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Summary

Finance has been critical to the development of interest and momentum concerning the Paris Agreement, which emerged from COP21. However, a quick scan of the accord could lead many to derive a disappointing picture because of the absence of practical commitments to financial devices that can limit the risks of climate change. We support the opposite view that the text marks a new departure by committing countries to "making financial flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development ». This was matched by parallel developments such as the Financial Stability Board's launch of a new Task Force on climate disclosure. We argue that, further steps now need to be taken within the broader context of financing the new model of prosperity laid out in the UN Sustainable Development Goals (UN, September 2015). At a time of increasing financial uncertainty and inadequate investment in the real economy, putting in place a framework for financing the transition to a low-carbon, resilient model of development is now an economic imperative - and an immense opportunity. Mitigating the systemic risks of climate change while putting the global financial system on a path toward balanced and sustainable development, is in the long-term strategic interests of both industrialized and developing countries and we suggest what practical steps can be accomplished in a near future in this direction.

Keywords: COP 21, Paris Agreement, Climate Finance

JEL Classification: Q5, Q58, F53

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Abstract

- 1. Finance has been critical to the development of interest and momentum concerning the Paris Agreement, which emerged from COP21. However, a quick scan of the accord could lead many to derive a disappointing picture because of the absence of practical commitments to financial devices that can limit the risks of climate change.
- 2. We support the opposite view that the text marks a new departure by committing countries to "making financial flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development ». This was matched by parallel developments such as the Financial Stability Board's launch of a new Task Force on climate disclosure.
- 3. We argue that, further steps now need to be taken within the broader context of financing the new model of prosperity laid out in the UN Sustainable Development Goals (UN, September 2015). At a time of increasing financial uncertainty and inadequate investment in the real economy, putting in place a framework for financing the transition to a low-carbon, resilient model of development is now an economic imperative and an immense opportunity.
- 4. Mitigating the systemic risks of climate change while putting the global financial system on a path toward balanced and sustainable development, is in the long-term strategic interests of both industrialized and developing countries and we suggest what practical steps can be accomplished in a near future in this direction.

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Unsurprisingly, celebration of the success of COP21 in Paris is now followed by a wave of concerns, and even some skepticism. UN FCCC Executive Secretary Christiana Figueres recently noted in Davos: "after 20 years of working towards that goal, that was the easy part". Given the Copenhagen trauma, reaching a universal agreement with all countries on board was, of course, a challenging task. But the risk exists that the Paris Agreement, like the agreement reached at COP3 in Kyoto, will remain largely 'unfinished business' (Jacoby et al., 1998). Its ratification by 55 countries representing 55% of world emissions is not evidence of adequate reforms and it is uncertain how the Agreement will be translated into policies and measures that help countries implement real, practical, and transformational climate policies.

However, many elements of the Paris text can assist national leaders in their efforts to tackle the aspects of climate change that make this issue "a truly wicked problem." First, the Paris Agreement contains a *Decision* that has immediate legal effect among all Parties, independent of the vagaries of the ratification process. Second the Paris Agreement itself is an outcome of *the Durban Platform of Action*⁹. The Agreement, which should "be implemented from 2020," has a permanent vocation and will provide the legal basis for climate action today, as well as an opportunity to adapt national economic development strategies to future circumstances.

Because the Decision defines actions to be undertaken before 2020 and will enter immediately into force, its interpretation is critical to the credibility of the post-COP21 process. The Decision has implications that go beyond the formal ratification of the Agreement, to the enforcement of real climate action. The key message is that the short term benefits of a low-carbon transition will advance national development strategies, given the economic and geopolitical conditions that have been realized since the Global Financial Crisis of 2007-2008. These short-term benefits depend on the multiplier effects that would arise from a massive redirection of global financial flows (Aglietta et al., 2015).

The seeds of a climate-friendly financial system?

At first glance, the Agreement only provides general principles which might not attract the attention of policymakers who think that challenges other than climate change are more pressing and urgent. However, a more careful and constructive interpretation of the text is possible, especially if one inspects closely the content of Article 2 of the Agreement and Paragraphs 54, 57, and 108 of the Decision.

Importantly, Article 2 makes clear that the aim of the Agreement is to strengthen the global response to climate change including by "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development ».

