



ReCreating Europe

SCI-HUB AND ACADEMICS: SURVEY EVIDENCE FROM EU COUNTRIES

Giulia Rossello & Arianna Martinelli
Scuola Superiore Sant'Anna



Sant'Anna
Scuola Universitaria Superiore Pisa

`giulia.rossello@santannapisa.it`



EPIP 2021, Madrid 8th -10th September

Motivation

- **Digital technologies** have reduced the cost of managing editorial activities; & of copy, and transmitting journal articles
- **Oligopoly** of large scientific publishers → universities pay btw. \$1.800.000 - \$6.000.000 for journal access
- German, Hungarian and Swedish universities cancelled **Elsevier's** subscriptions after its refusal to rediscuss their subscription agreements
- Journal fees are a barrier to **knowledge diffusion**
- In 2011, **Sci-Hub** was created to allow free access to research papers and books bypassing publishers' pay-walls

Research Agenda

- First outcome of a project aimed at providing Systematic Survey Evidence on Academics working in 6 EU countries about:
 1. Channels used to access the Scientific Literature (e.g. use of Sci-Hub)
 2. To Examine knowledge and perception of copyright law and teaching and research exceptions
 3. Perception on academic publishers (Elsevier, Springer,..)
- **Focus of this presentation:** To examine why scholars use Sci-Hub and what are their characteristics
- **SO WHAT:** Empirical evidence to help future negotiation between universities and large publishers

What is Sci-Hub? What we know?



- Shadow library website, accused of violating publishers' copyright
- In 2021 it received 2 million requests per day
- It works with LibGen, a database containing scientific articles.
[Accused of using stolen proxy credentials of university libraries]

Empirical evidence - Interdisciplinary, Information Research, Communication, and Library Studies: Surveys investigating use, Aggregate download Data, Qualitative Studies

- Not systematic: one scientific discipline, one country, or one institution (Nicholas et al. 2019, Gonzalez-Solar et al. 2019, Mejia et al. 2017, Hoy 2017, Duic et al. 2017)
- 50% scholars in Croatia never used Sci-hub - Female use it less (Duic et al., 2017)
- Country variation: 86% French; 10% US (Nicholas et al., 2019)
- Research-active Academics use it more (Duic et al., 2017; Mejia et al., 2017)

Literature Review

- Academic work has its specificity, at the same time academics are consumers of scientific articles and employees at universities producing articles
- Our research builds upon two additional bodies of literature:
 1. **Economics of Knowledge: Academic Values, IPRs, and Sharing habits** - Nonmonetary rewards, peer recognition, level of competition, field heterogeneity (Sauermann et al. 2013, Walsh et al. 2007, Haeussler et al. 2014)
 2. **Business & Management: Digital Piracy/ Computer-related deviant behavior (CRDB)**
 - **Consumers:** i) cultural dimension ii) ethical decision-making iii) perceived risk and expected utility theory iv) reinforcement mechanisms. (Eisend, 2019)
 - **Corporate employees:** Negative emotions related to the workplace ↑ the likelihood to commit CRDB (Xu et al., 2020)

Survey Distribution

- Germany, Hungary, Ireland, Italy, Netherlands*, and Sweden.
- Web-scrape emails from university websites (Top 5 universities for each country in THE University Ranking 2021)
- Our target is all academics including Humanities, with all type of job contracts
- We distribute the survey in English and in the Country Language
- We are distributing the survey to ≈ 130.000 emails: the complete population of scholars in the selected universities.
- Survey Response Rate Between 1% - 4% (1.616 Obs.)
- Preliminary data** we estimate the probability of using Sci-Hub

*The survey will be distributed in The Netherlands later

** Data collection will continue until October 2021

Method I

Logistic regression - Use Sci-Hub: Have you ever used SCI-HUB, Z-Library, or LibGen? [Yes=1, No=0]

Our main regressor - **Negative feelings** related to the working environment [Multiple choices - List of 14 categories]:

- Dummy =1 if reported:

- | | |
|-------------------------------|---------------------------------------|
| 1. Teaching Load | 7. Behav. senior colleagues ; |
| 2. Administrative Load ; | 8. Lack Funding Facilities ; |
| 3. Competition Load ; | 9. Homesickness ; |
| 4. Lack Research Time ; | 10. Work Anxiety (sum of 3 dummies) ; |
| 5. Career stress ; | 11. Lack Recognition; |
| 6. Behav. junior colleagues ; | 12. and Other [baseline] |

- Negativity score = sum of the dummies

Method II

We add controls used in the Literature on Digital Piracy (Eisend, 2019)

1. Demographic Characteristics: Age, Female, Foreign, Country, Field, University
2. Political Ideology
3. Individual Moral Justification of violating copyright law
4. Past Piracy behaviour
5. Colleague Piracy Perception
6. Library Characteristics [product characteristics]

Additionally, we add two variables specific on Copyright:

- Knowledge of Creative Commons [Often part of journals' publication agreements]
- Perception on the knowledge of the National Copyright Law

Preliminary Data

Use Sci-Hub	Germany	Hungary	Ireland	Italy	Sweden
No=0	157 (52%)	48 (35%)	140 (58%)	293 (49%)	222 (67%)
Yes=1	147 (48%)	90 (65%)	101 (42%)	305 (51%)	109 (33%)
Total	304	138	241	598	331

Statistic	N	Mean	St. Dev.	Min	Max
Use_Sci-Hub (Yes=1)	1,616	0.47	0.50	0	1
Age	1,590	44.85	13.34	23.00	85.00
Female	1,573	0.35	0.48	0.00	1.00
Foreign	1,616	0.17	0.37	0	1
Knowledge_Creative_Commons	1,531	1.97	2.14	0.00	6.00
Perception_Knowledge_Copyright	1,590	2.52	0.88	1.00	5.00
Private_Property	1,446	2.09	0.90	1.00	4.00
Income_Inequalities	1,481	2.29	0.72	1.00	4.00
Moral_Justification2	1,537	2.82	1.22	1.00	4.00
Past_Piracy	1,542	5.43	2.54	1.00	8.00
Colleague_Piracy_Perception	1,539	4.11	2.10	1.00	8.00
Library_Satisfaction	1,614	6.48	1.61	1.00	8.00
Negativity_Score	1,616	2.58	1.68	0	10

Preliminary Results

	Dependent variable:			
	'Use_Sci-Hub'			
	(1)	(2)	(3)	(4)
Age	−0.05*** (0.01)	−0.05*** (0.01)	−0.05*** (0.01)	−0.05*** (0.01)
Female	−0.36** (0.14)	−0.38** (0.16)	−0.37** (0.14)	−0.37*** (0.14)
Foreign	0.05 (0.18)	−0.10 (0.20)		
Knowledge_Creative_Commons	0.11*** (0.03)	0.14*** (0.04)	0.13*** (0.03)	0.10*** (0.03)
Perception_Knowledge_Copyright	−0.12 (0.08)	−0.14 (0.09)	−0.14* (0.08)	
Private_Property		−0.06 (0.09)		
Income_Inequalities		−0.02 (0.11)		
Moral_Justification2	0.42*** (0.05)	0.34*** (0.06)	0.37*** (0.05)	0.43*** (0.05)
Library_Satisfaction	−0.08* (0.04)	−0.05 (0.05)	−0.08* (0.04)	
Past_Piracy		0.08*** (0.03)	0.07** (0.03)	
Colleague_Piracy_Perception		0.19*** (0.04)	0.18*** (0.03)	
Negativity_Score	0.18*** (0.04)	0.16*** (0.05)	0.16*** (0.04)	0.19*** (0.04)
Constant	0.60 (0.57)	−0.24 (0.72)	−0.26 (0.60)	−0.18 (0.47)
Country	Yes	Yes	Yes	Yes
ERC	Yes	Yes	Yes	Yes
University	Yes	Yes	Yes	Yes
Observations	1,413	1,200	1,402	1,416

