A new deal for Green Growth?

Hedging against the risks of 'secular stagnation'

Jean-Charles Hourcade

After COP21: mind the implementation gap

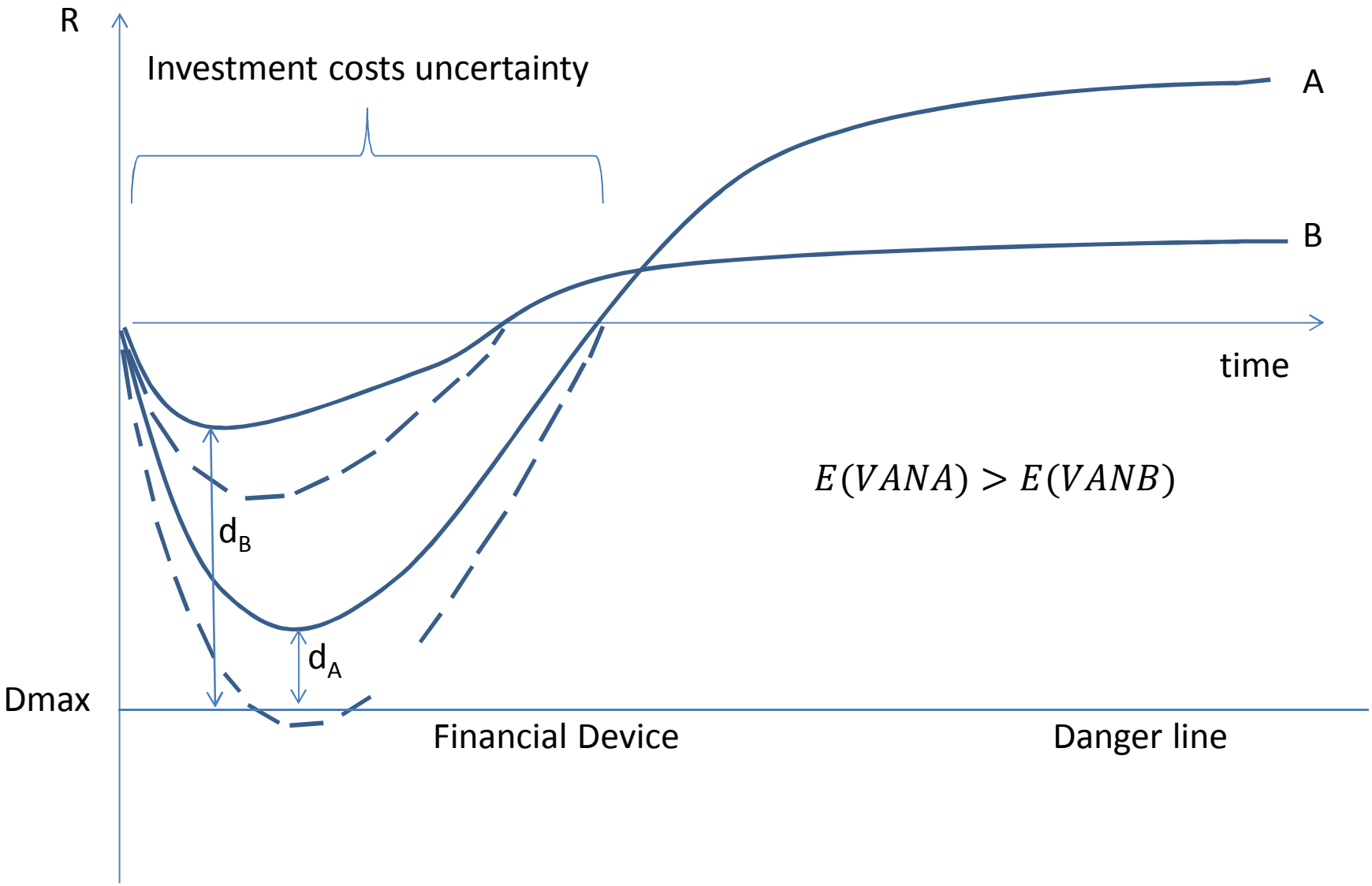
- **A temptation to postpone climate action** until after the end of the current economic doldrums and social alarms

- **How to convince 'climate agnostic' policy-makers to go beyond symbolic announces**
  - Aligning LCT with **Sustainable Development Goals**
  - LCT as a way of responding the **alerts of prominent economists** against the risks of 'secular stagnation'
  - Guarantee **no** immediate and future **negative impact on unemployment and on public debt**

