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Bridging the North-South Divide on Climate Post Copenhagen

John Whalley and Sean Walsh

The United Nations climate change negotiations currently underway and now seemingly likely to conclude only six to 12 months after the UN Framework Convention on Climate Change (UNFCCC) hosted meeting at Copenhagen in December 2009, are beset by a series of obstacles, the most fundamental of which reflect the North-South divide, largely between the Organisation of Economic Co-operation and Development (OECD) and non-OECD economies. In this brief we argue that movement across this divide is the single most important element in a successful conclusion to the negotiation. Current obstacles reflect asymmetries between developing and developed countries both in terms of growth in carbon emissions — and hence the costs of reducing emissions proportionately relative to some base date level, but also in terms of historical emissions as a source of damage. These are compounded by the imprecision of the negotiating mandate — a lack of a clear definition of the basic principles involved, particularly in the case of the original UNFCCC principle of common yet differentiated responsibilities, which accepts but does not clearly delineate differentiated responsibilities for developing and developed countries on climate change. Significant movement in the negotiating position of either side (or both) is likely a necessity for a climate deal to be reached even in post-Copenhagen negotiations. However, the recent unilateral commitment by China to reduce emissions by 40-45 percent per unit of GDP from a 2005 base year by 2020 is a positive first step.

This divide reflects two different factors. On the one hand, developed Northern countries have higher incomes per capita and slower economic growth, whereas Southern developing countries have lower incomes per capita and more rapid economic growth. This gives Southern countries higher carbon emissions growth and they thus have relatively higher costs if equi-proportional reductions relative to a base date were agreed. There is also disagreement between the North and South over responsibility for damage, and whether to measure emissions on an annual basis or on a historical or cumulative basis. Developed countries want an annual basis. Southern countries see this as unfair and want a cumulative approach to measuring the amount of emissions each country or group is responsible for.

To get a full treaty to replace the Kyoto Protocol by the end of 2012, there will need to be agreement on interpretations of basic, ill-defined concepts, and involve a wide ranging negotiating bargaining set with no clear overlap



Sean Walsh

Sean Walsh has worked at The Centre for International Governance Innovation (CIGI) since May 2007. He holds a BA and MA in Economics from the University of Waterloo, where his major fields of study were labour and environmental economics. He has worked with numerous professors at the University of Waterloo and is currently John Whalley's research assistant at CIGI, working on the rising power of developing nations in the global economy, with a focus on China, as well as climate change negotiations. He attended an official session in Copenhagen on the challenge of reconciling the global environmental and trade regimes.

in the positions between negotiating parties, particularly between the North and South. Thus, the likelihood of a significant agreement post-Copenhagen seems to us to be clouded, despite the significant political momentum behind it driven by concerns over accelerating climate change. The recent emissions reduction commitment by China presents the opportunity for lessening the differences seen between parties; however, whether and how parties will respond remains to be seen.

Common yet Differentiated Responsibilities

A central obstacle in the current negotiation is the lack of a clear definition of the principle of "common yet differentiated responsibilities" for developing countries. The negotiation is taking place under the UNFCCC charter and this charter is where the term originates. Previously in the Kyoto Protocol, this concept was interpreted to mean that developing countries did not have to participate in efforts to mitigate climate change since they were viewed as largely not responsible for emitting the greenhouse gases (GHGs) currently impacting on the climate. But with climate change concerns escalating, and with rising emissions in developing countries, this outcome is no longer seen as tenable both by developed and developing countries. But how to participate and on what basis is unclear.

One interpretation is that developing countries have rights to development and should be financially compensated for emissions restraint which impedes their growth. Another is that developing countries should be entitled to different forms and depth of commitment. Developing countries also argue that their emissions reductions should be based on cumulative/ historical emissions, not current annual emissions. These ambiguities are behind the divide between Northern and Southern countries — one that must be resolved before any international treaty can be reached.

The basic problem is that growth in emissions remains tied to economic growth and is likely to remain so for the next few decades until technological innovations address this. With Northern country GDP growth rates at roughly three percent, if that, while the major carbon dioxide emitting Southern country averaging closer to nine percent in the case of China and six percent for India and Brazil, a similar proportional global carbon reduction effort by all countries relative to a base date level of emissions would represent a much more significant cost to developing than developed countries since developing countries have higher growth rates of carbon emissions. Developing countries also claim that carbon reduction is an impediment to the development goal of poverty reduction/elimination, raising issues of how to balance eliminating poverty versus mitigating climate change. Northern countries can do little to counter this argument if they maintain their stance of preferring annual over cumulative measurement of emissions, effectively disavowing responsibility for the last 200 years of their emissions during the industrial revolution.

