Time for new (green) financing instruments? A market-oriented framework to finance environmentally friendly practices in EU agriculture

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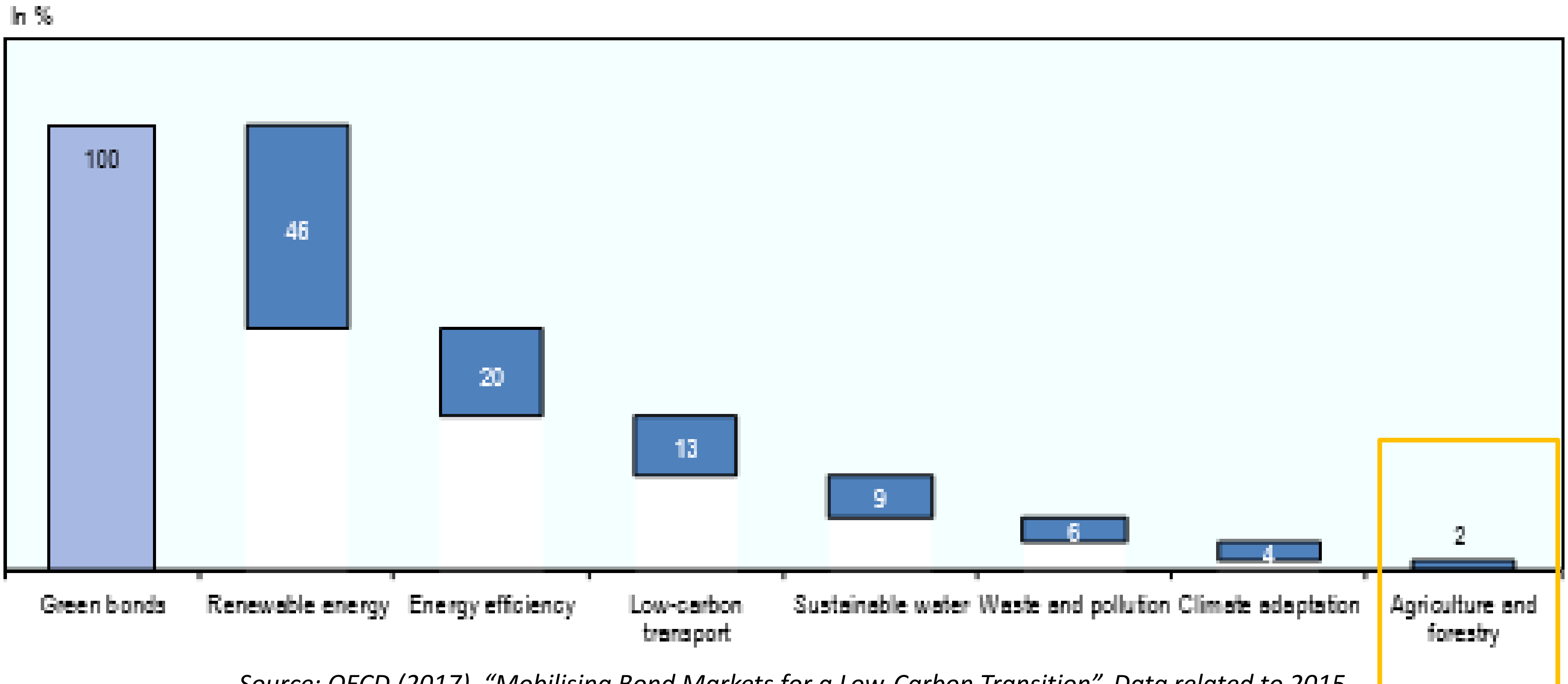
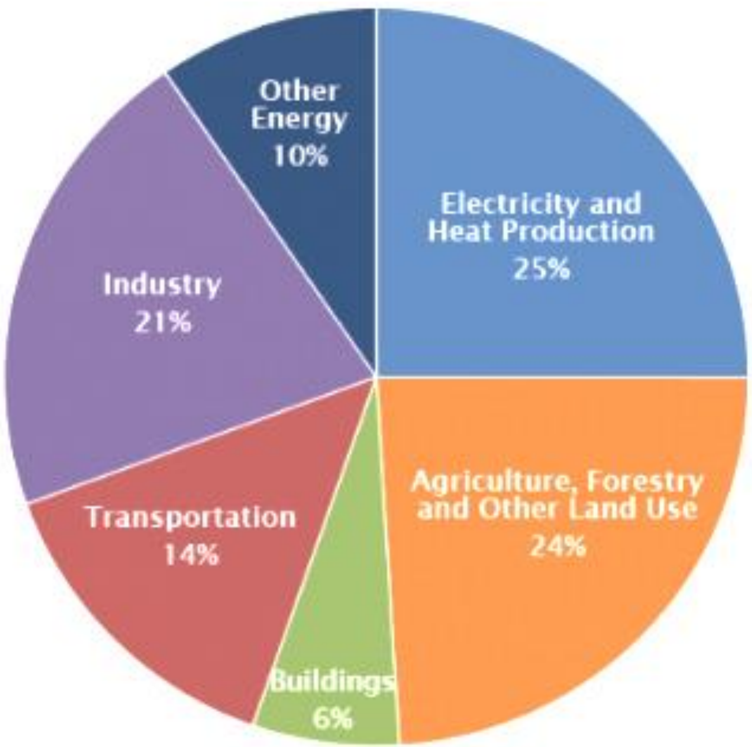
Green bond use of proceeds raised by sector



