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# The Global Open

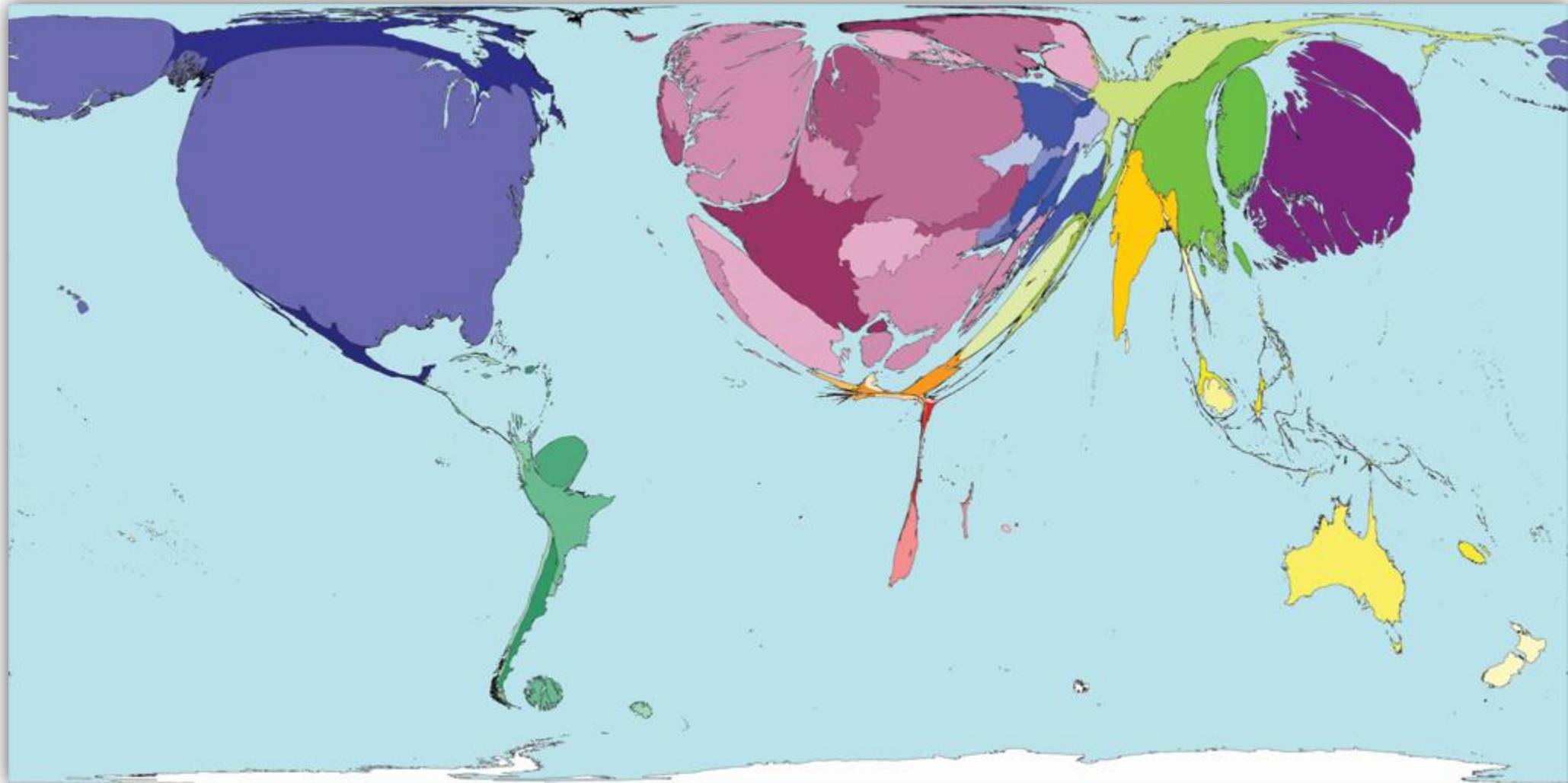
Joachim Schöpfel



# Global South and Open Access

# *This Global Science Map Is Not Destiny*

By Laura Czerniewicz | Published: July 9, 2015

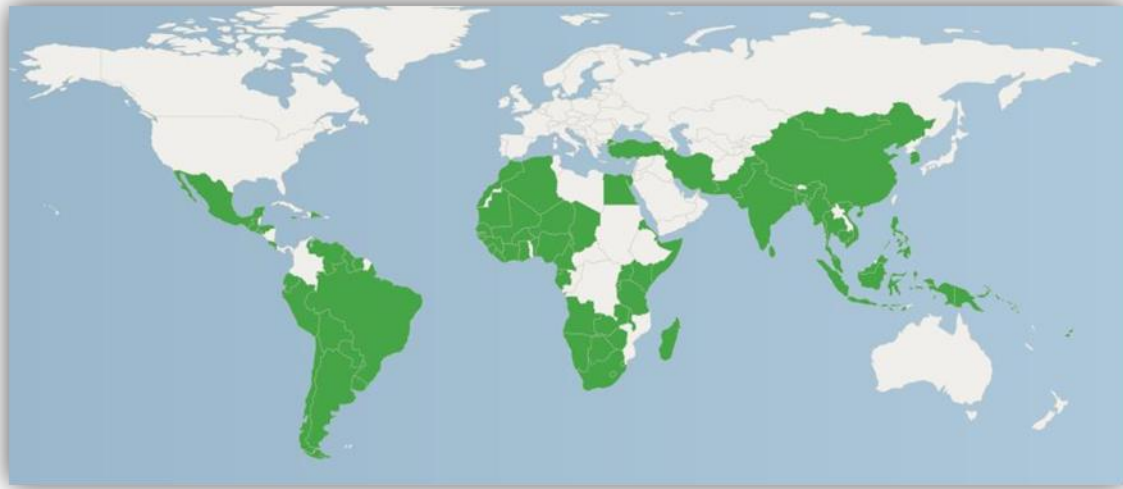


# Is it?

- *“(...) to redraw the map of global knowledge production, the inequitable global power dynamics of global knowledge production and exchange must be confronted head on (...)”*
- *“(...) And finally, the open access movement needs to broaden its focus from access to knowledge to full participation in knowledge creation and in scholarly communication”* (Laura Czerniewicz loc.cit.)