This debate on common yet differentiated responsibilities overarches several related issues. One is how emissions should be measured — by country, per capita or per unit of GDP. Emissions levels on a per country basis (also referred to as a level basis in the negotiation and literature) are the easiest to relate to the levels of emissions. However, this measure ignores country size, growth rates and social circumstances, and tends to favour smaller and/or well developed

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and/or less populous countries. A “per capita” or “per unit of GDP” basis for measurement is more accommodating of the differing circumstances in individual countries (hence the “per GDP” form of the most recent commitment by China). It is possible for these alternate measures to fall (through increases in population or GDP) while total emissions are still on the rise, but they still can represent a significant reduction in the growth of emissions over time. Whether to measure GDP at purchasing power parity or market exchange rates is also critical, as it makes a large difference to China and India.

Another, although smaller, issue is the basis for emissions measurement: consumption or production of carbon-emitting goods. That is, should emissions be counted on the basis of the country in which the emissions and associated goods are produced or where those goods are consumed? This is an issue for countries that export or import goods with high carbon content and run trade surpluses (especially China), because the form of emissions commitments these countries are responsible for differs significantly between the two bases. Estimates for China suggest that around 35 percent of that nation’s emissions relate to exports.

These issues of measurement and responsibility are critical for China and other countries with large populations and rapid growth rates, as the responsibility these countries could have for mitigating climate change alters greatly depending on the metric used to measure GHGs. These countries generally want emissions measured on cumulative per capita and consumption basis, which is viewed as less restrictive of developing country growth, while developed countries generally prefer an annual per country and production basis of measurement. There are also issues of the base date to be used with some countries (for example, Russia, due to negative growth rate between 1991 and 1997) wanting to keep the Kyoto baseline of 1990, and others (China) wanting the most recent date feasible. One possible suggestion has been for country-specific base dates. However, none of these issues have been resolved, with the involvement of the larger developing countries in the Copenhagen negotiation potentially hanging in the balance.

Legacies and Lessons from the Kyoto Protocol

Another challenge of the post-Copenhagen process is remedying the weaknesses in the earlier Kyoto Protocol. One widely cited flaw with the Kyoto Protocol is its lack of effective enforcement. There is no clear basis for determination of emissions levels on the agreement date, and penalties for non-compliance are few. Consequentially, this is a central topic of debate in the current negotiation and this is evident in a focus on “measurable, reportable and verifiable” emissions reductions. This concept also highlights the ambiguity and problems inherent in measuring emissions on a global scale, and particularly outside of the OECD, where the technology to do so may not even exist. Responsibility for damages cannot be calculated until emissions can be recorded reliably.

Few firm ideas circulate on crafting a credible enforcement regime, but one is obtaining commitments of funds as bond and holding funds committed by all countries in escrow until the commitment date and positive determinations of compliance. Any non-compliant funds would then be distributed between compliers. Another is for any treaty to be entered into domestic law to give private sector rights to sue for non-compliance in all countries.

Enforcement is viewed as a necessity, particularly since the failure of Kyoto



John Whalley

John Whalley is a CIGI Distinguished Fellow and a Fellow of the Royal Society of Canada. The author or co-author of dozens of scholarly articles, he is one of Canada’s preeminent experts in the field of global economics. His current academic positions include William G. Davies Professor of International Trade and Co-Director of the Centre for the Study of International Economic Relations, Department of Economics, University of Western Ontario; Research Associate, National Bureau of Economic Research in Cambridge, MA; and Coordinator, Global Economy Group, CESifo, University of Munich. Dr. Whalley is a former Visiting Fellow at the Peter G. Peterson Institute for International Economics, Washington, D.C. He holds a BA in Economics from Essex University (1968), and an MA (1970), M.Phil (1971) and a PhD (1973) from Yale University.

to enforce its measures has allowed a backlog of unfulfilled commitments by most of the developed world under the Protocol to build up. This has become problematic for the current negotiation, as many countries without such backlogs (especially developing countries) are questioning the credibility of any further (and likely stronger) emissions reduction commitments in Copenhagen from those with backlogs. While the UNFCCC keeps track of all countries' progress, the worst backlogs (in percentage terms) involve Spain and Canada and in total, perhaps 15 to 17 OECD countries may be in non-compliance come 2012.

International Funds

Non-OECD countries are also seeking financial assistance in order to help them remedy damage from climate change. The Copenhagen negotiation will focus on separate international funds for adaptation and innovation.

Prior international funds totaling small sums of millions of US dollars, including from a two percent levy on Clean Development Mechanism projects, were created under the Kyoto Protocol for use in facilitating the adjustments needed to combat climate change. These are still in operation. However, the argument now is that this level of funding for climate change mitigation is insufficient by large orders of magnitude. Figures in the region of US\$100 billion per year are discussed, with some even suggesting the same level of funding be applied to this initiative as was appropriated to deal with the financial crisis — several trillion US dollars. The G77 have suggested that OECD countries commit to transfer between 0.5 and 1 percent of GDP to an Adaptation Fund. In the energy sector alone, the IMF has stated that roughly US\$45 trillion in investment will be needed by 2050 to raise the technology needed to mitigate carbon, and that each year's delay beyond 2010 in reaching a global treaty will increase that amount by another US\$500 billion. This has spurred the development of Adaptation and Innovation funds as part of the Copenhagen negotiation process and these are poised to become substantial in size.

