Seizing a moment of opportunity after Trump's withdrawal

Καιρον αρπαζοντων!

Jean – Charles Hourcade (Cired-Enpc-Agroparistech)

9th meeting of the LCS-Rnet, University of Warwick, 12-13 September 2017

Trump's withdrawal is more than an unfortunate parenthesis

- Remember *the lost decade 'COP6 -> COP15* after Bush_{ir}'s withdrawal from the KP
 - Times had changed but not the paradigm of climate change economics and policies
 - From 'negotiating targets' to « *fair » sharing of the remains of a limited carbon budget*
 - Climate centric policy tools helpless to unty the climate/development Gordian Knot
 - Focus on carbon pricing and *paradoxical ignorance of a key dimension of capitalism: finance*,
 - A *chaste veil* on the 2008 *financial crisis* and on the *changing world balance of economic powers*
- Trump's withdrawal is a symptom of the intra and inter national tensions; there are few 'silent Trumps' amongst governments leaders
- Pressed by urgent demands *climate resignated are tempted to postpone action*
- Waiting Cancun (COP16) for a *paradigm shift (equitable access to low carbon development)* and COP21 for a *framework for action* ...

Motivate and help the climate resignated to seize the $K\alpha\iota\rho$ os

- Start from the short term world tensions: nationalistic drifts embarking the discontents of the globalization, fear of migrations, exacerbated unequalities ...
- Explain why climate action as a lever to reducing the 'fault lines' of the world economy (R. Rajan)
 - The gap between propensity to save and propensity to invest -> risks of secular stagnation (
 - The fragility of the financial intermediation system (generalized tragedy of the horizons)
 - Too export dependent development strategy in developing countries after the Asian Crisis
 - A large funding gap on infrastructures (IMF)
 - the traps of quantitative easing and of 'growth austerity'
- Indicate where is the 'fulcrum' for this lever To 'lift the word' if they want to be the new Archimedes

- Article 2 of the Agreement : "aligning financial flows along a new trajectory of global economic development consistent that leads to low levels of greenhouse gases emissions and high level of investments in climate-resilient development»
- Para 136 of the Decision notes the importance of carbon pricing but only *"applies to "non-party entities"* and is not binding upon Parties to the Convention

• Article 108 of the decision: recognizes the social, economic, and environmental value of mitigation activities and their co-benefits to adaptation, health, and sustainable development" (hereafter SVMA)

The Social Value of Mitigation Action: a '3rd domain' concept



Changing immediately the possibility spaces

- Real challenge but *no unsurmountable macro-economic constraints*
 - Incremental Investments < 0,5% of the GDP in non O&G countries</p>
 - Ieveraged inv costs < upfront inv costs < induced inv costs</p>
 - Redirected investment = 8 to 9% of the Gross Capital Formation
- A double mouvement needed
 - to increase the number of economically viable LCIs, a 'micro-economic problem'
 - attracts 'savers' all over the world ... a financial intermediation problem
- Under a Common But Differentiated Responsibility Principle

Triggering investments in an uncertain context : carbon prices vs cuts in capital costs



A simple message:

- The carbon price signal is blurred by the volatility of many other signals (including fossil fuel prices)
- the *'reward'* for reducing carbon emissions *comes often too late*
- The *reward has to be given upfront* through *public garantees* (Remind the experience of the railway transition)
- **Public guarantee is not a subvention**, it is a burden for taxpayers only if
- But this raises *risks of political arbitrariness and economic unefficiency*
- A 'surrogate' to carbon prices needed, here comes the SVMA

	Technological pessimism path		Technological optimism path	
Discount rate	5%	2%	5%	2%
T=10	73,50	87,25	36,66	43,24
T=20	75,76	104,71	36,54	50,20
T=30	72,26	115,34	35,56	56,96
T=40	68,82	127,50	34,34	64,22

Switching carbon prices for coal CCS

(SVMA with 2% discount rate, 8% private discount rate)



Switching carbon prices for coal CCS

(SVMA with 2% discount rate, 12,5% private discount rate)



Switching carbon prices for Hydro

(SVMA with 2% discount rate, 8% private discount rate)



for low path of SVMA (SVMA per abated ton = 56\$)

for high path of SVMA (SVMA per abated ton = 115\$)

Switching carbon prices for Hydro

(SVMA with 2% discount rate, 12,5% private discount rate)



----- Switching carbon price for low path of SVMA (SVMA per abated ton = 56\$)

for high path of SVMA (SVMA per abated ton = 115\$)

Domestic SVMA and Domestic Prices: the Indian Case

	2020	2030	2040	2050
Indian SVMA	20	50	70	105
Explicit carbon prices	3	10	18	30
SVAT10	25,51	46,76	67,98	81,08
SVAT40	19,96	29,76	37,08	40,35

National and World SVMA? transforming the heterogeneity obstacle into sources of mutual gains

- **1.** Remind the main obstacles to carbon pricing:
 - 1. the *decreasing marginal utility of income*
 - 2. countries situated at different phases of their development
 - 3. The *reluctance to large compensatory transfers* ... and risk of 'windfall' profits for some
- 2. For the same reasons, the national SVMAs will be lower than the claimed willingness to pay of international community to pay for the 2° targets commitments,
- 3. Indian government would is ready to value at 20\$ per ton a public guarantee for a LCI while the world community assess it between 34\$ and 125\$!!!!
- 4. Here is the space for financial assistance to overcome the trap of the 'when flexibility' (everything is cheaper in developing countries BUT macroeconomically costly)

Articulating two leverage effects



A blueprint for 'Clubs of Initiatives'

- An agreement on *SVMAs*
 - A 'common SVMA' for public garanties of overseas investments
 - National SVMA for domestic public garantees
- Voluntary commitments, by 'clubs' of governements, to back a quantity of carbon abatement over every 5 years; their central banks open credit lines and accept CRAs as repayment which are accepted for interbank payments within the Club
- A commitment to *paid-in capital for a multilateral guarantee fund* needed for political and economic reasons
- An Independent Supervisory Body to certify the eligibility of the projects in function of the NDCs list and secure their statistical additionality through allocation rules of CRAs (let us have a look to the 'Marshall Plan technique' cf Tom Schelling)
- These Clubs will enforce the *enabling conditions for reducing the carbon pricing gaps*

Conclusion: why the MGF + SVMA constitute the fulcrum ... some back of the envelop calculations

- A 0,01 €/litre tax on gasoline in France would raise a B\$ 0,5 paid-in capital for a MGF
- This would could back between 2,5 to 5 B\$ of public guarantees given assumptions about the failures risks
- These guarantees would lever B\$ 25 to B\$ 50 of investments ... a club with a few developed countries would fulfil the B\$ 100 Copenhagen promise and "Move the Trillions' with joint public guarantees by developed and developing countries
- A share of the proceeds of mitigation projects needed to fund *non-marketable basic needs* and adaptation to climate change through public overseas aid mechanisms.
- 2% to 4% of the B\$ 100 or B\$50 investments returning to the French economy in the form of sales of equipment will outweigh the costs for the French public budget of the required B\$ 0,5 asset-backed security (with a 50% fiscal charge on sales revenues).
- Practical institutional issues I let the floor to Dipak