The ‘fault lines’ of the world economy

- **Chronic excess of savings over (productive) investment**
  - ‘Propensity to save’ > ‘propensity to invest’
  - ‘Weak intermediation between long term assets and short term cash balances,
- **Type of globalisation:**
  - ’overly export-led strategy in emerging economies (R. Rajan)
  - Dualistic development
  - Risks of « ***currency cold war*** »
- **Cumulated wedge between potential growth and real growth,** shortfall of infrastructure investments (World Bank, OECD)

Investment pattern in a ‘shareholder business regime’



Combatting the 'postponment temptation'

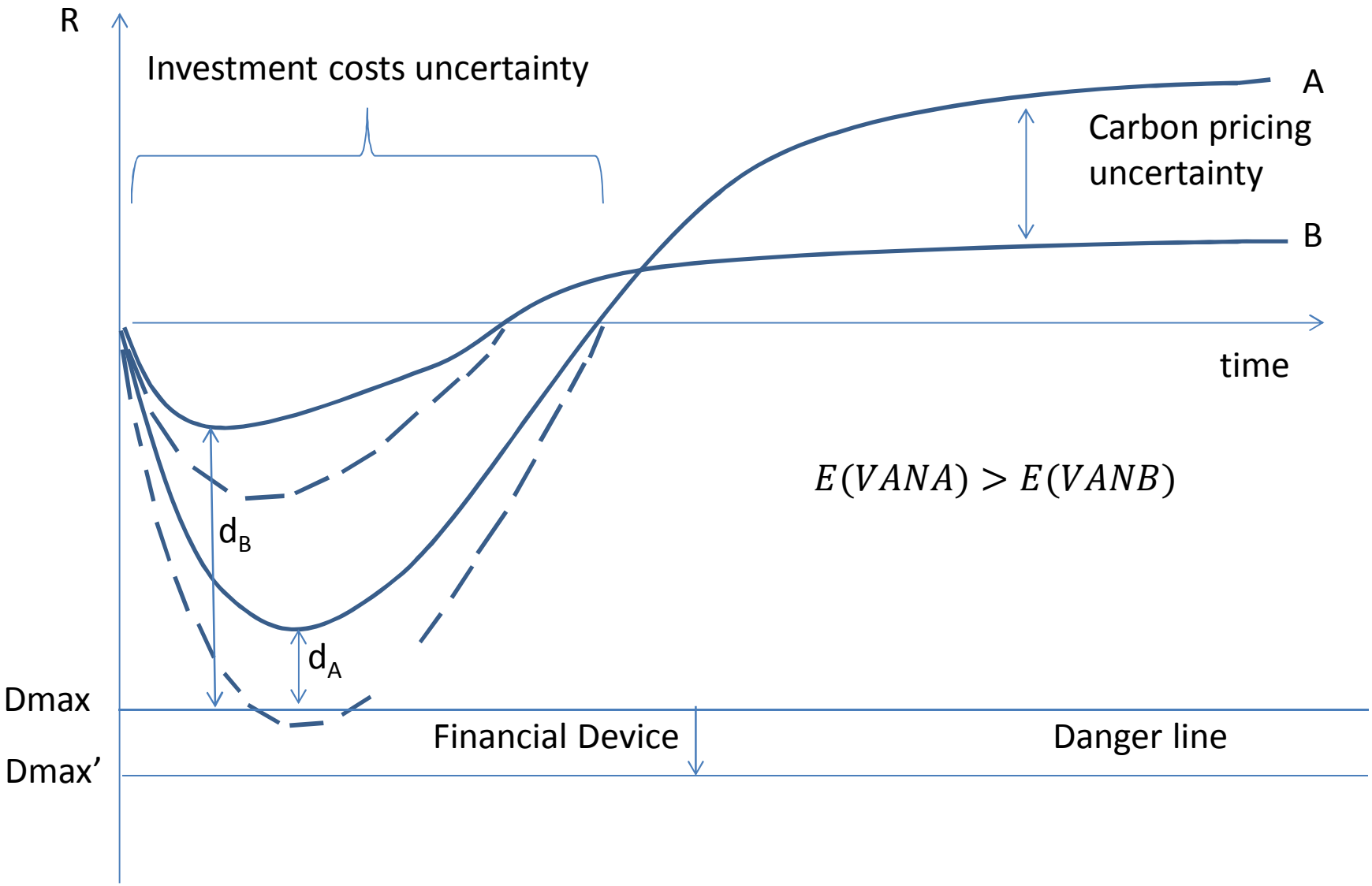
Positive message on the urgency of climate action and its long term co-benefits

