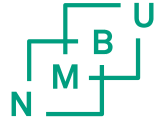


Efficiency, Opportunities and Challenges of Market and Non-market based Instruments for Managing Ecosystem Services

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1. Introduction



- The presentation is based on material from a study we are undertaking for Norad on market/non-market instruments
- The project started quite recently. Here I will give examples of a few core elements from the study
 - Classifying policy instruments
 - Financialization – experiences from CDM
 - Distributional effects of PES and CDM



2. Classifying policy instruments



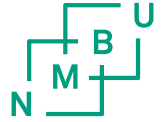
Legal rules (command and control)		Information	Economic instruments (public or private control)	
Public provision -ing	Legal protection - National parks - Reserves - Etc.	Information - Technical - Normative Education/development of skills	Pure public instruments - Taxes and fees - Subsidies - Fiscal transfers	Markets - Non-liability based (voluntary) - Liability based

Government/public action:

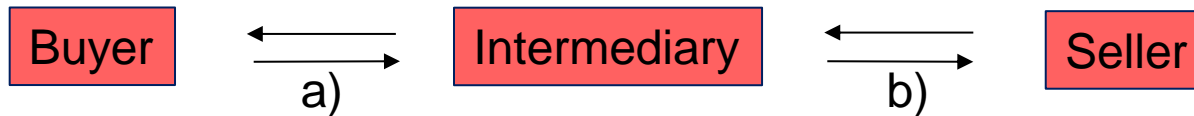
Defining rights (the resource regime) and rules for interaction between actors. Maybe also defining the service.

2. Classifying economic instruments (cont.)

Types of markets for ES



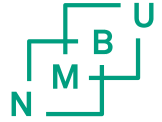
	Direct market (between seller and buyer)	Market with intermediaries	
		Complete (all transactions – a) and b) – trade based)	Incomplete (combination of trade-based and non-trade based transactions)



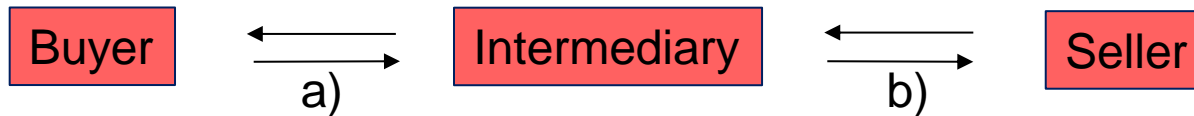
Note that intermediaries may be private businesses, NGOs, but also public agents

2. Classifying economic instruments (cont.)

Types of markets for ES



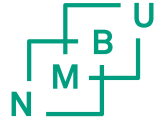
	Direct market (between seller and buyer)	Market with intermediaries	
		Complete (all transactions – a) and b) – trade based)	Incomplete (combination of trade-based and non-trade based transactions)
Non-liability based (voluntary)			
Liability based (cap-and-trade)			



Note that intermediaries may be private businesses, NGOs, but also public agents

2. Classifying economic instruments (cont.)

Types of markets for ES



	Direct market (between seller and buyer)	Market with intermediaries	
		Complete (all transactions – a) and b) – trade based)	Incomplete (combination of trade-based and non-trade based transactions)
Non-liability based (voluntary)	Vitel case (PES)	Some market PES systems - water, biodiversity, carbon Certification schemes	Most market PES systems - water, biodiversity, carbon
Liability based (cap-and-trade)	EU ETS – bilateral trades	EU ETS CDM (private buyers) Biodiversity offsets	Some CDM projects (public buyers)