Preliminary Results II

	<i>Dependent variable:</i>			
	'Use_Sci-Hub'			
	(1)	(2)	(3)	(4)
Age	-0.05*** (0.01)	-0.04*** (0.01)	-0.05*** (0.01)	-0.05*** (0.01)
Female	-0.38*** (0.14)	-0.40** (0.16)	-0.39*** (0.15)	-0.39*** (0.14)
Foreign	0.04 (0.18)	-0.11 (0.20)		
Knowledge_Creative_Commons	0.12*** (0.03)	0.14*** (0.04)	0.14*** (0.03)	0.10*** (0.03)
Perception_Knowledge_Copyright	-0.11 (0.08)	-0.14 (0.09)	-0.13 (0.08)	
Private_Property		-0.05 (0.09)		
Income_Inequalities		-0.005 (0.11)		
Moral_Justification2	0.42*** (0.05)	0.35*** (0.06)	0.37*** (0.05)	0.43*** (0.05)
Library_Satisfaction	-0.08* (0.04)	-0.05 (0.05)	-0.08* (0.04)	
Past_Piracy		0.08** (0.03)	0.07** (0.03)	
Colleague_Piracy_Perception		0.19*** (0.04)	0.18*** (0.03)	

Teaching_Load	0.13 (0.25)	0.21 (0.28)	0.14 (0.25)	0.15 (0.24)
Administrative_Load	0.18 (0.13)	0.14 (0.15)	0.17 (0.13)	0.18 (0.13)
Competition_Load	0.27* (0.16)	0.10 (0.18)	0.22 (0.17)	0.29* (0.16)
Lack_Research_Time	0.04 (0.13)	0.13 (0.15)	0.03 (0.14)	0.04 (0.13)
Career_stress	0.20 (0.14)	0.28* (0.16)	0.20 (0.15)	0.21 (0.14)
Behav_junior_colleagues	0.11 (0.37)	-0.09 (0.44)	0.13 (0.38)	0.10 (0.37)
Behav_senior_colleagues	0.49*** (0.18)	0.44** (0.20)	0.46** (0.18)	0.51*** (0.18)
Lack_Funding_Facilities	0.16 (0.13)	0.06 (0.15)	0.13 (0.13)	0.20 (0.13)
Homesickness	0.42* (0.25)	0.35 (0.28)	0.35 (0.26)	0.45* (0.25)
Work_Anxiety	0.20** (0.10)	0.22** (0.11)	0.19* (0.10)	0.21** (0.10)
Lack_Recognition	-0.27 (0.22)	-0.35 (0.24)	-0.29 (0.22)	-0.29 (0.22)
Constant	0.39 (0.58)	-0.53 (0.74)	-0.44 (0.61)	-0.35 (0.48)
Country	Yes	Yes	Yes	Yes
ERC	Yes	Yes	Yes	Yes
University	Yes	Yes	Yes	Yes
Observations	1,413	1,200	1,402	1,416

To Conclude

- Beyond common predictors of digital piracy behaviour
 1. Characteristics of the working environment and colleague behaviour
 2. Negative emotions related to the working environment, so far neglected.

Next Steps

- To complete the Data collection
- To Use more complex models: Heckman Selection Model
 - Use Sci-Hub [yes, no] -> How much times per years
-> How much papers per month
- To Create composite indexes to use information from all survey questions representing similar variables: Principal Component Analysis
- To Examine the determinants of the perception on copyright law that academics have (II paper)
- To Examine the perception on academic publishers (III paper)



ReCreating Europe

THANK YOU



Sant'Anna
Scuola Universitaria Superiore Pisa

`giulia.rossello@santannapisa.it`

EPIP 2021, Madrid 8th -10th September



Email Collection

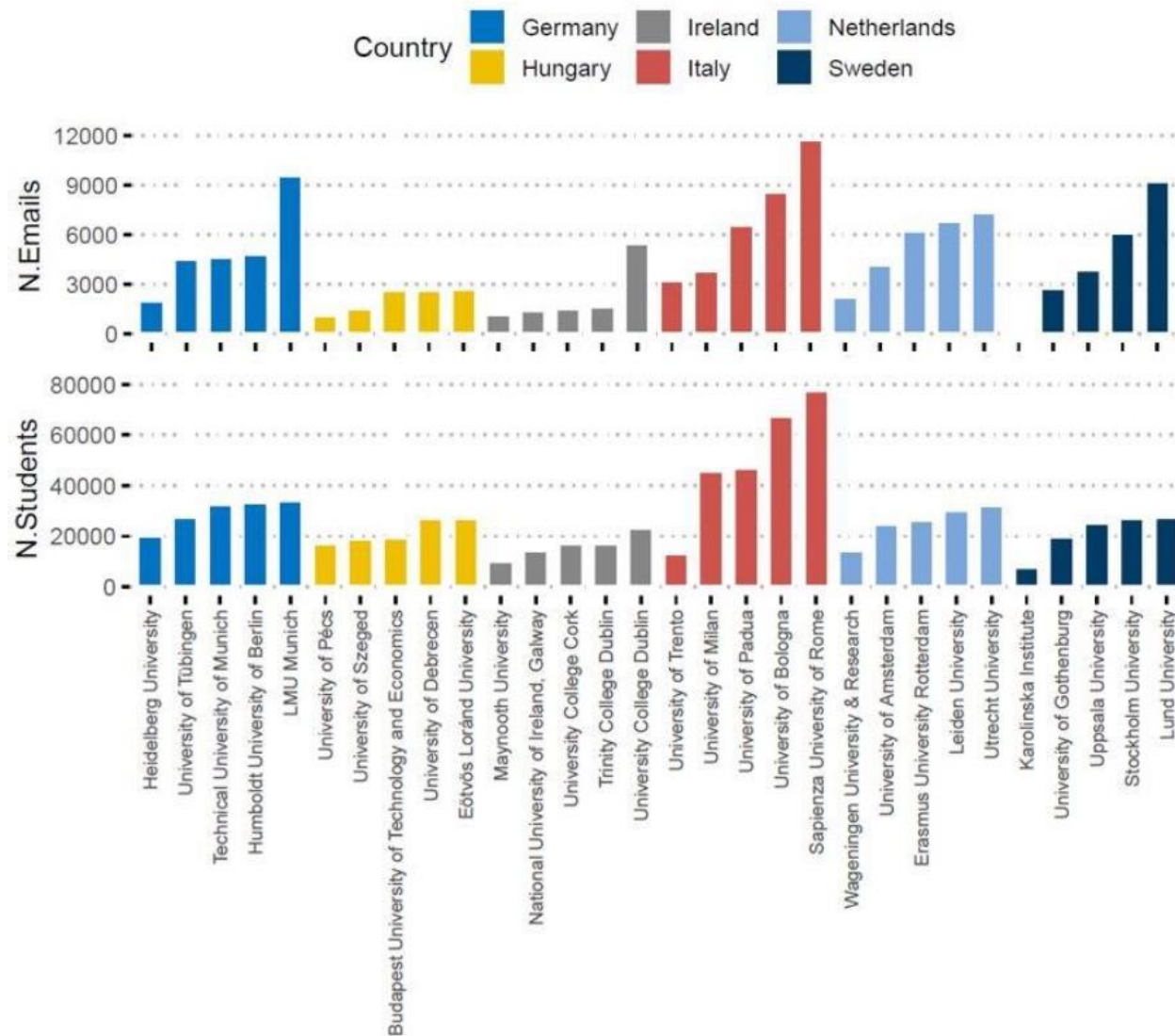


Figure 3 Comparison between Number of Emails collected per university and Number of Students per university.