Linkage Elsewhere in the International System

There are also broader questions emerging as to whether these climate change negotiations can in reality be held in isolation from other international negotiations. These other issues of linkage also involve central North-South issues. The current international system, originating in the Bretton-Woods Conference in 1944, does not account for physical linkages between countries, as are under discussion, but focuses instead on the trade and finance linkages. The result is that while issues of climate change and the environment link countries physically, the relevant international treaties and organizations do not reflect this, thus putting strain on the current international system. There are calls for greater levels of innovation within existing international institutions, and even some suggestions of reworking the entire international institutional architecture. This need for change to accommodate environmental matters is particularly evident in the area of trade. Outside of the World Trade Organization (WTO) system, there have been calls, most notably in the EU, for border tax adjustments and other forms of green protectionism such as tariffs to offset the additional production costs of including carbon as an input to production.

Some degree of implicit integration between the trade regime and the emerging environmental regime seems likely to result and there are signs that this may begin in the current Copenhagen negotiation process. China, India and other rapid growers may seek some form of firmer guarantees on market access for exports in partial return for climate commitments. The existence of Emissions Trading Systems and carbon pricing provides an initial common language for these two regimes. However, the financial crisis and the inherent instabilities associated with it add impetus to ensuring that the climate change debate does not further destabilize the global economy. Whether these links harm or help the chances of success in Copenhagen, or the chance for the successful integration of the two international policy spheres remains uncertain.

Emerging Coalitions

The developed-developing country divide on climate in the Copenhagen process is also resulting in developing country coalitional activity. Initially, the potential for climate related damage was the main driver for coalitional activity in this process. An early coalition was AOSIS, the Alliance of Small Island States, representing 43 low-lying island nations that could potentially disappear from the map should climate change have enough impact on sea levels. However, their combined political and economic power is relatively weak and they have not been able to break the deadlocks in the negotiation.

More recently, the negotiation's growing links to trade, the lack of progress in Northern carbon dioxide reduction efforts, and objections to Northern insistence on an annual emissions has led China and India into a pact wherein they will both take the same negotiating stance in the negotiations surrounding Copenhagen and in any future negotiations for the next five years. The emissions and economic power represented by the coalition provide it with significant leverage within the climate change negotiation and this leverage will carry forward into other areas, principally trade. Further leverage has been added due to the 40-45 percent emissions per unit of GDP reduction commitment by China, which India is now seriously considering as well. Furthermore, if the pattern of this negotiation is similar to WTO/GATT Rounds, where smaller entities free ride on the agreements reached by larger ones, other smaller developing countries will likely follow and participate in any agreement reached.

Concluding Remarks

There is a growing North-South divide over global climate arrangements, and the little time that is left before 2012 and the end of Kyoto arrangements paired with a list of major unresolved North-South issues has dimmed the optimism seen originally after the Bali meeting in 2007 for a global climate deal in 2009. Negotiators are now looking to post-Copenhagen negotiations to resolve the remaining issues. Whether negotiations can conclude in a six to 12 month extension is an open question. The commitment by China represents a first step to bridging the North-South divide and further movement by both sides will be necessary before enough common ground is established that a new treaty can be agreed to. The deadline will be the expiry of the Kyoto Protocol in 2012. Should the issues embodied in the North-South divide on climate not show any further progress towards resolution by 2012, there is the potential for no cooperative regime to be in place when Kyoto ends.

Works Cited

Bosello, F., R. Roson and R. Tol (2007). "Economy-wide Estimates of the Implications of Climate Change: Sea Level Rise," *Environmental and Resource Economics*. Vol. 37, No. 3: 549-71.

Lockwood, B. and J. Whalley (2008). "Carbon Motivated Border Tax Adjustments: Old Wine in Green Bottles?" *NBER Working Paper Series*. No. 14025.

Walsh, S. and J. Whalley (2009). "Bringing the Copenhagen Global Climate Change Negotiations to Conclusion," *CESifo Economic Studies* Vol. 55, No. 2: 255-285.

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CIGI was founded in 2002 by Jim Balsillie, co-CEO of RIM (Research In Motion), and collaborates with and gratefully acknowledges support from a number of strategic partners, in particular the Government of Canada and the Government of Ontario. CIGI gratefully acknowledges the contribution of the Government of Canada to its endowment fund.

Le CIGI a été fondé en 2002 par Jim Balsillie, co-chef de la direction de RIM (Research In Motion). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement de l'Ontario. Le CIGI exprime sa reconnaissance envers le gouvernement du Canada pour sa contribution à son Fonds de dotation.

The Centre for International Governance Innovation
57 Erb Street West
Waterloo, Ontario, Canada N2L 6C2
tel: 519.885.2444 fax: 519.885.5450
www.cigionline.org



The Centre for International
Governance Innovation

Centre pour l'innovation dans
la gouvernance internationale

57 Erb Street West

Waterloo, Ontario N2L 6C2, Canada

tel +1 519 885 2444 fax +1 519 885 5450

www.cigionline.org