+

Emphasizing how the 'trigger phase' of a Green Growth regime can :

- **Awake** the investor/Buridan's Donkey
- **Overcome the limits of Quantitative Easing Policies**: risks of depression vs risks of re-unleashing speculative bubbles,
- Thus overcome/compensate/dismantle **vested interests** opposing to the reform of current economic globalisation,

At the root of the ‘tragedy of horizons’



Linking the climate and the macroeconomic agenda

A financial intermediation able to:

- Move down, ***now,*** the 'danger line' for low carbon investments and support INDCs
- Redirect, ***now,*** savings pools towards infrastructure investments …
- Increase the efficiency of sectorial policies and **hedge against the fragmentation of climate finance** through the incorporation of a common 'prix directeur du carbone'
- Boost, ***now,*** final demand in the world economy over the short term

The COP21's surprise

- **the article 2 of the Agreement:** **aligning financial** flows along a new trajectory of global economic development
- **The 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" (SVMA)***

Positive Carbon Pricing and Finance

- **Supporting INDCs via:**

A volume of public guaranties
+
SVMA + Credible MRV

- Mobilizing private saving and institutional investors through the creation of **low carbon assets**

- **Increasing the efficiency of real carbon prices**: more investments for a given carbon price and incentive for governments to launch tax reforms

- a 'notional price' to **put some economic rationale in INDCs** and prevent their arbitrariness

Numerical experiments on the European Case
project Cired/Iass

- **Disentangling the drivers of costs/benefits of LCT policies:**
  - **Propagation of higher energy costs** throughout the industrial matrix
  - **Crowding out vs spill-over effects** of low carbon investments
  - **Lower burden of the energy bill** on trade balance
  - **Shift in development patterns, technical change and life-styles**

- **LCT for a European Economy**
  - **trapped in a 'slow growth' regime**: European apparent labour productivity catches up the US one in 2060 only
  - **Confronted with high or low oil prices**
  - **Fulfilling unilaterally its decarbonation objectives**

A few words on the modeling structure (Imaclim-R)

Recursive General Equilibrium Model

Hybrid structure :

- tracking physical and monetary flows + installed capacities
- interconnecting BU models of E/T/B/Is

Endogenous technical Change

Imperfect foresight -> possible idle capacities

Gap between potential and real growth

Exogenous assumptions of the external balances -> endogenization of capital flows

Calibrated over 2001 -> 2013, including for the oil prices

Four sets of LCT policies

V0: Climate centric measures only (carbon costs)

V1: V0 + infrastructure policies and investments

V2: V1 + carbon tax reforms (lower payroll taxes)

V3: V2 + public guarantees and SVMA

The mechanisms in a nutshell: Looking at the 2015-2035 GDP Growth Rates

	High oil prices	Low oil prices
Reference	1,26	1,46
Carbon 'cost' only	0,95	1,08
plus infrastructures	0,99	1,14
plus carbon tax	1,25	1,41
plus carbon fin SVMA	2,28	2,53

Too bad to be true?

Too good to be true?

A zoom on the ‘very short term’: unemployment

	2015 - 2020	2030 - 2035
Refence	1	1
Carbon 'cost' only	1,02/1,06	1,15/1,34
plus infrastructures	1,02/1,06	1,11/1,25
plus carbon tax	1,02/1,06	1,01/1,06
plus carbon fin (SVMA)	0,9/0,94	0,79/0,88

The key lies in the sequencing of costs and benefits

Lower carbon tax/price needed over 2015-2020

High Oil Prices: 11$/TCO2 in V3 against 30$/TCO2 in V2

Low Oil Prices: 152$/TCO2 in V3 against 208/TCO2 in V2

Reason: More investments triggered for a given carbon tax

Higher final demand through higher investments and no Crowding Out on Non Energy Investments

V3: High Oil Prices: + 50G$ and + 64G$ compared with R and V2

V3: Low Oil Prices: + 16G$ and +23G$ compared with R and V2

Less short term frictions and more ‘knock on effect’

The ‘mechanics’ of the Short Term ‘knock-on effect’

Slight reduction of the energy burden on trade balance

Slight inward redirection of economic activity (low exposed markets)

Slight reduction of labor costs (on average)

Higher final demand for non energy goods ⇄ slightly higher wages

Slight reduction of energy bill of households if …. (↑EE>↑EnergyPrices)

(macroeconomic role of EE in stocks of buildings and on soft transport)