- So, what is the actual contribution of the Global South to the open access movement? Do open repositories and academic journals in open access change the situation of unequal scientific production?

# The question is quite simple but...

- Monitoring open access is (still) a problem
- Biased OA representation in favor of Western countries
- What exactly is the Global South?



Study from March 2017  
101 countries with available et reliable  
information

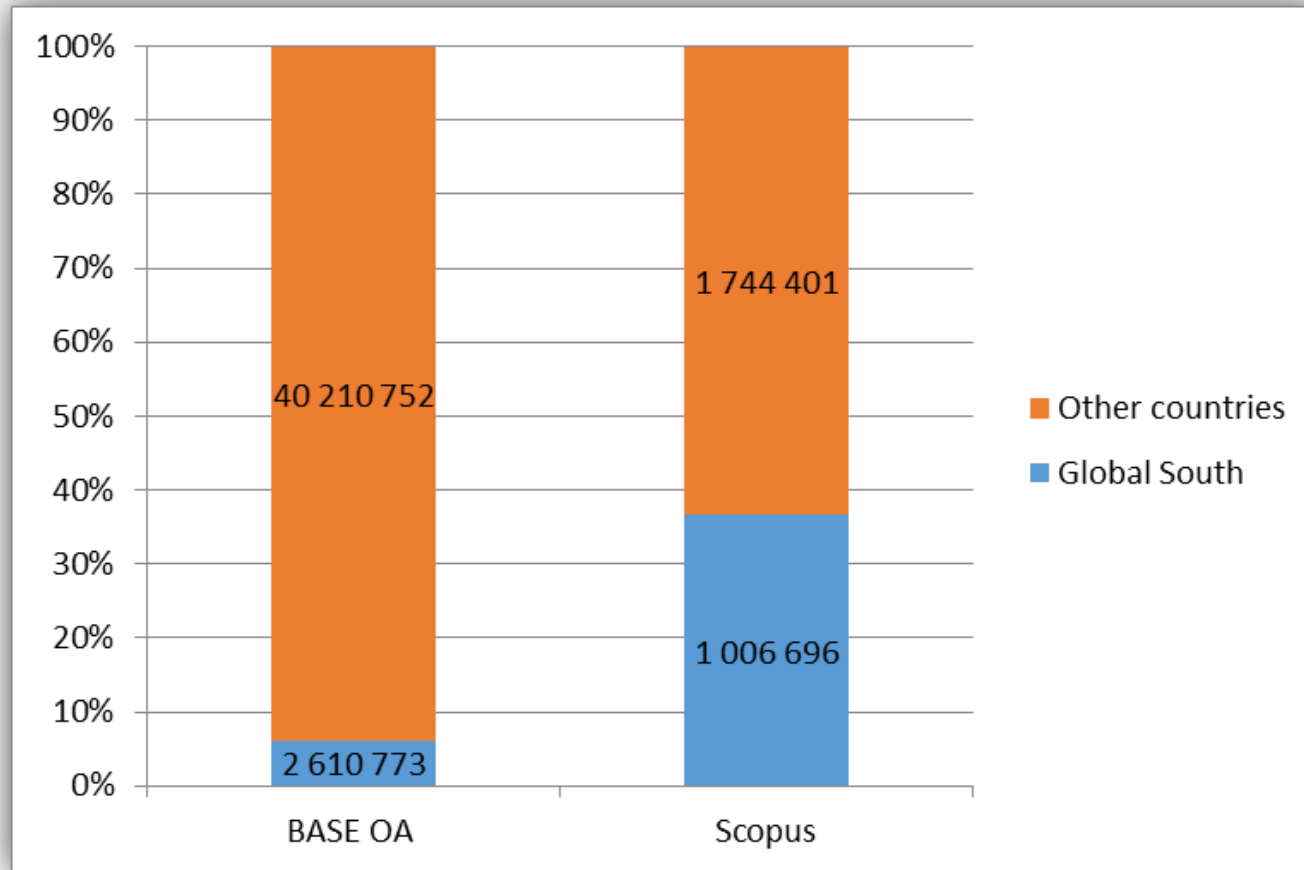
Sources :

World Trade Organization, World Bank Group  
Elsevier (Scopus)

