FORMULAZIONE DEGLI SCENARI E MISURAZIONE DELLE PERFORMANCE DELLA BANCA

PARALLEL SESSION 4.3

Franco Fiordelisi (<u>franco.fiordelisi@essex.ac.uk</u>)

7 Giugno 2023



Misurazione dei rischi e delle performance

• Di certo un tema non nuovo...



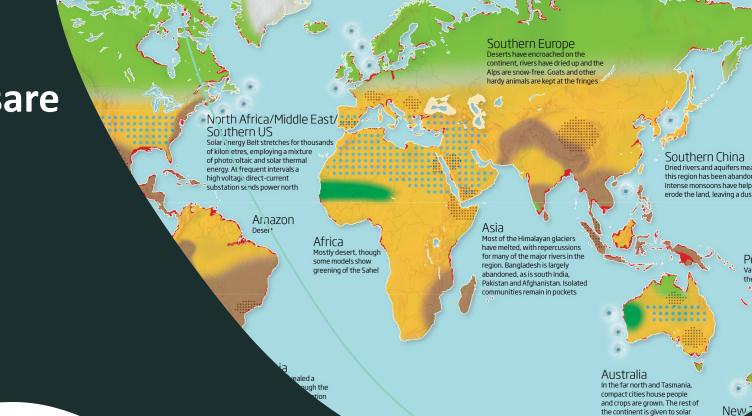
FORMULAZIONE DEGLI SCENARI

- Fenomeni eccezionali negli ultimi 25 anni:
 - Cambio della valuta
 - La crisi finanziaria globale
 - Il fallimento dei Governi -> crisi sistemiche
 - Tassi negativi
 - Pandemie
 - La transizione climatica



Climate risk: perché ci dovrebbe interessare una banca?

Interesse diretto
 → Physical risk



energy production and uranium mining for nuclear power

ratio of withdrawals to supply

Perché la transizione economica dovrebbe interessare una banca?

- Interesse indiretto→ Transition risk (policy & regulation changes)
 - Green Deal Europeo → Strategia Europea per diventare una società a impatto climatico zero entro il 2050
 - La **tassonomia** europea (lista degli **investimenti** ritenuti sostenibili in Europa dal punto di vista ambientale)
 - Atti delegati: le regole in grado di dettagliare meglio la classificazione. Es. **gas** ? **nucleare**?
- Back to the future:

→ Un nuovo vincolo di portafoglio e massimale sugli impieghi?

Perché la transizione economica ci dovrebbe interessare?

NACE code	Sector	Total in- vestment (EUR bn)	Taxonomy Eligible (EUR bn)	Taxonomy Aligned (EUR hn)	Transition Exposure (EUR bn)	Taxonomy Eligible (%)	Taxonomy Aligned (%)	Transition Exposure (%)
٨	Agriculture, forestry and fishing	9.2	0.6	bn) 0.0	bn) 0.0	6.4%	0.0%	0.0%
A								
B	Mining and quarrying	263.2	0.0	0.0	157.4	0.0%	0.0%	59.8%
С	Manufacturing	3028.2	1215.7	30.4	433.1	40.1%	1.0%	14.3%
D	Electricity, gas, steam, airco	476.8	368.9	154.9	148.6	77.4%	32.5%	31.2%
${ m E}$	Water supply, sewerage, waste	52.6	48.7	10.6	0.0	92.5%	20.1%	0.0%
\mathbf{F}	Construction	178.9	178.9	47.5	6.1	100.0%	26.5%	3.4%
G	Trade, repair of motor vehicles	609.9	0.0	0.2	16.5	0.0%	0.0%	2.7%
Н	Transport and storage	393.2	243.8	7.7	319.1	62.0%	2.0%	81.2%
J	Information and communication	1437.0	1083.7	0.0	0.0	75.4%	0.0%	0.0%
\mathbf{L}	Real estate	284.1	284.1	42.6	198.9	100.0%	15.0%	70.0%
М	Professional, scientific, technical	2320.6	115.7	0.0	0.0	5.0%	0.0%	0.0%
Ν	Support services	102.9	2.6	0.0	7.4	2.6%	0.0%	7.2%
	Total	23495.6	3542.8	294.0	1287.2	15.1%	1.3%	5.5%

Alessi, e Battiston (2021). JRC Working Papers in Economics and Finance, 2021/14

Perché la transizione economica ci dovrebbe interessare?