Survey Questions

BLOCK 1: ACADEMIC PERCEPTION OF COPYRIGHT

SUB-BLOCK A

Knowledge & perception

- T1 – perception of the law
- T2 – knowledge of the law

SUB-BLOCK B

Institutions & morality

- T3 – institutional norms
- T4 – is piracy wrong
- T7 – justification

SUB-BLOCK C

Working environment

- T5 – academic values
- T6 – subjective norms

SUB-BLOCK D

Behavior

- T8 – perceived control ability
- T9 – reinforcement

BLOCK 2: CHANNELS TO ACCESS SCIENTIFIC KNOWLEDGE (SCI-HUB)

SUB-BLOCK A

Access, behavior & norms

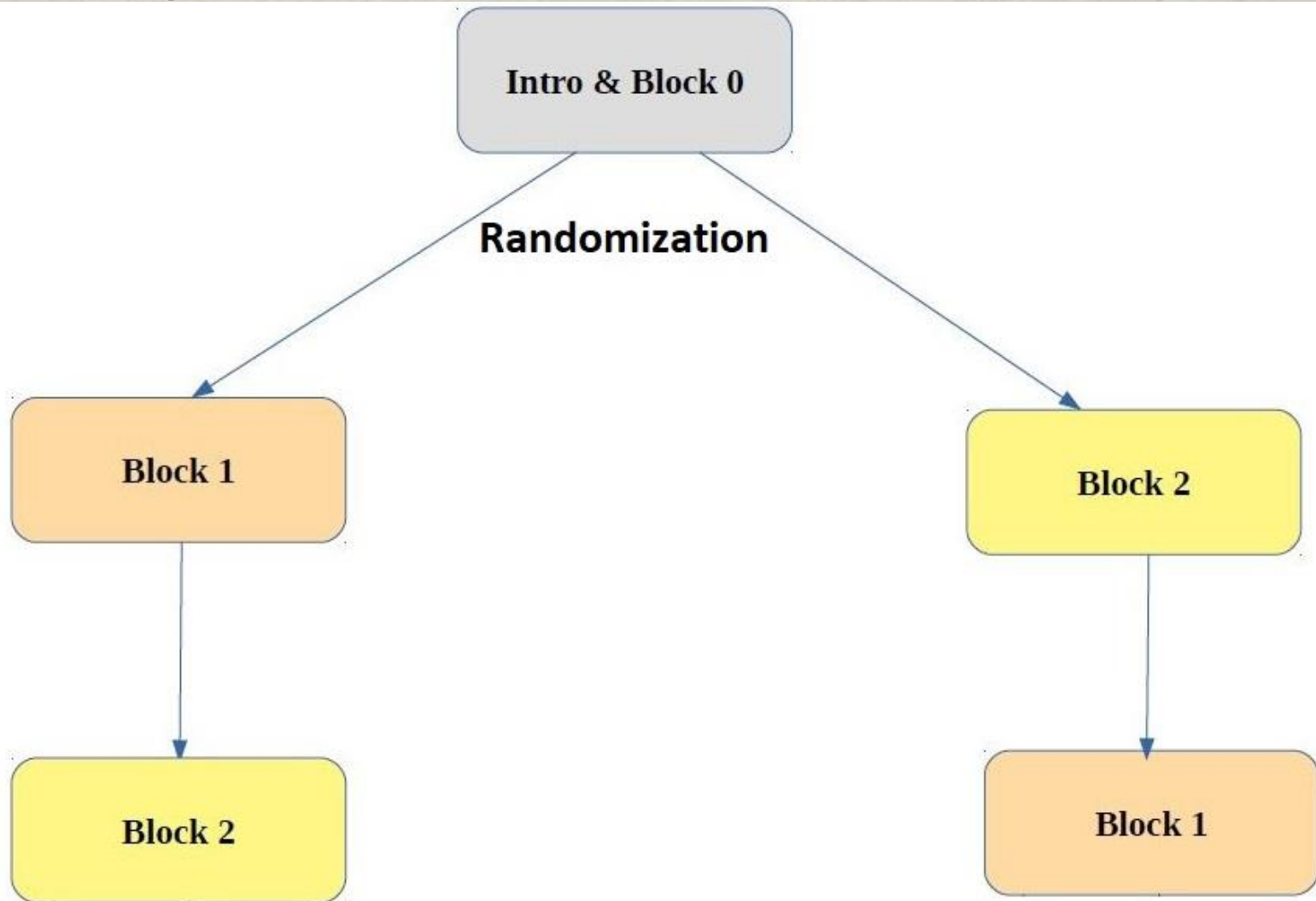
- S1 – access to library
- S4 – sharing and subjective norms
- S7 – perceived control ability

SUB-BLOCK B

SCI-HUB &
Shadow libraries

- S2 – sci-hub usage (*if no the survey jumps to Block 3 or Block 1*)
- S3 – justification and usage
- S5 – quality/price
- S6 – expected utility effect usage sci-hub

Survey Methods



Variables

- **Knowledge Creative Commons:** How many of the 6 symbols of copyright agreements in Figure 1 do you understand?
- **Perception Knowledge Copyright:** What is your expertise of the national laws on the topic of copyright?
- **Private Property:** To which of the following statements you most agree? [(1) The Common Good and social goals are more important than Private Property Rights; (2) Private Property Rights have a social function and can be limited by the State every time it is needed, subject to compensation; (3) Private Property is the foundation of civil society and should be limited by the State only in extreme circumstances, subject to compensation; (4) Private Property is the foundation of civil society and should not be limited by the State]
- **Income Inequality:** To which of the following statements you most agree? [(1) Income inequalities are wrong and should be eliminated; (2) The government should try to diminish income inequalities; (3) Some degrees of income inequalities are needed to promote the individual effort; (4) Income inequalities reflect individual efforts and merits and should not be a concern for the State]
- **Moral Justification2:** Do you feel guilty when you use copyrighted material (papers, software, books, movies) without permission for research purposes?
- **Past Piracy:** When you were a student, how likely or unlikely is that you used proprietary software, data, or books copies without the license
- **Colleague Piracy Perception:** Software piracy is considered common or uncommon among your colleagues
- **Library Satisfaction:** How much you are satished or dissatised with the resources of your library
- **Negativity Score:** What are for you the most negative aspects of being an academic [please indicate more than one] { we counted how many where indicated [1-14 possibilities; see next slide]
- **Homesickness:** if selected \being away from home"
- **Work Anxiety:** count if selected (1) the feeling that sometimes my research is a waste of time, (2) the feeling that sometimes my research is a waste of public money; (3) It undermined my condence in knowledge and science

What are for you the most negative aspects of being an academic
[please indicate more than one]

teaching responsibilities

administrative responsibilities

not being prepared, emotionally, for distressing aspects of competition

being unable to concentrate on my research

feeling under pressure to proceed in the career

the behaviour of junior colleagues

the behaviour of senior colleagues

the inadequate facilities or funding

being away from home

the feeling that sometimes my research is a waste of time

the feeling that sometimes my research is a waste of public money

It undermined my confidence in knowledge and science

not having the appropriate recognition from my colleagues

other [please indicate it]

Creative Commons

How many of the 6 symbols of copyright agreements in Figure 1 do you understand? [0-6]

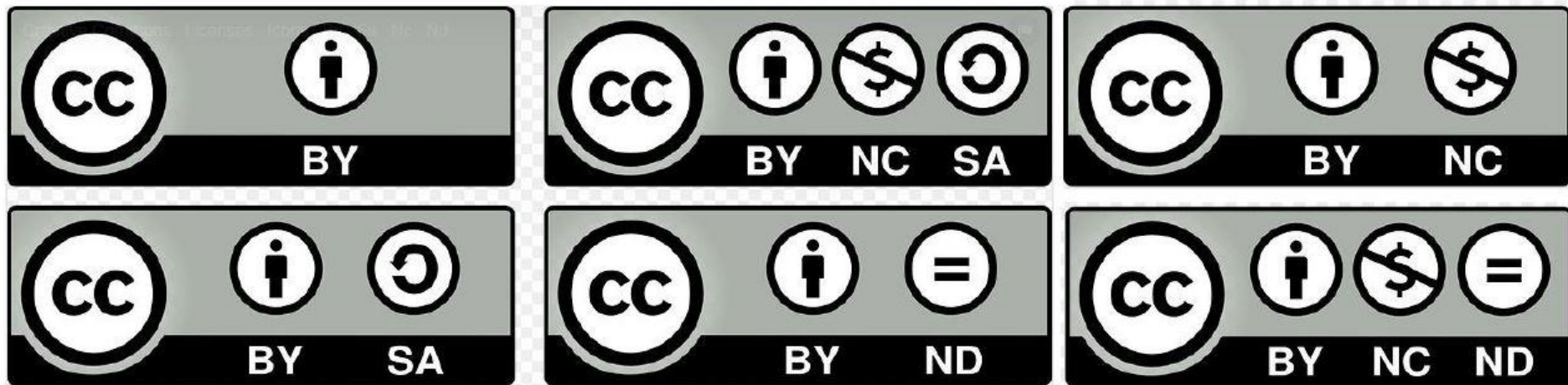


Figure 1 Creative Commons

References

Nicholas, D., Boukacem-Zeghmouri, C., Xu, J., Herman, E., Clark, D., Abrizah, A., Rodriguez-Bravo, B. and Swigon, M. (2019). Sci-Hub: The new and ultimate disruptor? View from the front. *Learned Publishing*, 32(2), 147-153