OpenDOAR, DOAJ, BASE, re3data

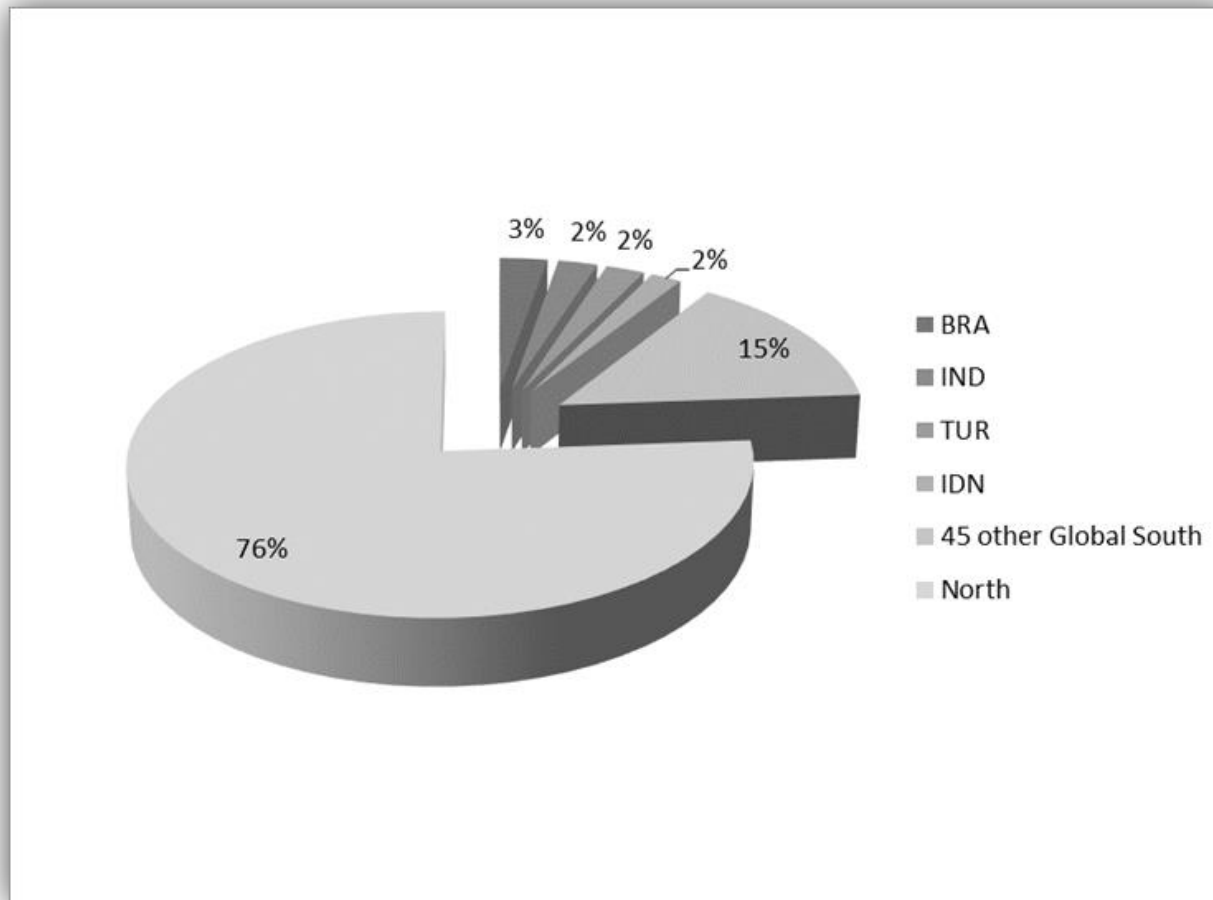
*Acknowledgement to H el ene Prost, CNRS*

# Global South academic output in BASE (open access, cumulative) and Scopus (2016)



- Only 6% of OA items from the Global South
- Brazil, India and Indonesia represent 60% of the Global South OA
- 55 countries are not indexed in BASE
- Their OA output remains invisible

# Open repositories (OpenDOAR)



- 24% repositories from the Global South
- Brazil, India, Turkey and Indonesia represent 9%
- 45 countries represent 15%
- 52 countries remain invisible