Source: OECD (2017), "Mobilising Bond Markets for a Low-Carbon Transition". Data related to 2015

Introduction and scope 2/4

Global greenhouse gas emissions by economic sector



Source: IPCC (Intergovernmental panel on climate change). Data related to 2010

Introduction and scope 3/4

- For agriculture, significant gap between % greenhouse emissions and % of proceeding from green finance

- The study aims at:
  - Analysing what prevents the issuing of green securities in agriculture
  - Identifying a possible financing infrastracture able to finance environmentally friendly practices in the EU agriculture by issuing green securities

Introduction and scope 4/4

- Method of investigation:
  - **Simple securitisation** as initial financing mechanism
  - Analysis of the key **frictions** in the financing mechanism, applied to agriculture (Ashcraft and Schuermann, 2008)
  - Identification of operational enablers and financial infrastructure *to be*
  - Drawing up conclusions

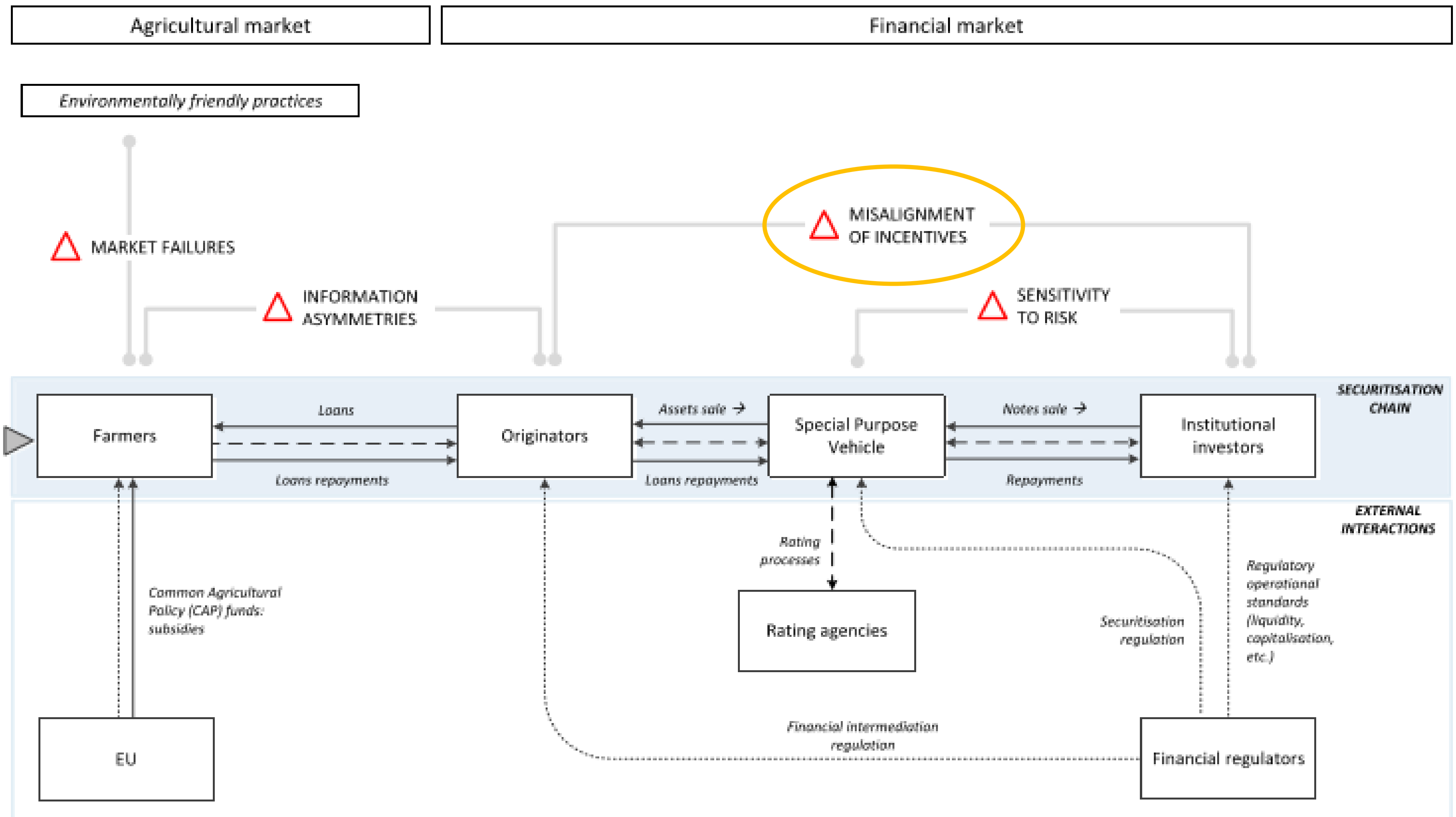
Literature review 1/2

Securitisation	Possible advantages: • **possibility for a wider range of investors to access asset classes traditionally reserved for retail banks** (Duffie 2008; IMF2015) • **increased provision of liquidity in the banking system** (Gorton and Pennacchi 1995; Adrian, Estrella, and Shin 2010) • **diversification of the risk along the whole intermediation chain** (Allen and Carletti 2006) Risks: • **reduction of credit standards and transfer the risk to the market** (Keys et al. 2009; Mian and Sufi 2009) • **Reduced monitoring of the borrowers' performances** (Pennacchi 1988; Parlour and Plantin 2008; Loutskina and Strahan 2009)