Paragraph 54 (which references paragraph 3 of article 9 of the Agreement) elaborates on the Copenhagen commitment made by industrialized countries. This paragraph illuminates the Copenhagen commitment, recognizing the intent to stimulate a minimum of US\$100 billions in annual North-South transfers before 2020, and promote a flow that will be increased by 2025. These funds are expected to finance both mitigation and adaptation (i.e., resilience-enhancing) activities. Implementation of the commitment under this paragraph is viewed by the leaders of the G77 as a credibility test for developed countries on their broader commitment to implement the Principle of Common But Differentiated Responsibility (CBDR) that is at the heart of the UN Framework Convention on Climate Change.

Paragraph 57 directs the Subsidiary Body for Scientific and Technological Advice (SBSTA) of the UNFCCC to clarify the accounting methods that will be used to track financial flows. This technical point is of notable importance from a political perspective. During the negotiations in 2015, a specific North/South sticking point

⁹Ad Hoc Working Group on the *Durban Platform* for Enhanced Action created at COP17 in 2011.

emerged: an OECD-CPI report concluded that a level of US\$ 62 billions of transfers had already been achieved during 2014. By contrast, an assessment prepared for the Indian Ministry of Finance was only able to confirm that US\$ 2 billions of new and additional funding had been transferred from the Convention's Northern to its Southern parties¹⁰.

Paragraph 108 "recognizes the social, economic, and environmental value of mitigation activities and their cobenefits to adaptation, health, and sustainable development" (SVMA). This sentence opens a discussion about "positive" carbon pricing (Sirkis, 2015) which would encompass both the social cost of carbon (the value of climate damages that are the consequence of a specified emissions pathway) as well as all the positive cobenefits of mitigation activities (employment, energy security, local environmental amenities). The Government of Brasil first proposed this concept at COP20 in Lima. It was subsequently supported in the UN FCCC negotiations by the Group of 77 and China (G77).

Paragraph 133 recognizes civil society as an important element in the so-called "Paris Alliance" and considers economic actors along with financial institutions as key agents of change. Understanding this paragraph in the context of Paragraph 136 (which applies to "non-party entities" and is not binding upon countries that are Parties to the Convention and have ratified the UNFCCC) underlines the importance of carbon pricing, and paves the way for initiatives by governments, economic actors, and financial institutions to build innovative systems combining carbon pricing with innovative financial instruments.

These paragraphs can be viewed as the underlying principles of deeper structural reforms in the financial sector that are necessary to achieve the objective of Article 2 of the Agreement, i.e. *aligning financial flows along a new trajectory of global economic development that leads to low levels of greenhouse gas emissions and high levels of investment in climate-resilient development*. This Article sends a strong signal to the highest legal authorities of nations by recognizing that the re-alignment of the financial sector is an important objective in its own right and not only as a means for supporting greenhouse gas abatement projects. (LCS-RNet, 2015; UNEP Inquiry, 2015; Canfin and Grandjean, 2015).

Financing the INDCs and shifting the trillions: building on the core of the Paris Agreement

The first practical outcome of the new framework outlined in the Paris Agreement should be to stimulate implementation of the Intended Nationally Determined Contributions (INDCS) that were presented in Paris.

The INDC approach was first seen as a *pis-aller* after the Copenhagen failure (Barret et al., 2015) and as a weak substitute for top-down agreement on national emissions quotas. At COP21 this diplomatic gambit has proved to be a crucial innovation, able to foster a new dynamics among the Parties to the UNFCCC. Most importantly, the INDCs provide a unique lens for examining how each government envisions the alignment between national development strategies and protection of our shared global climate system.

The value of this bottom-up approach has now been confirmed (including a special regime for the Least Advanced Countries and Small Islands) as a means of reaching a *"global peaking of greenhouse gas emissions as soon as possible."* Obviously the current misalignment of thus-far declared INDCs with the over-arching objective of limiting future warming to less than 2°C is also now widely recognized. (For additional details on the short-falls in current plans, see further the UNEP Gap Report, 2014; Climate Action Tracker, 2015; Sterman et al., 2015; and GICN, 2015).