# Open repositories, South and North

## Similar

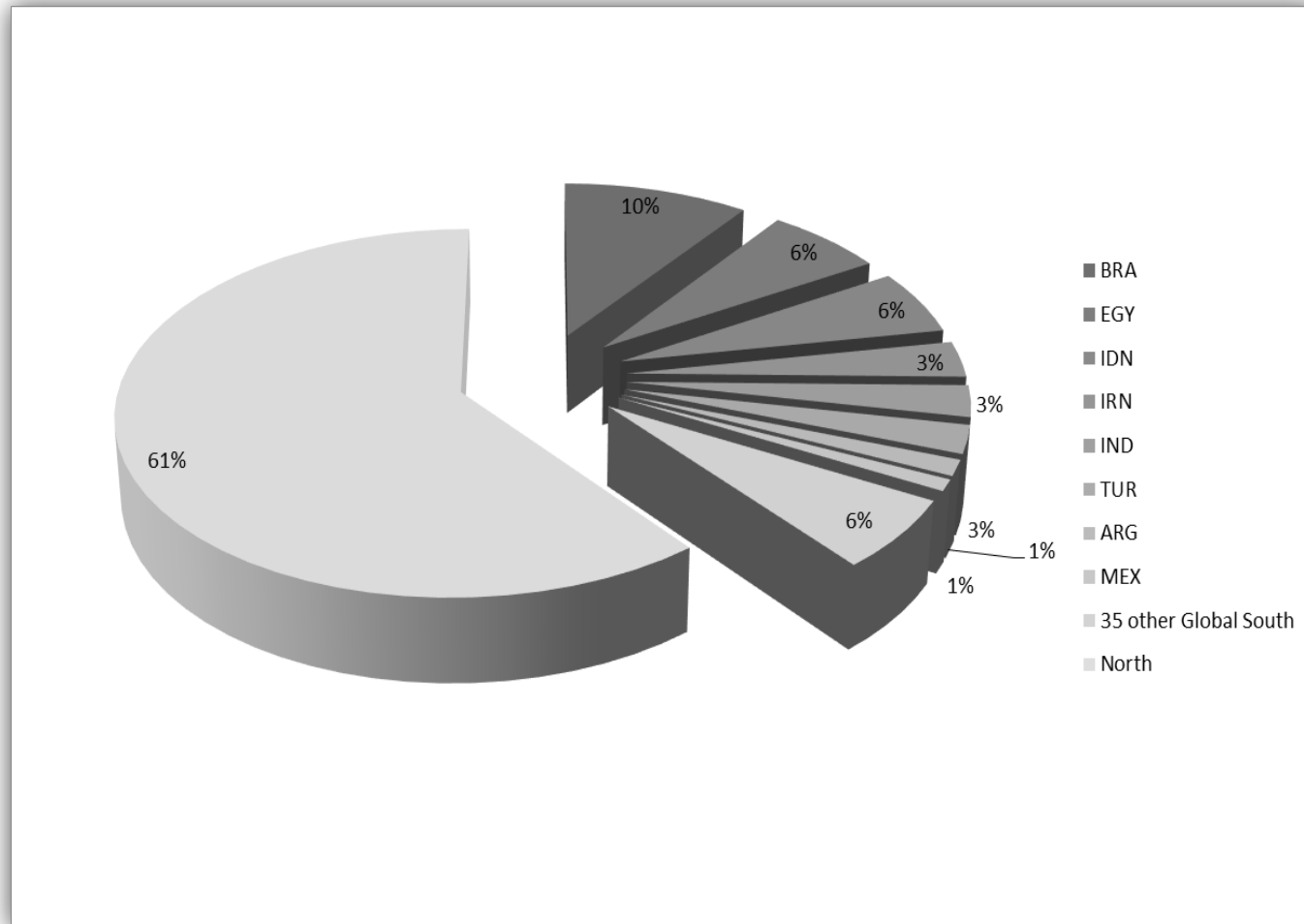
- Institutional repositories (universities)
- DSpace, EPrints
- English is prevailing
- Journal articles are main content

## Different

- Greenstone (Unesco, Human Info), SciELO
- Other languages than English
  - Spanish, Portuguese, Chinese, Turkish, Arabic, French...
- More grey literature (?)



# Open access journals (DOAJ)



- 39% journals from the Global South
- Eight countries represent 33%
- Brazil, Egypt and India represent 22%
- 35 countries represent 6%
- 58 countries remain invisible