SMEs lending	• **SMEs are typically more financially constrained than large firms as a consequence of their limited access to alternative sources to bank lending** (e.g. Beck, Demirgüç-Kunt, and Martínez Pería 2009) • **Credit limitations exist due to the opaqueness of the balance sheet and other relevant information that typically features SMEs** (e.g. Berger and Udell 2002, Stein 2002)

Literature review 2/2

SMEs lending	• **Relationship lending is an effective means to limit the information asymmetries between SMEs and financial intermediaries** (e.g. Boot 2000; Berger, Klapper, and Udell 2001) • **The conventional wisdom that large banks have little interest in serving SMEs has collected only ambiguous finding** (e.g. Mian 2006; Jimenez, Salas, and Saurina 2009, Berger and Udell 2006)
Behavioural impact of subsidies in agriculture	• **Aside from agro-climatic factors, different environmentally friendly practices have different effects on yields and land** productivity (e.g. Wezel et al. 2014). Hence, financial compensation matters. • **Little economic incentives may induce farms to opt out of even mandatory greening payments** (Schulz, Breustedt, and Latacz-Lohmann 2014) • **Non-financial factors may also be important to push farmers to undertake environmentally friendly practices** (Espinosa-Goded, Barreiro-Hurlé, and Ruto 2010, Schulz, Breustedt, and LataczLohmann 2014)