However, this misalignment does not represent an insurmountable problem, since a ratchet mechanism has been embedded in the INDC platform that requires a revision of national contributions every five years in order to achieve a path toward 'carbon neutrality' by the second half of the 21st Century (See further Article 4 of the

¹⁰This additionality issue is at the core of a long standing controversy (since the creation of the Global Environment Facility in 1990) whose principle is legitimate but the implementation controversial. It generates disputes that can freeze projects beneficial both for the environment and the development.

Paris Agreement.) What creates a problem is rather the absence of tangible incentives to encourage compliance with the declared INDCs in the short term, and to reinforce them with greater commitments in the future. In the Agreement, there is neither 'gain of cooperation' nor 'penalty for free-riding', as any successful "climate club" would require (Nordhaus, 2015; Espagne, 2015).

This absence of explicit links between climate and development finance with the INDCs may represent an opportunity missed at COP21. Several negotiators felt that it was not appropriate to formalize the links between finance and the INDCs at the present moment, given the lack of complete clarity on the accounting rules that would be applied and the lack of agreement on the meaning of each country's obligation under the principle of CBDR. The CBDR obligation is indeed maintained for developed countries concerning financial transfers in Article 9 of the Paris Agreement, even though the Agreement does not reiterate the old distinction between Annex 1 and non-Annex 1 countries. Perhaps the negotiators' caution was necessary to reach consensus on articles that can now help the Parties to overcome a long-standing stalemate in the negotiations.

A first example of what could be possible in the short term is for developed countries to extend their financial pledges concerning the sensitive floor of '100 billions' in the form of public guarantees for low-carbon investments, under the condition that these investments incorporate the SVMA principle defined in paragraph 108 of the Decision. This would lower the risk coefficient of low-carbon investments in developing countries without high budgetary cost for developed countries, since the guarantee would only be called upon if the investments fail. Another option would be a "Global Guarantee Fund" (GGF), mobilizing funds available in multilateral assistance organizations to issue highly-rated green bonds. The proceeds from issuance of these green bonds could be used for financing low-carbon investments (R. Studart& K. Gallagher, 2015)¹¹. Both mechanisms would be *definitely additional* and will entail little temptation toward non-compliance because the costs for public budgets are much lower than would be the case if reliance was placed solely on direct financial transfers from North to South. Obviously, they are suitable for funding mitigation investments in (a) adaptation (in the form of share of the proceeds of the leveraged investments) and (b)non-marketable activities which are so important for less developed regions (in the form of sovereign bonds for projects incorporating the VSMA).

The principles of such operational devices could be adopted as early as COP22 in Marrakech. Doing so would help to build trust globally, because developing countries, which are currently building their infrastructure, otherwise might soon be locked into carbon-intensive economic development pathways. Implementing such devices would promote a positive interpretation of the CBDR principle¹² and show that developed countries are really committed to helping developing countries to implement their INDCs, securing an 'equitable access to development' for all (Cancun UNFCCC, 2010).

Reducing investment risks of low-carbon investments and massively redirecting financial flows towards these investments will require a credible regulatory framework to ensure environmental integrity in all projects, to hedge against windfall profits, and modulate the traditional arbitrariness of investment choices. Beyond COP22, these SVMA-based mechanisms could become prototypes for wider arrangements¹³ to deploy the full potential of Article 2 of the Agreement and "move the trillions" in financial flows towards a low-carbon transition (Sirkis et al., 2015). Recent progress made on Monitoring, Reporting, and Verification (MRV)

¹¹To hedge against sovereign risks due to political uncertainty, part of the guarantee is deposited upfront into the paid-in capital of GGF. This would not entail a burden on the public finance of the donor. The GGF would tap into this capital in case of non-compliance and readjust accordingly the equity of the country.

¹²A typical and very informative development of a positive interpretation of the Common but Differentiated Responsibility Principle by Chinese experts can be found in (Zou Ji and Fu Sha, 2015).

¹³These arrangements will necessarily incorporate long-term trajectories on which a pull-back force should be hung to incite countries to align their INDCs with the long term universal objective. Such a mechanism is sketched in (Hourcade& Shukla, 2015).

techniques (Bellassen and Stephan, 2015)¹⁴along with reference to the SVMA principle could be two key pillars of this new framework. In addition, because they would increase the amount of private investments for a given level of carbon pricing, they would reinforce initiatives like the Carbon Pricing Leadership Coalitionand help countries to incorporate carbon price signals in the public policies conducive to achieving their INDCs.