# OA journals, a closer look

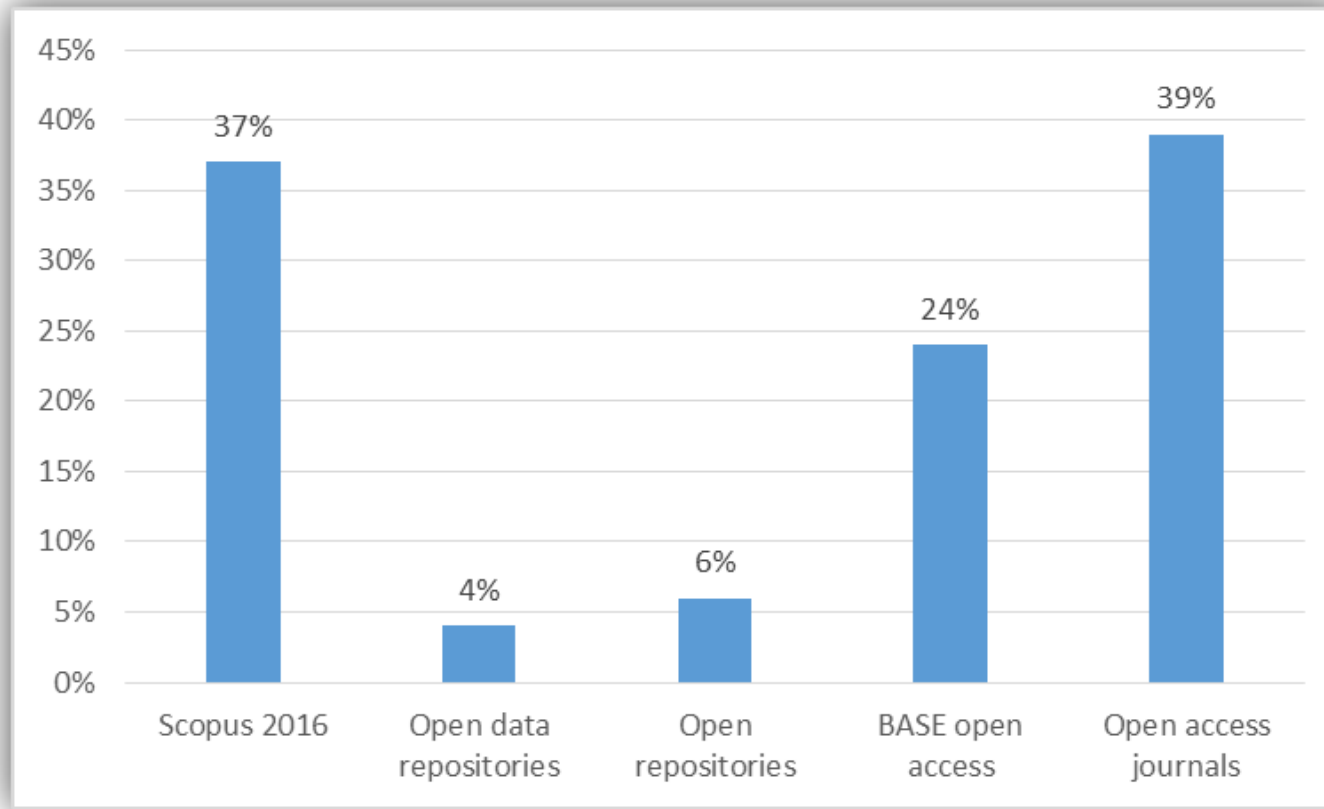
## Facts

- Some countries are more public than others
  - Brazil, Iran, Indonesia
- Some countries are more corporate than others, including APCs
  - Egypt

## Questions

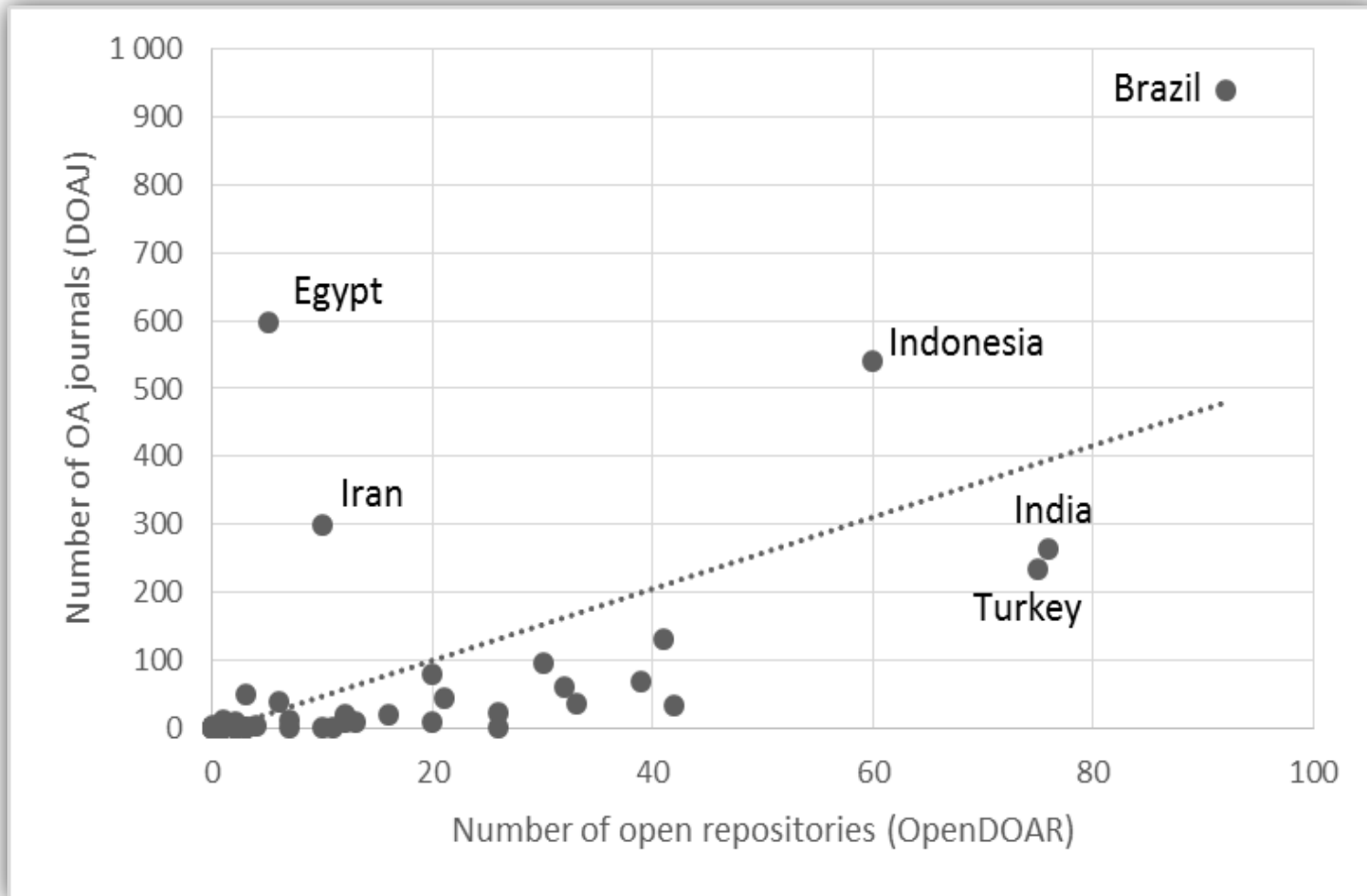
- Dependent on DOAJ indexing
  - 2016 suppression of 3,000 titles
  - Are Indian OA journals predatory?
- Where are Chinese OA journals?
- APC policy of Turkish and Indian OA journals?