Gonzalez-Solar, L. and Fernandez-Marcial, V. (2019). Sci-Hub, a challenge for academic and research libraries. *Elprofesional de la informacion* 28(1). Available at: <https://doi.org/10.3145/epi.2019.ene.12>

Mejia, C R., Valladares-Garrido, M J., Minan-Tapia, A., Serrano, F T., Tobler-Gomez L E., Pereda-Castro, W., Mendoza-Flores, C R., Mundaca-Manay, M Y. and Valladares-Garrido, D. (2017). Use, knowledge, and perception of the scientific contribution of Sci-Hub in medical students: Study in six countries in Latin America. *PLOS one*, 12(10). Available at: <https://doi.org/10.1371/journal.pone.0185673>

Hoy, M B. (2017). Sci-Hub: What librarians should know and do about article piracy. *Medical reference services quarterly* 36(1), 73-78

Duic, M., Konjevod, B, and Grzunov, L. (2017, May 22-26). Web sources of literature for teachers and researchers: practices and attitudes of Croatian faculty toward legal digital libraries and shadow libraries such as Sci-Hub [Paper presentation]. 40th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO), Opatija, Croatia. Available at: 10.23919/MIPRO.2017.7973535

Sauermann, H. and Stephan, P. (2013). Conflicting logics? A multidimensional view of industrial and academic science. *Organization science*, 24(3), 889-909

Walsh, J P., Cohen, W M. and Cho, C. (2007). Where excludability matters: Material versus intellectual property in academic biomedical research. *Research Policy*, 36(8), 1184-1203.

Haeussler, C., Jiang, L., Thursby, J. and Thursby, M. (2014). Specific and general information sharing among competing academic researchers. *Research policy* 43(3), 465-475

Eisend, M. (2019). Explaining digital piracy: A meta-analysis. *Information Systems Research* 30(2), 636-664

Xu, F., Luo, X. R., & Hsu, C. (2020). Anger or fear? Effects of discrete emotions on employee's computer-related deviant behavior. *Information & Management*, 57(3), 103180.



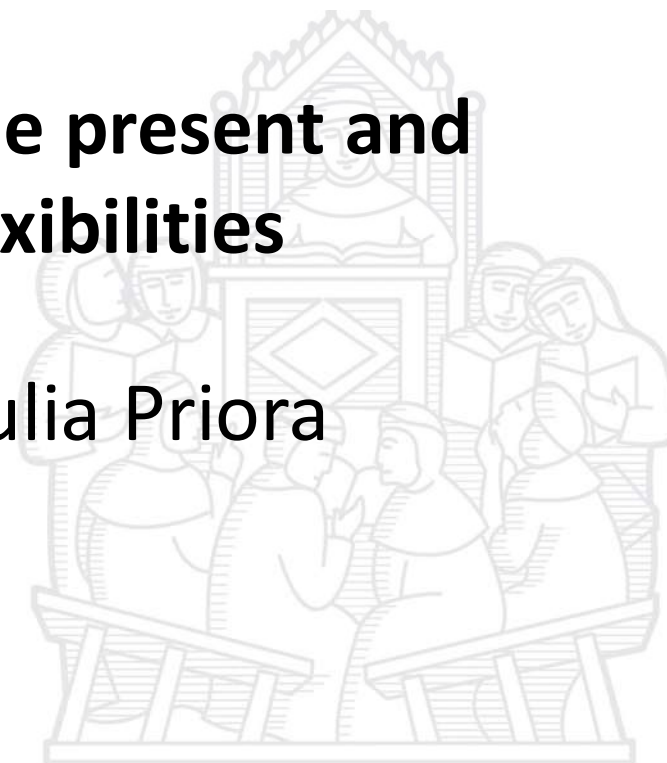


ReCreating Europe

Betwixt EU and national: the present and future of copyright flexibilities

Caterina Sganga and Giulia Priora

EPIP Annual Conference
10 September 2021



The project



Sant'Anna
Scuola Universitaria Superiore Pisa



UNIVERSITY OF AMSTERDAM



**University
of Glasgow**



CREATE



ALEXANDER VON HUMBOLDT
INSTITUTE FOR INTERNET
AND SOCIETY



Ligue des Bibliothèques
Européennes de Recherche
Association of European
Research Libraries



**Maynooth
University**
National University
of Ireland Maynooth



UNIVERSITÀ DEGLI STUDI
DI TRENTO



UNIVERSITY OF TARTU



**UNIVERSITY OF
COPENHAGEN**



Sant'Anna
School of Advanced Studies - Pisa



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870626

The project

WP 1 – Management and coordination

WP 2
USERS



WP 3
Authors and
performers



WP 4
Creative
industries



WP 5
GLAM



WP 6
Intermediaries



WP 7 – Dissemination, Engagement and Outreach

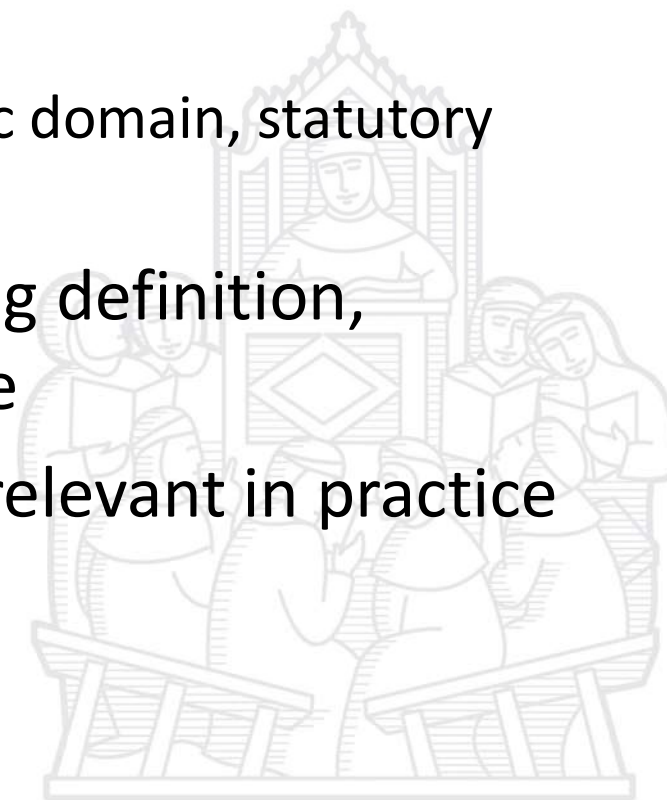
WP2 End-users

- WP2 devoted to interplay copyright vs access to culture and creative re-use
- Not only general consumers but also vulnerable groups
- Several tasks, legal and economic
- Blended methodology (desk & participatory)
- Today's paper --> based on task on “Comparative and EU mapping of public and private regulatory sources on copyright flexibilities”