‘Keynesian’ effect of mitigation investments (energy and beyond)

Behind the ‘mechanics’ the political role of taxes and finance

No ‘economic magic bullet’

Need of articulating policies fragmented so far

Need of articulating many level inititiatives

Articulating many levels of governance

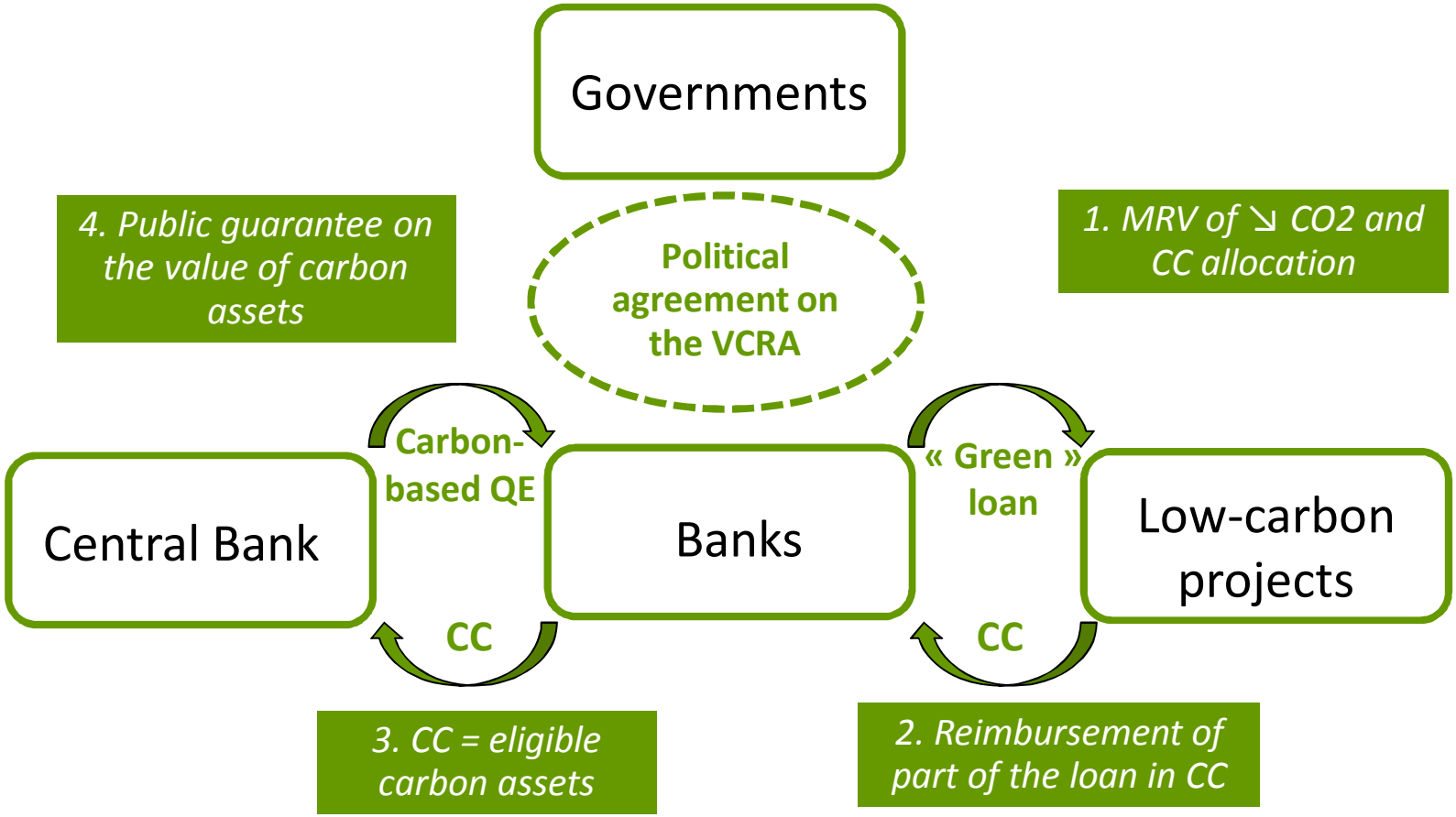
Compensations: how to make people the owners of the LCT

We need fiscal and finance policies because:

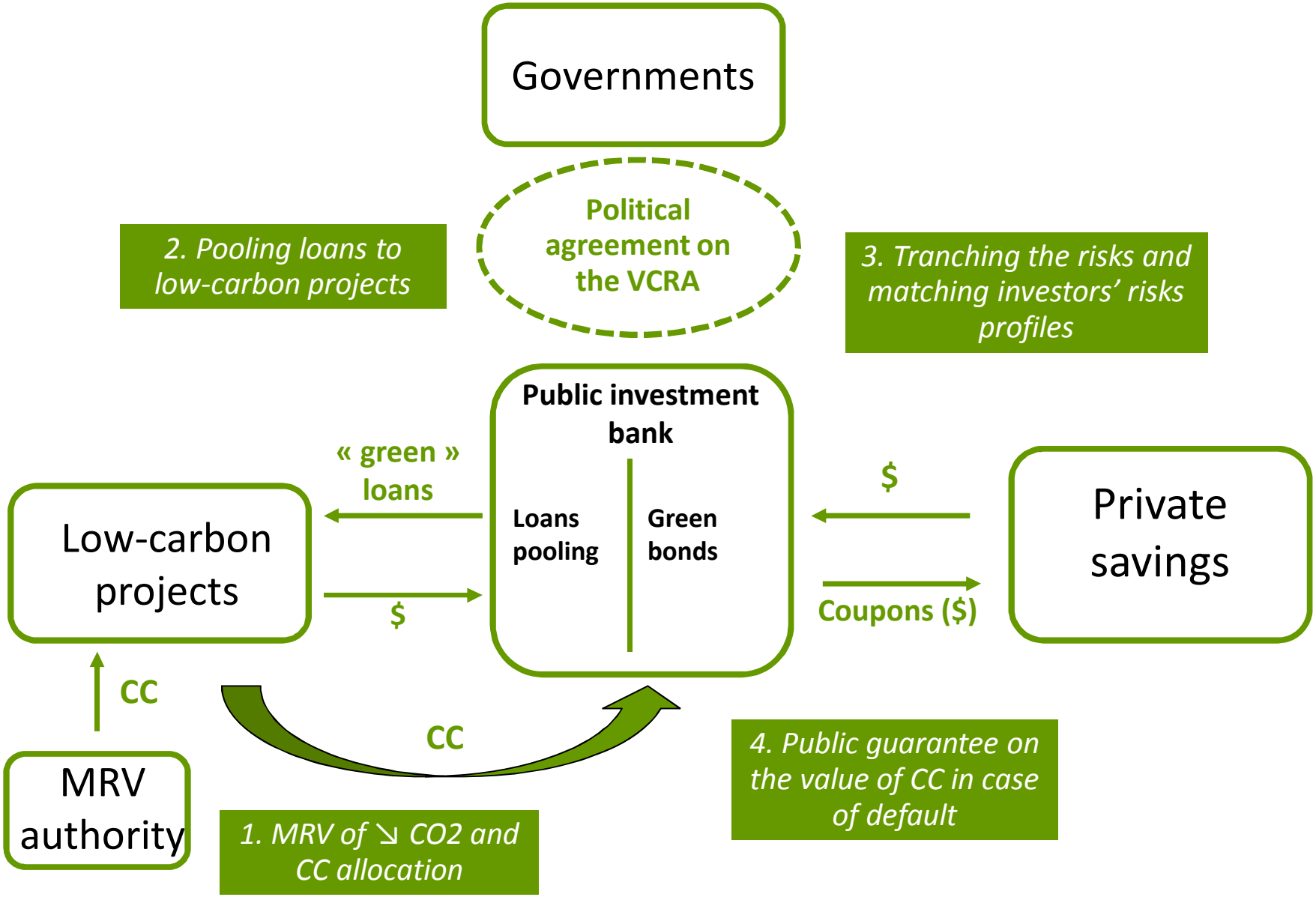
Fiscal systems are the lubricant of changes: national processes in nature (Article 136 of the Paris Agreement)

Financial systems are the ‘fuel’ of changes, they manage the ‘commerce of promises’

The financial intermediation system: carbon based money creation



The private savings channel



Harnessing the Animal Spirits of Finance to support a Green Growth New Deal

1. After the end of Bretton Woods there is no Anchor to the 'Commerce of Promises'
2. An agreed upon SVMA could be such an anchor expressing the value of a 'common good'
3. It would end ultimately into climate friendly monetary and financial reforms
4. It would generate a new class of assets to compensate for the devalorisation of existing classes of assets
5. It would bridge the 'credibility gap' of climate policies and really support the shifting of Trillions of dollars/euros ….
6. It would help untying the Environment Gordian Knot and solving the '100G$ and beyond' commitments of the Paris Agreement