# Open access : journals, repositories, data



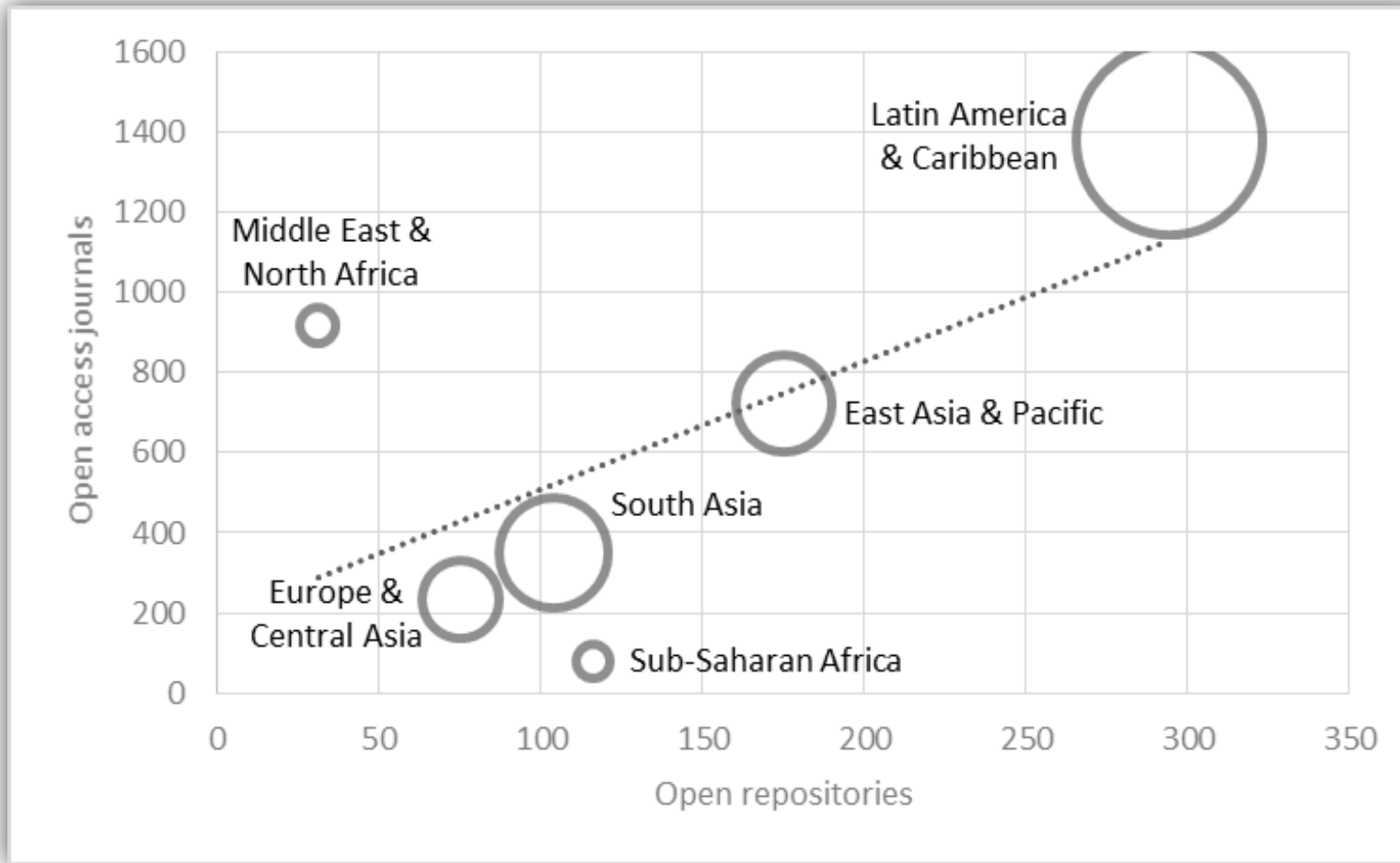
- OA is underrepresented
  - Except for OA journals
- More gold than green
- Very few data repositories
  - China, India, Mexico
  - Probably re3data bias

# Correlations green/gold



- Pearson's  $r = .70$
- Some "anomalies"
- High correlation with BASE items ( $r > .80$ )
- Low correlation with Scopus items ( $r < .40$ )
- *High correlation between Scopus items and re3data data repositories ( $r = .88$ )*