Building up the financing instruments 1/9

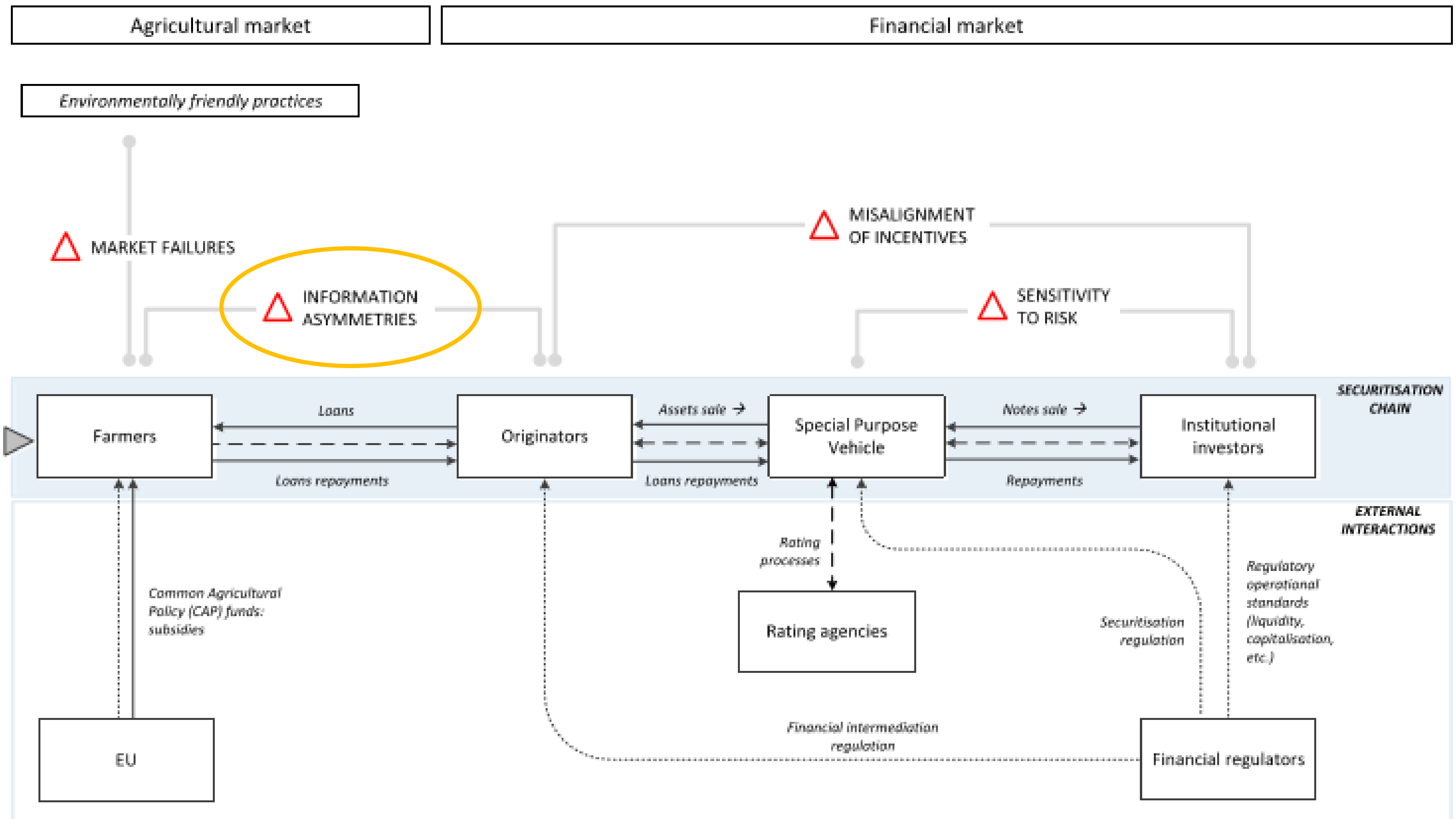


Building up the financing instruments 2/9

- Misalignment of incentives between originators and final (institutional) investors :
  - **Risk of transfer of credit risk to the market**