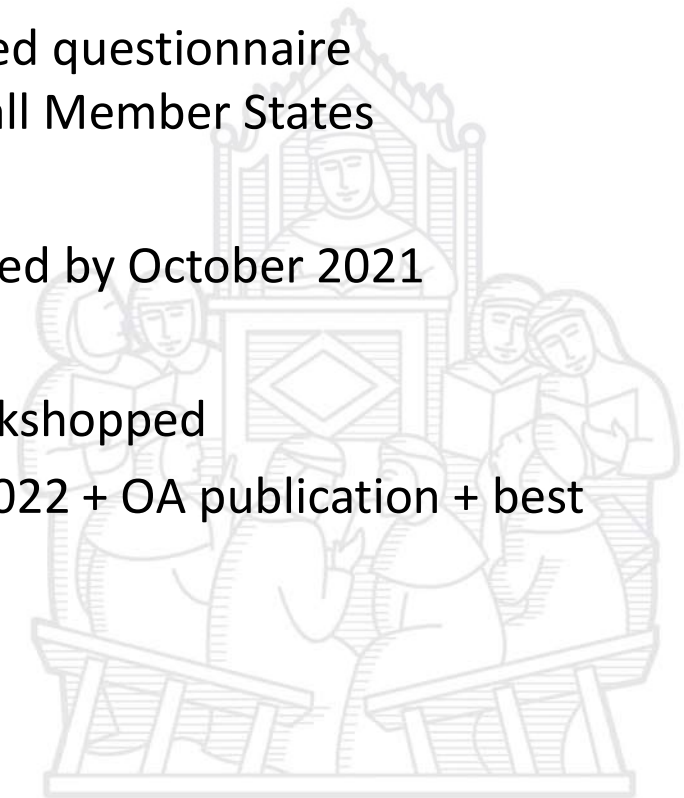
Why “copyright flexibilities”?

- Beyond copyright exceptions to cover all regulatory tools contributing to © balance
 - Eg also public domain, paying public domain, statutory licenses, exhaustion...
- Few or no attempts of overarching definition, mapping, assessment in literature
- Not just theoretical exercise but relevant in practice

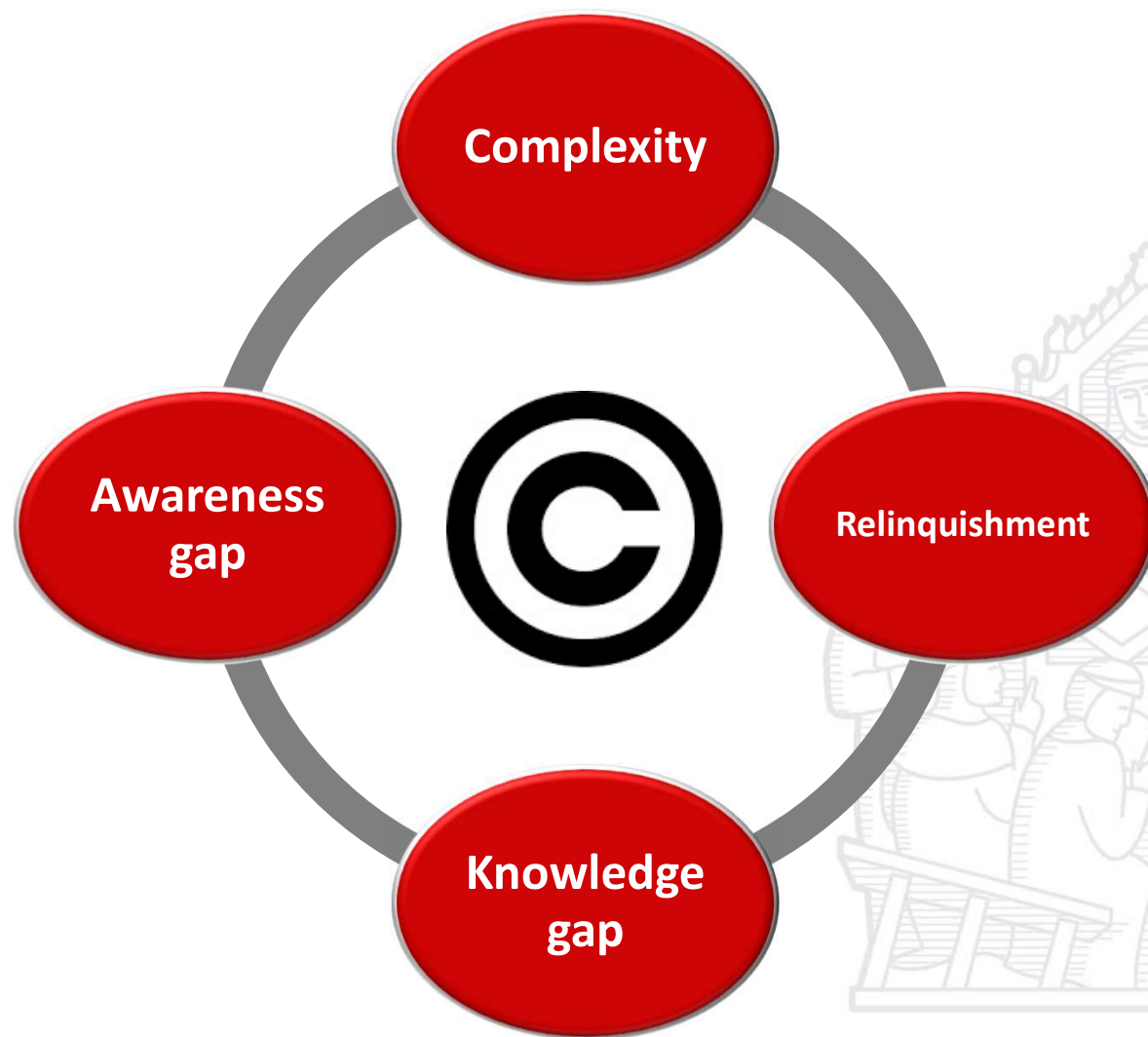


Our methodology

- **PUBLIC SOURCES** (Sant'Anna – current paper)
 - Statutes and other regulatory sources, case law
 - EU: desk research; national: semi-structured questionnaire administered to 36 national experts from all Member States
 - Mapping coded in spreadsheets
 - Updates to questionnaire to be administered by October 2021
 - Interviews with policy-makers upcoming
 - Comparative reports prepared – to be workshopped
 - Public database guided by reports in Q3/2022 + OA publication + best practices and policy recommendations
- **PRIVATE SOURCES** (Szeged – paper 3)



Our goals – tackling:

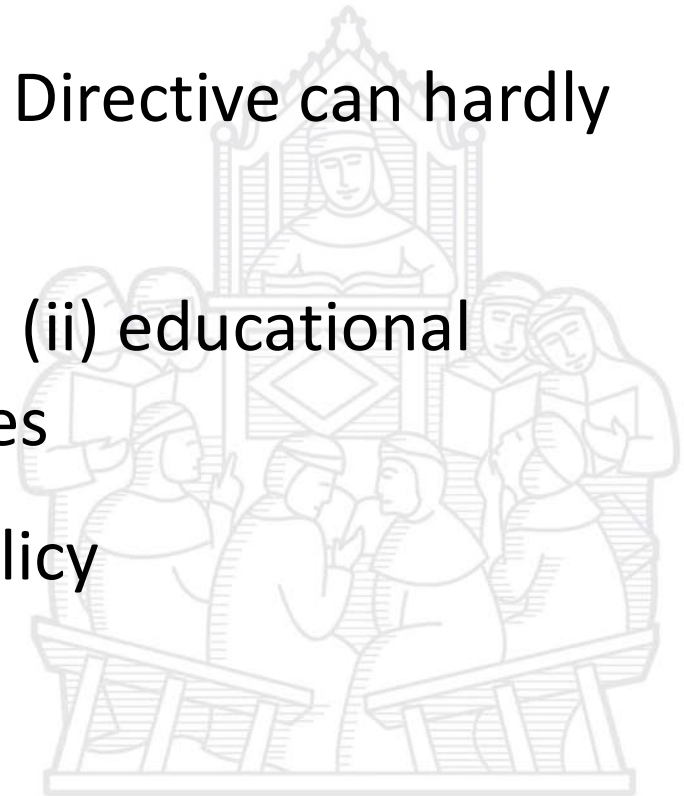


Preliminary conclusions

1. Lack of common legal understanding of role of copyright flexibilities in national copyright systems
2. Situation possibly worse than what flagged by scholars after InfoSoc patchwork of optional exceptions
3. CJEU's push towards increased harmonization not proven as effective as believed at national level
4. Impact of license agreements still high → © balance remitted to private autonomy and bargaining power