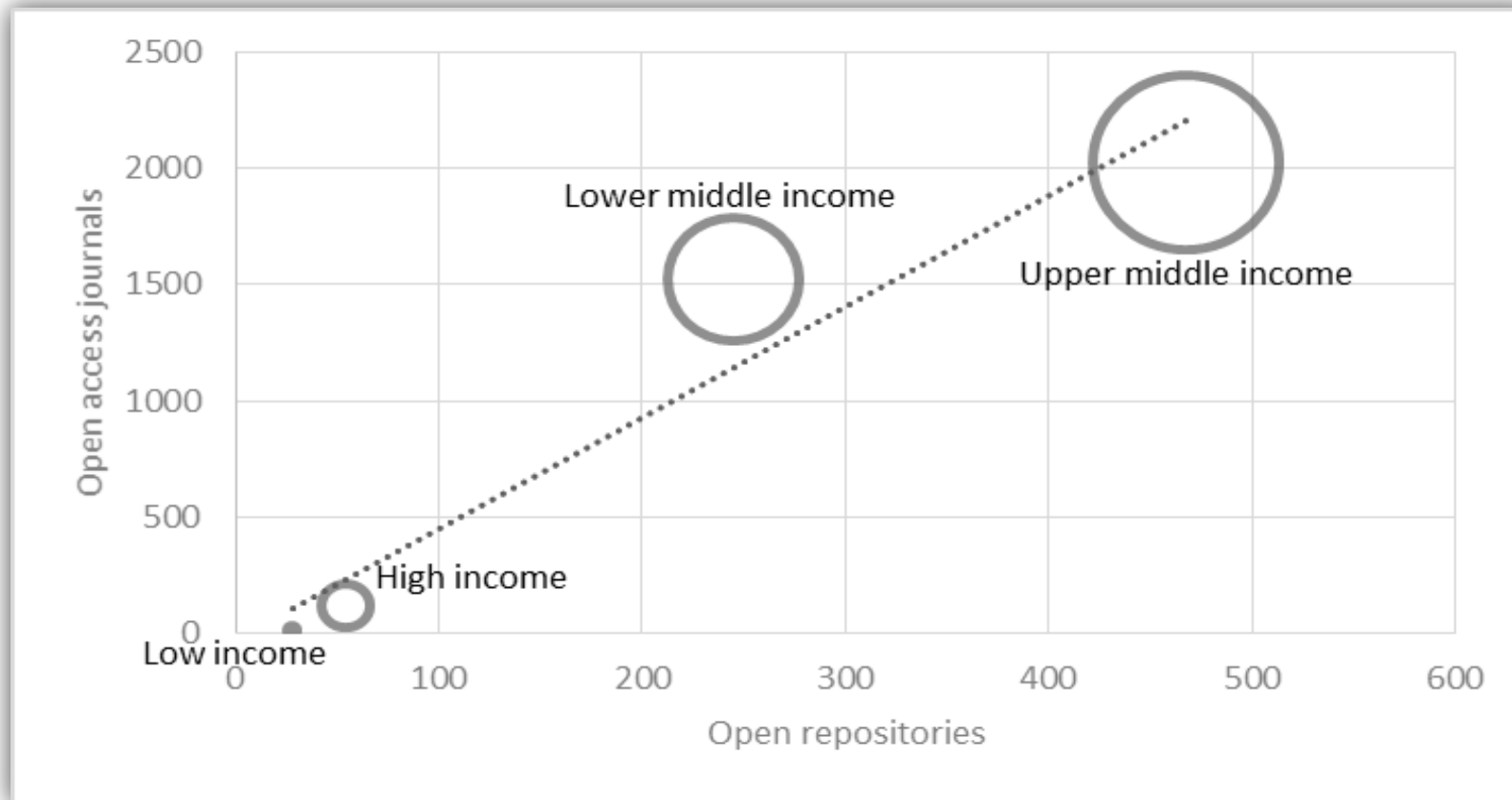
# Geographical areas



- Size of bubbles = number of OA items (BASE)
- *NB – half of the Global South countries are not represented here*
- *But except one (Niger), all have indexed documents in Scopus*

# Income level

(source: World Bank Group, 2015 gross national income)



- The main contribution to OA is provided from the Upper middle income group, with large countries with an important research sector like Brazil, Argentina, Mexico, China, Turkey, Iran or South Africa
- Their average share in OA output is two times higher than in the next group, the Lower middle income countries, with Egypt, India, Indonesia, Sri Lanka or Pakistan

# Profiles

41 countries with OA contribution (with median; logarithmic scale)

## Q1 Leading countries (16)

93% OA items, 79% repositories, 71% journals  
Argentina, Brazil, China, India, Indonesia, Mexico, South Africa, Turkey...