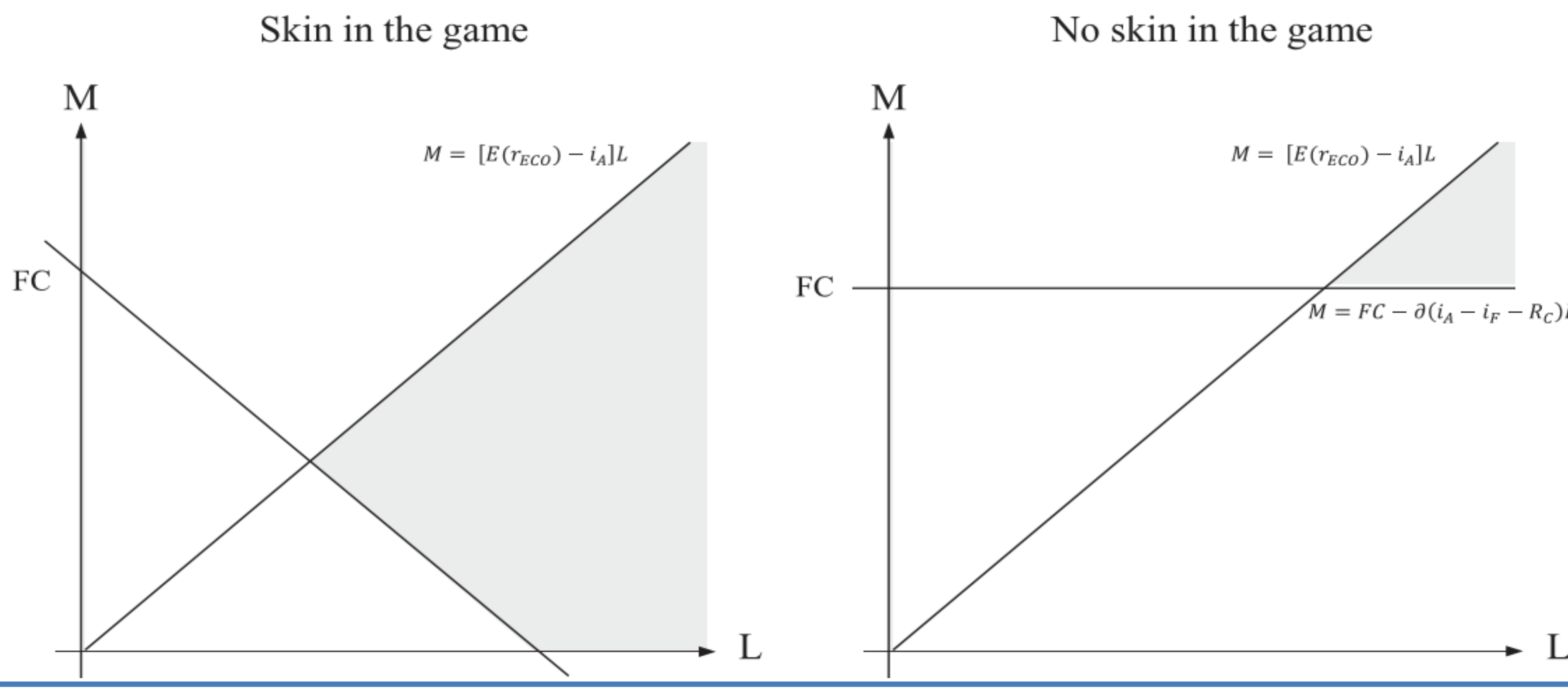
The target financing infrastructure has to include risk retention clauses for originators (*skin in the game*)

Building up the financing instruments 3/9



Building up the financing instruments 4/9

- Information asymmetries can limit lending to SMEs, with significant crowding-out effects for farmers
- Even more likely as a by-product of securitisation