3. Financialization: Experiences from CDM

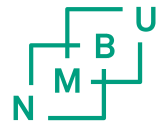
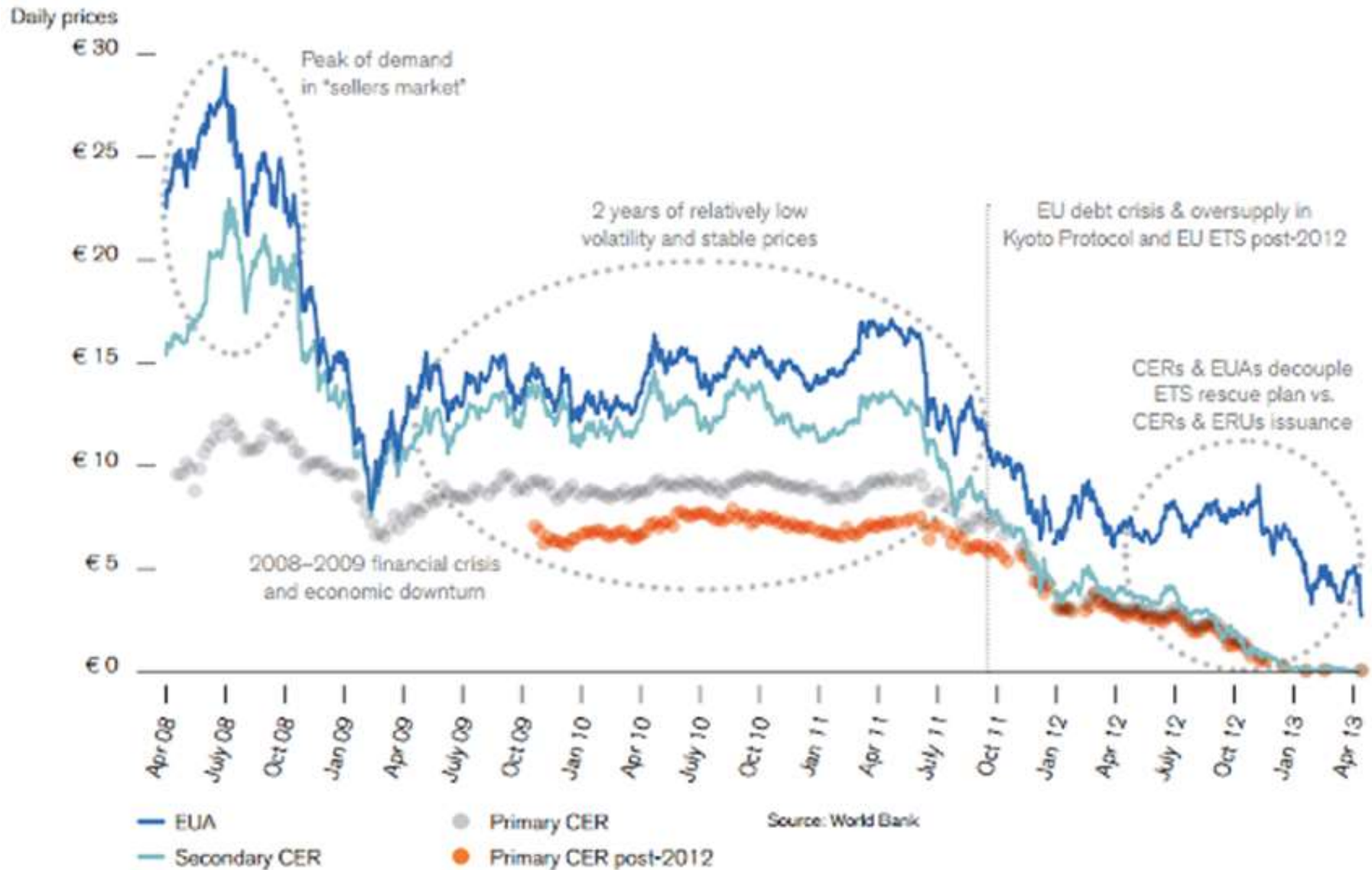


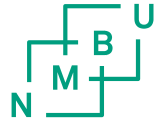
Figure 4: EUA and CER prices (2008–2013)



3. Financialization: Experiences from CDM

- What explains the difference between prices on primary and secondary CERs
 - Risks are (much) higher for trades in the primary market
 - Transaction costs (including issuing/verification)
 - Information rents – intermediaries have advantages
- Effects of a collapse of CDM for developing countries
 - A lot of projects will not be realized
 - We see the importance of (lacking) political decisions – i.e., no Post-Kyoto – for the viability of markets
- Environmental consequences of a collapsing CDM
 - Due to somewhat weak additionality, the problem on this side is maybe less.
- Do we need to handle risks the way CDM does. What about an international fund that issues allowances/CERs?

4. Distributional effects of PES and CDM



- **Win-win?**

- Who is paid?
- Level of payment compared to costs
- Format of payments

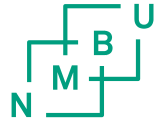
- **Who** gets paid – the main picture

- **Land owners**, dominantly **private and larger** land owners
- **Women** tend to be **excluded**. Note also issues regarding **elite capture** in case of community based programs
- Regarding **plantations**, payments tend to go to concessionaries
- **Land** and the **products** from the land **more expensive**
- Results depend on **who the intermediary is** – the goals set for the program

- **Why** are the poor weakly involved – core aspects

- **Opportunity costs** higher for those with little land
- **TCs** higher for small-holder oriented programs
- The **poor** are **less well informed**

4. Distributional effects of PES and CDM



- **Level** of payments

- Generally (much) **lower than opportunity costs**. Then comes also transaction costs on top of this (sellers may not cover these, though)
- **Other gains** than payments – e.g.,
 - from the conservation itself
 - increased tenure security
- Some **disagreements in the literature** on this issue

- **Format** of payments

- **Cash** seems to dominate; but **some in-kind**
- In the case of community projects, we observe a mix of **individual payments and payments to the community** – the latter seems dependent on the level of trust
- The emphasis on PES being successful only if **educational programs** are involved – changing practices is profound