Preliminary conclusions

- From these 4 roots of divergence > ineffectiveness of EU © flexibilities
- An ineffectiveness that the CDSM Directive can hardly overcome
- 3 case studies: (i) private copying; (ii) educational uses; and (iii) cultural heritage uses
- Laying the groundwork for our policy recommendations (M30)

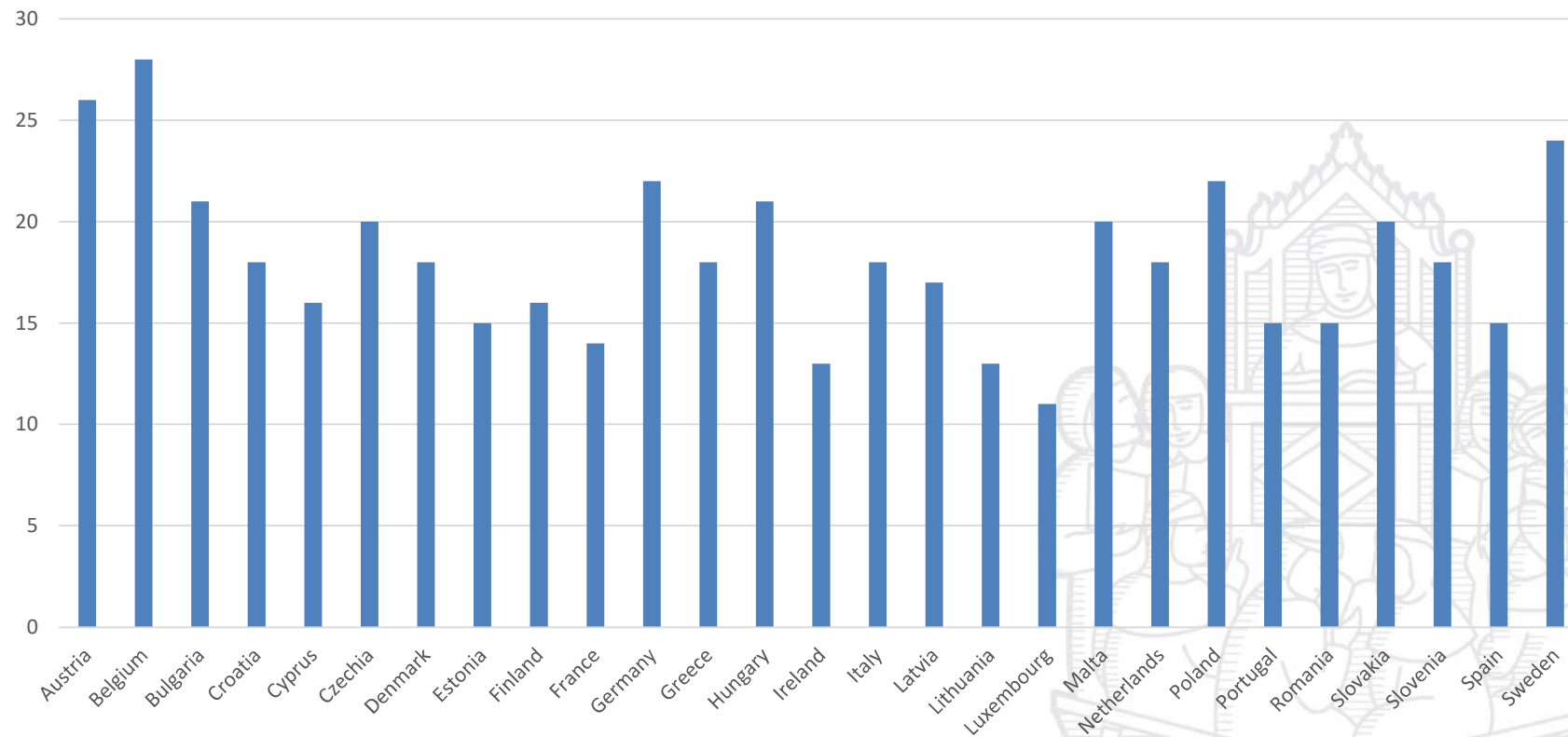


Snapshots from our analysis



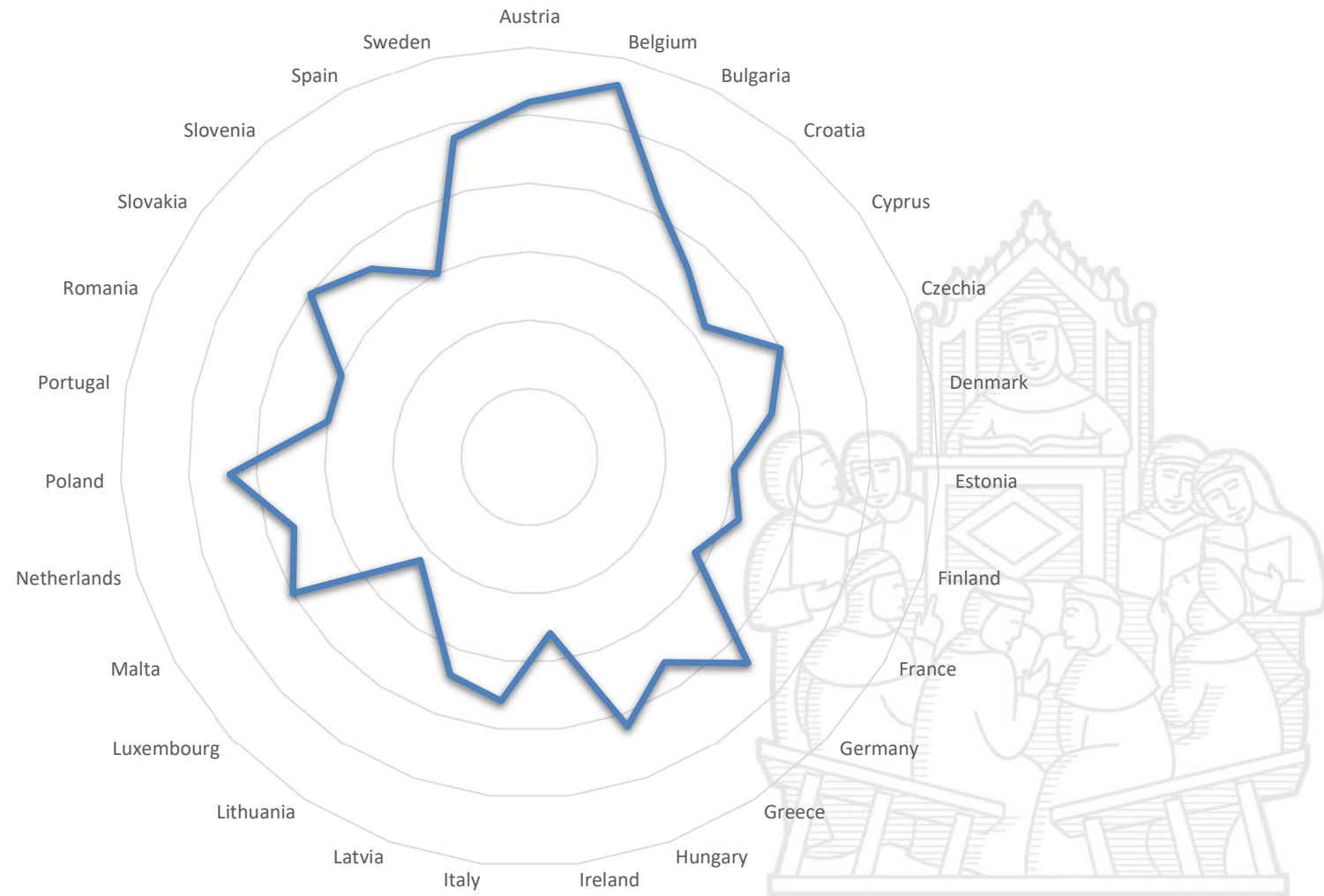
How to map “user-friendliness”?

