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Beyond Copenhagen: Reconciling International Fairness, Economic Development, and Climate Protection

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THE HARVARD PROJECT ON INTERNATIONAL CLIMATE AGREEMENTS

The goal of the Harvard Project on International Climate Agreements is to help identify key design elements of a scientifically sound, economically rational, and politically pragmatic post-2012 international policy architecture for global climate change. It draws upon leading thinkers from academia, private industry, government, and non-governmental organizations from around the world to construct a small set of promising policy frameworks and then disseminate and discuss the design elements and frameworks with decision-makers. The Project is directed by Robert N. Stavins, Albert Pratt Professor of Business and Government, John F. Kennedy School of Government, Harvard University. For more information, see the Project's website: http://belfercenter.ksg.harvard.edu/climate

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ABSTRACT

Time to respond to the severe threat posed by global climate change is running short. Though the most recent international climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) achieved some consensus in the form of the Copenhagen Accord, they failed to produce an adequate and legally binding action plan for achieving long-term reductions in greenhouse-gas emissions. Looking beyond Copenhagen, this paper proposes a new architecture for international climate policy going forward. It highlights a top-down, burden-sharing rule that is designed to produce a fair distribution of burdens across countries while also (a) giving priority to economic development and concerns about wealth inequality and (b) achieving emission reductions consistent with holding the expected increase in global average temperature to 2 degrees Celsius. In addition, this paper discusses several key design elements that will be important, especially from the perspective of developing countries, to the success of future international climate negotiations. These design elements include agreements on burden sharing, choice of policy instruments, financial mechanisms and technology transfer, penalties for noncompliance, and linkages between trade and climate change.

Key Words: global climate change, Copenhagen Accord, burden-sharing rule, international climate fairness **JEL Classification**: Q54, Q56, Q58, Q48

BEYOND COPENHAGEN: RECONCILING INTERNATIONAL FAIRNESS, ECONOMIC DEVELOPMENT, AND CLIMATE PROTECTION

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1. INTRODUCTION

Climate change is far from being just an environmental issue, and international negotiations to address it have already traveled a long and difficult path. The risks of climate change were first recognized at the 1992 United Nations Earth Summit in Rio de Janeiro; this led to the formation of the United Nations Framework Convention on Climate Change (UNFCCC) and eventually to a legally-binding international climate treaty, the Kyoto Protocol. The Kyoto Protocol, which required the world's more developed major country emitters (the so-called Annex I countries) to reduce their emissions to 1990 levels, entered into force in 2005—13 years after Rio—but it did so without the participation of the United States. At a subsequent meeting in Bali, Indonesia, in 2007, parties to the UNFCCC sketched out a time table for further negotiations aimed at reaching agreement on a post-Kyoto international climate treaty in two years; this meeting also produced an action plan (known as the Bali Action Plan) that outlined four building blocks for achieving long-term cooperative action. Nevertheless, negotiations at Copenhagen in December 2010—officially the FifteenthConference of the Parties to the UNFCCC or "COP 15"—were on the verge of collapsing altogether before a new agreement, known as the Copenhagen Accord, was reached in the closing hours of the conference. The Copenhagen Accord does not establish legally-binding, emission-reduction commitments; rather it relies on an "open enrollment" framework under which participating countries simply record their emission-reduction targets along with the actions that they plan to implement by 2020 to achieve those targets. As such, the Accord is very flexible: Countries must register their domestic climate commitments by 2015, but these commitments can take the form of laws or development plans. The failure to achieve a stronger, legally-binding agreement at Copenhagen reflects the numerous points of deadlock that emerged in North-South negotiations during the first 13 days of negotiations at COP 15. The resulting agreement—while it still represents an important step in the evolution of international climate policy—therefore leaves many areas to be addressed in future negotiations.

