems and for creating unbiased and fluid world governance fully focused on resolving global failures.

Concluding Remarks

The expected displacement of US, EU and Japan by China and India as global leaders is central in determining the future courses of world development and world governance. Leading newcomers bring to the world scene systemic features, some of which are likely to be taken over by incumbent leading countries and integrated in their socio-economic systems. The newcomers in turn may take over systemic elements from the incumbents. Global governance is destined to go through a transition in which rules are reset so as to reflect the changing balance of influence between incumbents and newcomers. Global failures are likely to intensify as global governance undergoes transition. Global failures would tend to accentuate further when the world scene is viewed by newcomer leaders and incumbent leaders as a zero sum game.

That said, displacement can be specified in different ways; some ways more useful than others, and each way carries its own specific implications for world development and economic systems. There is displacement defined in terms of the GDP in one country overtaking the GDP of another country. There is the more generalized notion of influence potential, which we express in terms of the relative shares of agent interaction and economic transformation, equally weighted, and giving thus the Dominance Index, DI. Displacement, when measured by DI, occurs at a quicker pace than when measured solely in terms of the GDP; this is due to the population effect in DI which favors developing over developed countries. Results of DI indicate that the displacement has already occurred, as the DI of China is higher than that of US in 2012, i.e. 15.4 pp and 13.7 pp, respectively.

Displacement calculus can be applied to individual countries as constituents of the world total, but can also be applied to the eight regions, with which we worked in this paper, as constituents of the world total. For democratic and effectively run world governance the regional perspective should precede the country perspective. Regional displacement of the western industrialized region by the EAP region is projected to take place at a much slower rate than in the case of country displacement of US versus China. The displacement calculus in this paper predicts that the western industrialized region (which we also call the firm centered region) and the EAP region will have equivalent DI's in 2050, at 25.6 pp, and at 24.8 pp., respectively. The interesting thing about this projected equal sharing of influence is that when the contending parties have influential powers that are more or less equal, as suggested in Figure 1, and perceive the situation as such, the parties will be more inclined to use reason and knowledge and adopt cooperative attitudes in managing collective actions and in avoiding bilateral frictions. Under skew distributions of influential powers it is more likely that a non-collaborative attitude emerges. The obtained results feed expectations that in the long run the new regional system competition will be more collaborative, a situation that promotes borrowing, testing and adaptation of successful institutions from one regional system to another. With a time span of 38 years to go, the resetting of rules of global governance can be done gradually, and world responses to the mounting global failures can be made more effective and timely.

Global governance, in contrast to the more advanced organization of the national polity, is at an early stage of evolvement, and is far from being in shape to tackle the list of mounting global failures. A basic step in making global governance more effective is the application of principles of democracy with realism in matters of collective decisions. By way of demonstration we applied the DI at the regional and country levels in composing a world top of presidential leaders, to be entrusted with coordinating global governance and resolving global failure. The result was a first chamber with the limited number of 16 leading countries, or G-16; which is different from the G-20. We postulated also that there is a rationale for supplementing the G-16 by a second chamber of eight regional chancellors, denoted by R-8, who can represent the interests of *other* countries in the eight regions *other* than those of the leading country.

As world development evolves, partly determined by internal mechanisms, and partly by external events, the outcomes are not predictable. That is the more reason for strengthening global governance based on principles of participatory democracy and interactive influence. The context of the world national polity is very different from that of the world polity. Remarkable advances have been achieved in the past centuries in circumventing and consolidating the institutional setup of the national polity. Some of these advances can be fruitfully used in programming the institutions of global governance, but the global governance of differentiated and interactive systems/regions/countries is unique and new, and it has to discover its own programme and path.

References

1. Wilson D, Purushothaman R (2003) Dreaming with BRICS: The path to 2050. Goldman Sachs Global Economics.
2. PWC Economics (2013) World in 2050, the BRICS and beyond: Prospects challenges and opportunities. Global trends and future scenario.
3. Cohen SI (2009) Economic System Analysis and Policies. Palgrave Macmillan, London.
4. Cohen SI (2015) World Development and Economic Systems: Theory and Applications. World Scientific Publishers, London.

5. Simon HA (1993) Altruism and Economics. Eastern Economic Journal 18: 73-83.
6. Sinn HW (2002) The New Systems Competition. the National bureau of economics research.
7. Lindbeck A (2003) An Essay on Welfare State Dynamics. Social science research network.