Number of copyright flexibilities in national legislation*



* Interim data (September 2020), excluding copyright flexibilities related to cultural heritage uses and uses by/for persons with disabilities

How to map “user-friendliness”?



Sant'Anna
School of Advanced Studies – Pisa



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870626

1. Lack of common legal understanding

- No European common legal understanding of the role and functions of © flexibilities on the horizon
- Scholarly proposals (inter alia, Gervais, Hugenholtz, Samuelson 2008, Rendas 2020, Dusollier 2021)
- “Original” intention of MSs to preserve and foster national legal cultures
- **Private copying**
 - only natural persons (Croatia, Estonia, Germany, Greece, Latvia, Luxembourg, Slovenia, Spain) or everyone (Belgium, Denmark, Finland, Portugal, Sweden); including professional uses (Austria, Belgium, Spain) or excluding them (Poland, Finland)
 - to make just one copy (Latvia, Lithuania) or a few (Slovenia, Netherlands, Sweden)
 - derogating from right of reproduction only (Austria, Cyprus, Malta) or also from the communication to the public and public performance within a small audience (Belgium, France) or even from lending (Germany)
 - **from the idea of an exception safeguarding the possibility of “self-archiving” materials and “privately study” it (Germany, Ireland, Netherlands) to levies systems aimed at recouping the inevitable losses of an ever more digital “copying culture” (Belgium, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Poland, Slovenia)**

2. “Double fragmentation”

- Beyond the fragmentation caused by the optional nature of E&Ls
- Fragmentation of legal understandings and interpretations by national Parliaments and Courts... left unaddressed by EU legislator!
- **Educational uses**
 - full works (Austria, Belgium, Greece, Slovakia), only parts or small fragments (Bulgaria, Croatia, France, Hungary, Italy, Lithuania, Luxembourg, Portugal, Romania, Spain), only a percentage (Ireland, Germany), or only lower-quality works (Germany, Italy) can be used
 - open and vague “educational scope/illustration for teaching” (Cyprus, Czechia, Estonia, France, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia)
 - detailed declinations: “reproduction for own school use” (Austria, Bulgaria, Croatia, Hungary, Portugal), “uses for teaching preparation” (Ireland), “public performance for teaching or examination purposes” (Austria, Belgium, Bulgaria, Croatia, Greece, Netherlands), “inclusion in teaching materials/anthologies” (Austria, Belgium, Croatia, Denmark, Greece, Italy, Sweden), “school radio/broadcasts/media collections” (Austria, Germany), “permitted use of school work created by students or teachers” (Czechia, Denmark, Sweden, Finland, Norway)

3. Multitude of key legal concepts

- CJEU's proactive role, more autonomous concepts of EU law to expect
- However...
- **Private copying** > “private use / private study / self-archiving”; subject matter exclusions
- **Educational uses** > “educational / recreational uses / institutions”, “up to the extent necessary”; subject matter exclusions and licensing carve-outs
- **Cultural heritage uses** > “preservation”, “private study”, “repair”, “promotion”, “access”, “public significance”, “cultural objects”... “culture”?

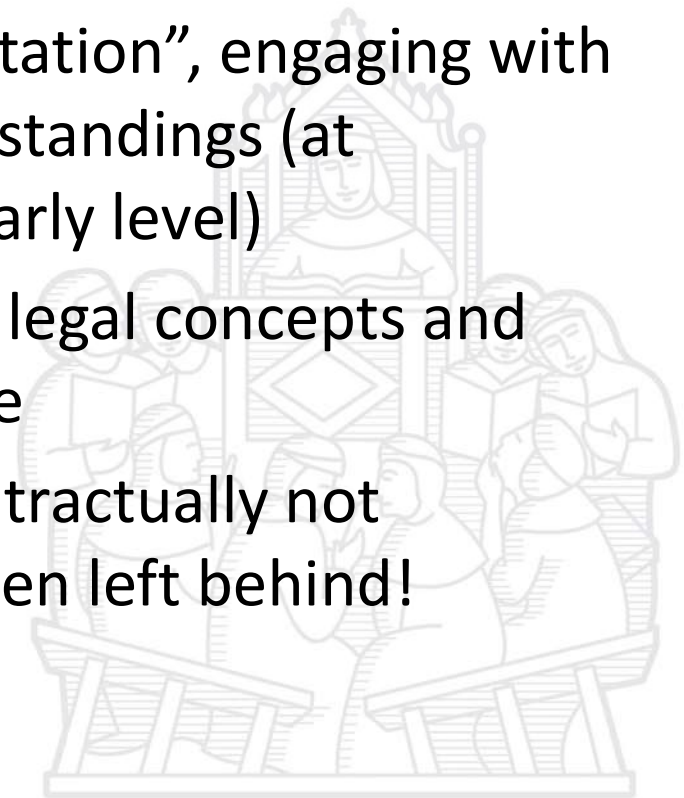
4. Role of licensing

- Significant room for contractual overridability
- Difficulties in harmonizing © flexibilities lead to “softening” legal strategies (see eg CDSM Directive)
- Potential proliferation of carve-out phenomena
- Implementation of Art.5(2) CDSM Directive will serve as reality-check on the scenario we prospect

From preliminary conclusions to interim policy recommendations

Tackling ineffectiveness of © flexibilities by:

- Taking stock of the “double fragmentation”, engaging with and promoting common legal understandings (at legislative, judicial, policy, and scholarly level)
- CJEU: assessing the centrality of key legal concepts and their potential towards this objective
- Moving towards mandatory and contractually not overridable... and fixing what has been left behind!





ReCreating Europe

Thank you.

Caterina.Sganga@santannapisa.it

Giulia.piora@santannapisa.it



@recreatingEU @CaterinaSganga @giuliapiora



Sant'Anna
School of Advanced Studies – Pisa



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870626



End-User Flexibilities in Digital Copyright Law – An Empirical Analysis of End-user License Agreements *Péter Mezei and István Harkai*

EPIP 2021 Conference

September 10, 2021





Foundations

- Need for a fair balance between the interests of rightholders, intermediaries and end-users (consumers) in the platform age
- Public v. private ordering mechanisms
- Limited literature on the analysis of the interplay between end-user flexibilities and private ordering mechanisms
- Comparative legal and empirical research
 - to understand better the state of the art and
 - to prepare for the implementation of §17(7)-(9) of the CDSM Directive



End-user flexibilities

- ***End-user***

- Chapdelaine (2017): *pyramid scheme* (users with full control; streaming users; social media users)

- ***Flexibilities***

- Classic copyright *limitations and exceptions*
- *Internal* to copyright (e.g. duration; CRM)
- *External* to copyright (in line with contractual freedom / necessitated by business models)
- *Procedural safeguards* (notice-and-take-down; complaint-and-redress mechanisms; formalities related to contract amendment/termination)



Methodology

- ***Theoretical framework***

- Comparative legal research (van Hoecke's toolbox theory) – *meso level analysis* (private ordering) + a look at *macro level (public) regulations* (CDSM provisions)