Several features of the Copenhagen Accord are worth noting. First, the Accord recognizes the scientific consensus in support of limiting global average warming to

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2 degrees Celsius (°C) to avoid the most damaging impacts of climate change. More broadly, the Accord acknowledges the need for deep cuts in global emissions on both science and equity grounds. Critics point out that an approach based on self-committed targets and voluntary actions could well result in a global average temperature increase of 3°C or even more. Given the current impasse in North-South negotiations, however, and given that most countries view their level of commitment to emission reductions as contingent on other countries' actions, the "open enrollment" framework may provide a good starting point for building trust between Annex I and non–Annex I countries. If the Copenhagen Accord succeeds in this sense, international cooperation to undertake the much deeper emission cuts that will ultimately be needed to reach the 2°C target may be easier to achieve in the future.

Second, the Accord maintains the distinction between Annex I and non–Annex I countries, but it does not establish more stringent compliance requirements for the former group of countries relative to the latter. Given that the economic growth and emissions profiles of many countries are in flux, this change could be conducive to progress in future climate negotiations. The Annex I list was appropriate when the Kyoto Protocol was drafted in 1997, but a more current ranking of countries according to their level of economic development would show significant changes since that time. Therefore, a more dynamic allocation regime is needed— particularly for developing countries—to provide a basis for transitioning from weaker targets to stronger targets or from voluntary mitigation efforts that may be binding in only one direction to mitigation efforts that are binding in both directions. To be credible, such a transition path would need to recognize the sustainable development needs of poorer countries while ensuring that developed countries are subject to binding emission-reduction commitments consistent with their historical share of responsibility for the overall accumulation of carbon dioxide and other greenhouse gases in the atmosphere since the Industrial Revolution. Over time, all countries would converge toward the adoption of binding commitments at the level of stringency needed to achieve substantial global emissions reductions.

Third, the Copenhagen Accord encourages the use of market-based instruments to achieve cost-effective mitigation actions. Though the focus is on using such mechanisms to achieve domestic targets, efficiency at the global level demands rules and guidelines to foster voluntary bilateral and multilateral linkages between individual countries' climate programs. Such linkages could be achieved though trading, tax, or other mechanisms, but these mechanisms are missing in the current agreement. A particular question for the design of international policy is whether there should be a single global carbon price (from an efficiency standpoint, a single global market price would promote the most cost-effective overall mitigation response).

Finally, the Copenhagen Accord highlights the importance of providing developing nations with predictable and adequate sources of funding for mitigating emissions, reducing deforestation, and implementing adaptation measures. How to raise funds on a large scale without displacing other forms of Overseas Development Assistance

(ODA) support needs to be explored and resolved in greater detail before new funding mechanisms can be made operational. Besides the financing issue, further elaboration of important design elements with respect to the measurement, reporting, and verification (MRV) of mitigation actions will be needed in a future agreement. A last issue concerns likely incentives for compliance (or penalty regimes for noncompliance): Specifically, what incentives can be provided under a new agreement to ensure that nations adhere to their international climate commitments. This is another important design element that was not addressed in the Copenhagen Accord.

In sum, the path toward a new and stronger international climate agreement remains difficult and probably long. Whether the Copenhagen Accord is ultimately viewed as a failure or success will depend on whether it creates a new dynamic incentive—one with the potential to engage countries and reinforce their commitment to building a more effective climate policy architecture in the future. The international community as a whole needs to regain momentum by deploying better program designs and practical mechanisms to push climate negotiations forward, while implementing trust-building measures along the way.

Olmstead and Stavins (2010) describe three essential elements for a promising post-2012 international global climate policy: (1) meaningful and differentiated mechanisms to encourage participation, (2) an extended time path of targets, and (3) a flexible, market-based approach that addresses concerns about distributional equity. To break the current impasse in international negotiations, this paper proposes a new policy architecture that provides for the three elements identified by Olmstead and Stavins. Specifically, this proposal features a top-down, burden-sharing rule that is designed to reconcile the objectives of international fairness, economic development, and climate protection. This proposal also provides dynamic and differentiated incentives to encourage participation and recognizes countries' historic responsibility for past greenhouse-gas emissions (Section 2). While the burden-sharing rule is the central feature of this architecture, several additional design elements are also likely to be important in post-Copenhagen climate negotiations. These elements—including agreements on targets and burden sharing, financing mechanisms and technology transfer, a penalty regime, and linkages between trade and climate change—are discussed in Section 3. Section 4 concludes the paper.