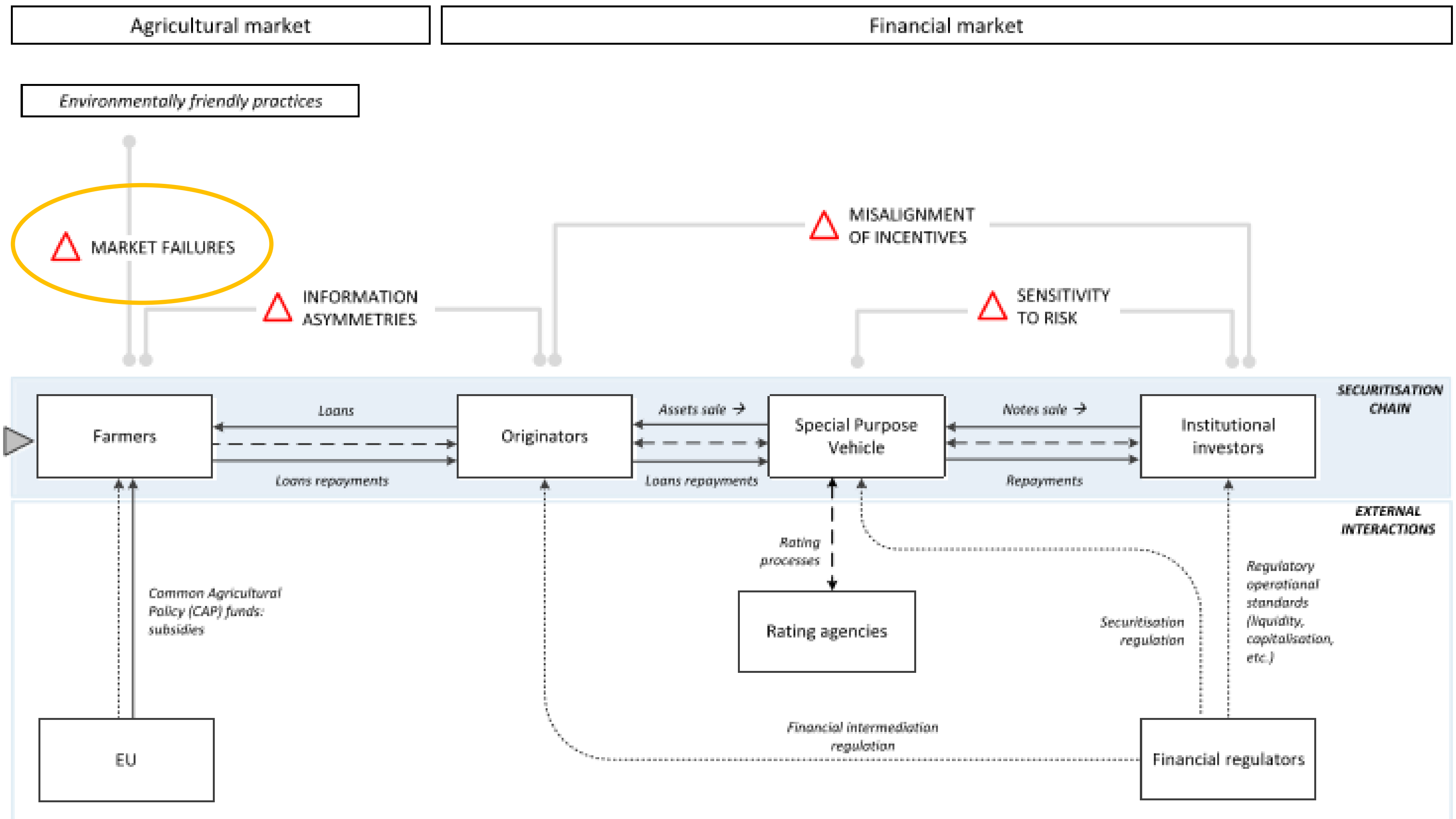


Building up the financing instruments 5/9

The target financing infrastructure should benefit from the use of standardised contracts aimed at environmentally friendly practices:

- Limit the impact of information asymmetries
- Ease the due-diligence activity in the securitisation process