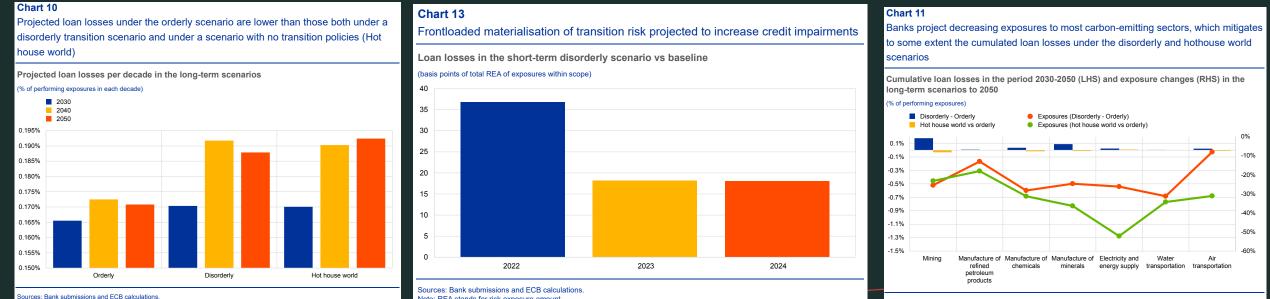
Holder Sector	Total in- vestment (EUR bn)	Taxonomy Eligible (EUR bn)	Taxonomy Aligned (EUR bn)	Transition Exposure (EUR bn)	Taxonomy Eligible (%)	Taxonomy Aligned (%)	Transition Exposure (%)
Investment funds (Non-MMF)	9334.3	1951.7	127.6	569.9	20.9%	1.4%	6.1%
Banks	4634.6	152.3	12.6	77.6	3.3%	0.3%	1.7%
Insurance corp.	3740.6	369.1	43.8	185.8	9.9%	1.2%	5.0%
Non-financial corp.	1486.6	298.5	35.7	136.4	20.1%	2.4%	9.2%
Households	1200.9	288.6	25.3	112.8	24.0%	2.1%	9.4%
Pension funds	900.3	112.1	8.5	37.0	12.4%	0.9%	4.1%
Other financial corp.	724.5	125.1	12.1	71.8	17.3%	1.7%	9.9%
Central gov.	398.6	32.2	3.7	29.9	8.1%	0.9%	7.5%
Other households and non-profit	295.2	88.4	3.0	13.6	30.0%	1.0%	4.6%
Other General Gov.	170.8	62.2	14.1	26.8	36.4%	8.3%	15.7%
Social security funds	163.7	24.5	2.2	8.5	15.0%	1.3%	5.2%
Money market funds (MMF)	160.7	4.3	0.6	1.8	2.7%	0.3%	1.1%
Financial vehicle corp.	121.3	9.9	1.4	4.0	8.2%	1.2%	3.3%
Non-profit institutions	75.8	14.3	1.5	4.8	18.8%	1.9%	6.3%
State gov.	59.8	4.5	0.7	3.4	7.5%	1.3%	5.8%
Local gov.	20.8	3.6	1.1	1.9	17.2%	5.5%	8.9%
Non-financial investors excl. HH (third party)	7.0	1.5	0.1	1.2	21.9%	2.1%	16.4%
Unallocated	0.2	0.0	0.0	0.0	14.2%	1.9%	16.5%
Total	23495.6	3542.8	294.0	1287.2	15.1%	1.3%	5.5%

Alessi, e Battiston (2021). JRC Working Papers in Economics and Finance, 2021/14

L'importanza degli scenari

ECB, 2022 Climate risk stress test

- Assorbire le perdite legate al clima con elevati buffer di capitale •
- Stress test climatici giungono a conclusioni analoghe: •
 - le perdite di credito attese saranno inferiori in caso di transizione ordinata rispetto a una • transizione disordinata
 - Le perdite sarebbero ancora più elevate in uno scenario di «hot house world» in cui il • cambiamento climatico non si arresta



rces: Bank submissions and ECB calculation

lote: REA stands for risk exposure amoun

Follow-up



Contents lists available at ScienceDirect

International Review of Financial Analysis



journal homepage: www.elsevier.com/locate/irfa

Environmental engagement and stock price crash risk: Evidence from the European banking industry

Franco Fiordelisi^{a, b}, Ornella Ricci^b, Gianluca Santilli^{c,*}

^a Essex Business School, United Kingdom ^b Roma Tre University, Italy ^c University of Rome Tor Vergata, Italy

ARTICLE INFO

JEL codes:

Keywords:

Crash risk Europe Financial institutions

Environmental

G14

G21

M14

N24

ESG

ABSTRACT

This paper investigates the impact of banks' environmental engagement on their future stock price crash risk. Given the strong commitment of European institutions towards a low carbon economy, we focus on European banks, which are expected to be crucial actors in driving this challenge. Using a sample of 447 bank-year observations across 22 European countries from 2015 to 2021, we find a negative relationship between banks' environmental engagement and future stock price crash risk, in accordance with the signalling theory, suggesting that a high level of environmental engagement corresponds to high ethical standards of bank managers and high levels of financial transparency.

Climate Change Fear: Natural Disasters and Investor Behavior

Franco Fiordelisi (corresponding author)

Essex Business School, University of Essex, Wivenhoe Park, Colchester CO4 3SQ, U.K., tel. +44 (0) 1206 872 260; email: <u>franco.fiordelisi@essex.ac.uk</u>

Giuseppe Galloppo

Department of Economics and Business, University of Viterbo La Tuscia, Via del Paradiso 47, 01100 Viterbo, Italy, email: <u>galloppo@unitus.it</u>

Viktoriia Paimanova

Department of Management, University of Rome Tor Vergata, Via Columbia 2, Rome, Italy, e-mail: viktoriia.paimanova@uniroma2.it

Oustanding panel oggi

- **Carmelo Salleo**, Head of Stress testing, Policy modelling, Climate change, Division Banca Centrale Europea
- Emanuela Lanzara, Chief Operating Officer, PRIMESAIL
- Daniela Garroni, Responsabile Pianificazione Strategica e Studi, Banco BPM
- Andrea Cremonino, Portfolio e Pricing Management Corporate and WM Italy, UniCredit