- ***Empirical framework***

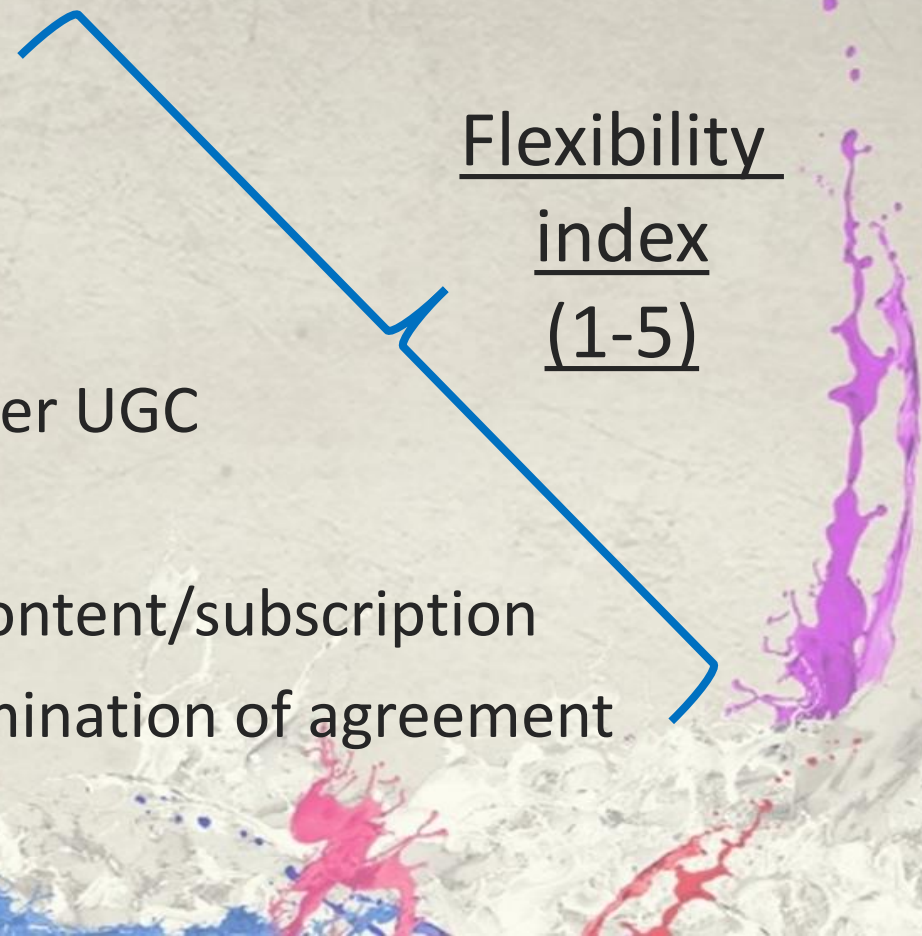
- Systematic and qualitative analysis of selected (17) platforms' EULAs under selected (15 → reduced to 8 finally) variables
- Platform categorization: Borghi et al. (2012)
- Limitations applied: pirate & niche services + premium models excluded; availability in the EU; focus on English language; many are OCSSPs



Selected variables

- (i) Extent of (access) rights
- (ii) Restricted uses
- (iii) Allowance of UGC
- (iv) License granted to the platform/other users over UGC
- (v) Technological restrictions on access
- (vi) Family sharing and other types of transfer of content/subscription
- (vii) Modification of terms and conditions and termination of agreement
- (viii) Procedural safeguards

Flexibility
index
(1-5)





Selected platforms

Streaming with hosting service	Streaming without hosting service	Online marketplaces	Social media
Soundcloud Bandcamp YouTube Twitch DailyMotion Pornhub	Spotify Netflix Disney+	Steam Electronic Arts Origin Amazon Apple Media Service Google Play	Twitter Instagram Facebook



Key findings #1

- ***UGC effect***

- Internal technological limitations
- EULAs are generally clear on NTDPs, and generally silent on complaint-and-redress mechanisms – must change in line with Art. 17(9) CDSM
- Amendments and terminations are asymmetrically in favor of platforms
- Misleading terminology regarding e.g. „sales” → might lead to consumer protection concerns
- Chapdelaine's hierarchy of end-user experience seems to be partially incorrect



Key findings #2

- ***Regulatory lock-in effect***
 - Certain activities are covered by or excluded from the scope of end-user flexibilities
 - Licensing of certain uses is clearly necessary, but...
 - Case law in motion (especially related to hyperlinking/embedding; fair use/server test changes in the US might also have relevance in Europe, too)
 - Silence on „freedom of expression“-related L&Es – must change in line with Art. 17(7) and (9) CDSM



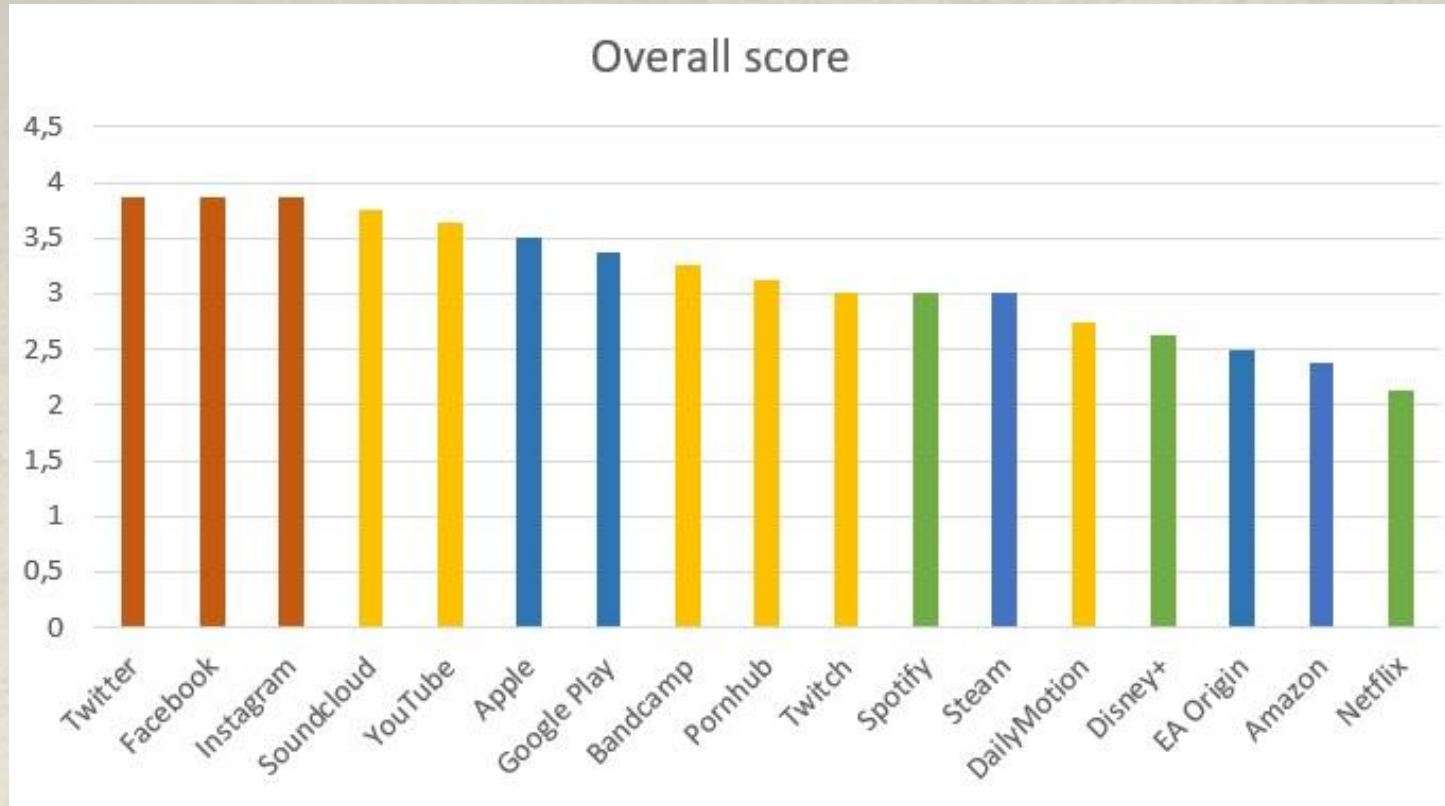
Key findings #3

- ***Business flexibility effect***

- „As is” contracts
- The presence of UGC generates greater end-user flexibilities, but asymmetric licensing practices exist (more rights granted to the platforms by users than to users by platforms)
- Fully or mainly non-UGC oriented services offer other type of flexibilities (e.g. family sharing; multiple devices; offline uses) → fierce vertical and horizontal competition



Flexibility index





Members of the team



Péter Mezei



István Harkai

Read our manuscript here:

https://papers.ssrn.com/abstract_id=3879740

Follow reCreating Europe on our [website](#); [newsletter](#); [LinkedIn](#); [Facebook](#); and [Twitter](#).

You can contact us at mezei.peter@szte.hu and harkai.istvan89@gmail.com