Why should "climate agnostics" be interested in the Paris Agreement?

Those concerned with climate change have to be lucid. Moving beyond 2020, the required trillions towards mitigation and adaptation will be found only if high level policy-makers are convinced this will help them meet their immediate political concerns: i.e., the gap between the propensity to save and propensity to invest which puts the world economy at risk from secular stagnation (Summers, 2014; Teulings, C. and Baldwin, R. (2014)) and the inadequacy of the global financial safety net (IMF 2016). Many analysts argue that a low-carbon development pathway increases the resilience of financial systems (Stern and Calderon, 2014), including vis-àvis the systemic risks of climate change and of unsustainable economic development, just flagged by the IMF (2016). The challenge regarding climate change, as defined by Mark Carney, the Governor of the Bank of England (Carney, 2015), is to avoid "the tragedy of the horizons", that is the temporal mismatch between the financial investor's agenda, the financial regulator's agenda and the economic impacts of arising from the physical process of climate change (climate risk, carbon risk and liability risk). This realization led the G20 (Antalya, November 2015) to ask the Financial Stability Board to study methods for appraising climate-related risk to financial portfolios, and to propose an expanded process of voluntary disclosure. Importantly, the new FSB Task Force was launched symbolically at COP21 – but appears nowhere in the text. Subsequently, under China's Presidency G20 (Shanghaï, February 2016) has given established a new Green Finance Study Group, cochaired by the Bank of England and the People's Bank of China, focusing on how to improve the ability of the financial system to mobilise private capital for green investments, placing the climate imperative within a much broader frame.

So far, these processes stop short of recognizing systemic risk to the financial system that arises from physical impacts of climate change as well as the tensions generated by unsustainable development pathways. Voluntary disclosure might be a first step, but relying only on such voluntary actions will not give sufficient incentive to align financial flows with the Objective of the UNFCCC. (See further Article 2 of the UNFCCC.) Absent an orderly set of incentives, asset managers might not resist the attractiveness of carbon-intensive investments in many regions. And decarbonizing one's investment portfolio is not necessarily synonymous with investing in a low-carbon development path. The voluntary disclosure approach is similar to a (partial and) individual insurance approach. It fails to address the collective nature of climate risk.

It is the role of governments to develop a 'green finance strategy' to make asset owners able to recognize the potential value of carefully structured, adequately "back-stopped" investments in low-carbon and climate resilient infrastructure. However, even if these financial regulatory changes help create a demand for low-carbon assets, they might not be enough to create the necessary supply of low-carbon projects and thus generate a strong economic 'ripple effect'. Ultimately commitments by UN Member States who are Parties to the UNFCCC would be needed to channel the "animal spirits" of financial markets and ensure the emergence of a large and liquid market for low-carbon projects.

The SVMA framework could help give birth to a new class of assets and speed its deepening. This would help the management of financial firms to value the carbon-saving assets critical to achieving success along a national low-carbon development trajectory. Financial institutions would thus be more prone to investing in low-carbon assets, and hold those assets in their core capital accounts, in lieu of cash (or frequently under-

¹⁴These advances in the MRV mechanisms build on the expertise cumulated with the Clean Development Mechanisms (CDM) and Joint Implementation Mechanisms. There is an implicit reference to the JIM in paragraph 37 of the Decision, in relation with paragraph 4 of article 6 of the Agreement.

performing) instruments of sovereign debt. The Basel Committee could even encourage national financial regulators to recognize such investments as part of the Tier 1, core-capital assets of large financial institutions that they are able to use to fulfill the Liquidity Coverage Ratio required under the Basel III Agreement.

Much of this discussion of financial reforms will necessarily be conducted in arenas outside the UNFCCC (e.g., Financial Stability Board, G20, G8, Major Economies Forum, etc.), but not without UNFCCC expertise. Our reading of the text of the Paris Agreement is that the UNFCCC has done an important part of the job, conveying a high level of political legitimacy and facilitating the deployment of the underlying principles, but much this job is yet incomplete. The challenge, which must be addressed as soon as COP22, is to take the practical steps necessary to show that the Paris Agreement provides the seeds for deeper reforms of the global financial system, aligning national development strategies in both industrialized and developing countries with worldwide efforts to protect our common future.

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