Building up the financing instruments



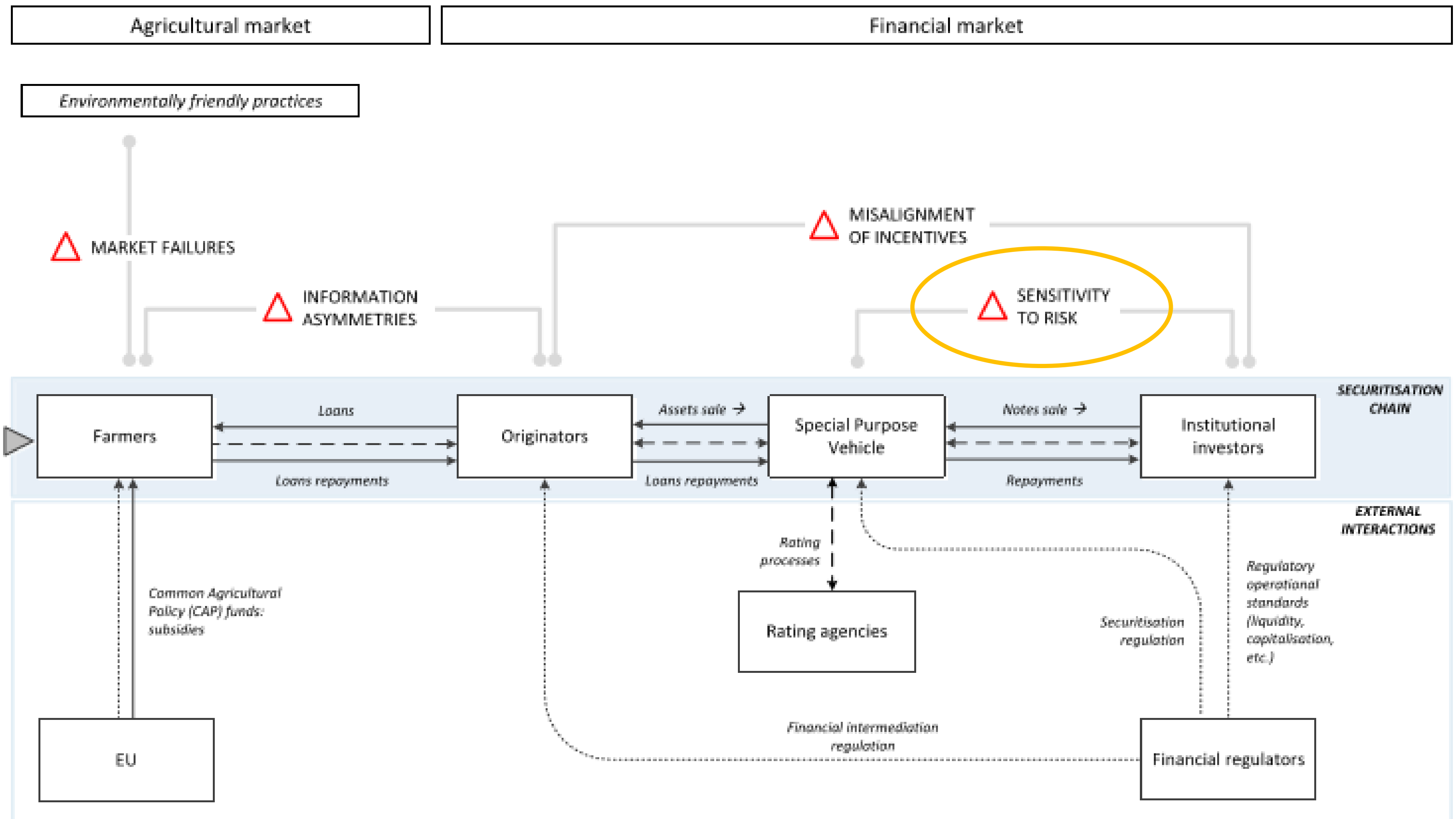
Building up the financing instruments 7/9

- Farmers may have no incentive to invest in environmentally friendly practices if not profitable
  - Applicable EU provisions preview *greening* (mandatory), *agri-environment* and *climate* (provider gets principle) payments

The target financing infrastructure should benefit from:

- List of environmentally practices (includes subsidies)
- Data on the economic and environmental performances of each practice

Building up the financing instruments 8/9



Building up the financing instruments 9/9

- Need to talk the (institutional) investors language: Securities issued by the vehicle need:
  - Adeguate risk-return profile
  - Secondary market
  - To be eligible as collateral for refinancing operations

The target financing infrastructure should benefit from:

- A policy programme linking subsidies (for underperforming practices) and credit enhancer
- Green label for securities issued

Conclusions 1/2

What is already avaialble:

i. A lending technology able to limit the information asymmetries between farmers and loans originators

ii. A set of rules and procedures indicating the level of engagement of the financial intermediary in terms of risk retention

iii. A securitisation mechanism able to provide appealing notes to institutional investors

Conclusions 2/2

What whould be needed to foster green securities in agriculture:

iv. An information platform and specific data sets able to provide reliable environmental and financial performance indicators on the environmentally friendly practices to be financed

v. An ad hoc programme indicating the level of engagement of public support though a balance of CAP grants and external credit enhancer in the securitisation mechanism

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