## Q2 Focus on green (5)

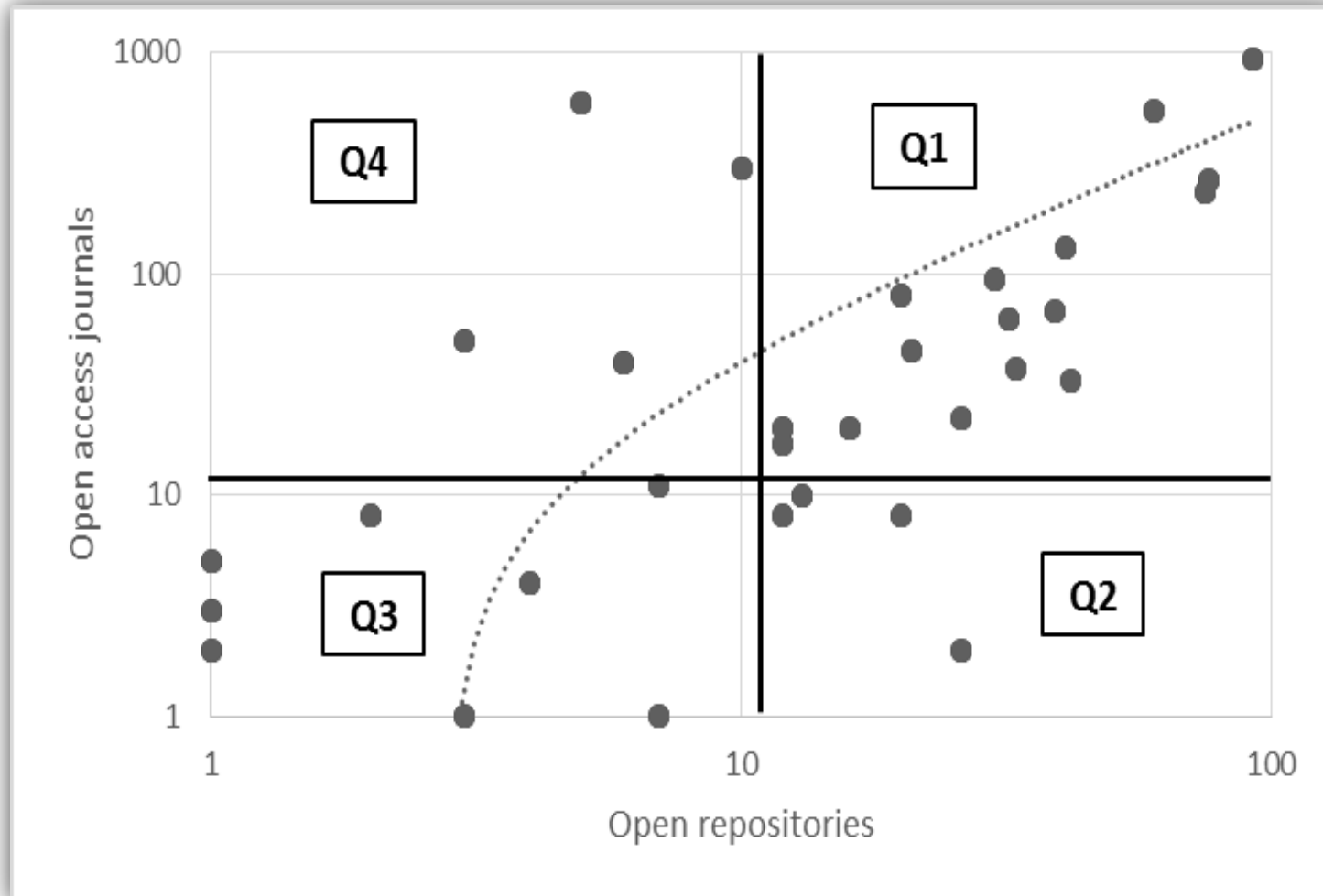
5% OA items, 10% repositories  
Algeria, Sri Lanka...

## Q4 Focus on gold (5)

4% OA items, 27% journals  
Egypt, Iran...

## Q3 Just beginning (15)

5% OA items  
Nicaragua, El Salvador...



# Lessons learned

- Diversity
  - successful public initiatives (SciELO)
  - favorable national policies (India)
  - institutional projects (South Africa)
  - private entrepreneurship (Egypt)
- Transition
  - e.g. China (journals), Iran (repositories)
- Resources
  - IT infrastructures
  - human resources
  - financial investment



# Key factors of success

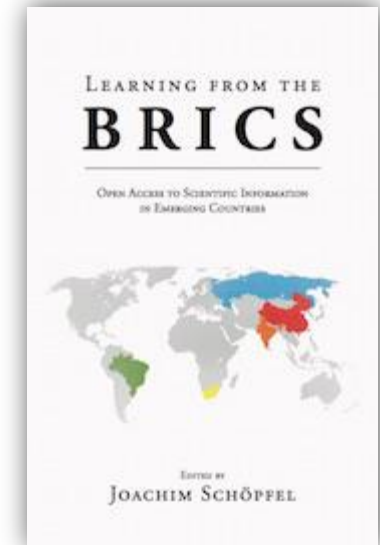
The reasons for success may be different from one country to another but we can identify at least three key factors of success:

- strong public policy in favor of OA (including copyright law),
- growing awareness among the research communities (including incentives),
- investment, i.e. private investment (with an emergent OA market) and above all, public funding for the dissemination of research results

# What OA is not

- It is not a kind of low-budget solution for scientific communication in poor regions and less developed countries
- Empirical evidence shows quite a different picture: all significant progress of OA (gold and green) take place in newly industrialized countries (NICs)
  - strong political leadership
  - rapid growth of urban centers and population
  - a switch to industrial economies (foreign investment, open markets etc.)
- OA may not contribute to a new digital divide but is surely a part of it

# The BRICS



# Why the BRICS?

- In our multipolar world five emerging countries, because of their large and fast-growing national economies, their demographic and geographic situation, play a specific and leading role with a significant influence on regional and global affairs.
- In 2015, these so-called BRICS countries — Brazil, Russia, India, China and South Africa — together represented 3.6 billion people, i.e. half of the world population, 22% of the world economy (gross world product) and nearly 60% of its growth.
- Today the international STI market is largely dominated by American, British, Dutch and German publishers and models.
- Our hypothesis is that tomorrow, these companies and models will have to share their dominant position with the emerging countries including their cultural, linguistic, scientific and economic diversity and richness.
- Also, these countries may be better positioned to provide sustainable models for other regions such as the Maghreb, Sub-Saharan Africa or Latin America.

# OA underrepresented, with differences

(figures from January 2017)

	<b>Citable publications</b>	<b>Open access journals</b>	<b>Open repositories</b>
<i>source</i>	<i>Scopus (Scimago)</i>	<i>DOAJ</i>	<i>OpenDOAR</i>
<b>Brazil</b>	57 033	947	91
<b>Russia</b>	55 500	161	28
<b>India</b>	113 144	320	76
<b>China</b>	401 945	65	39
<b>South Africa</b>	15 570	65	32
<b>% BRICS</b>	24%	16%	8%
<b>Worldwide</b>	<b>2 721 140</b>	<b>9 515</b>	<b>3 291</b>

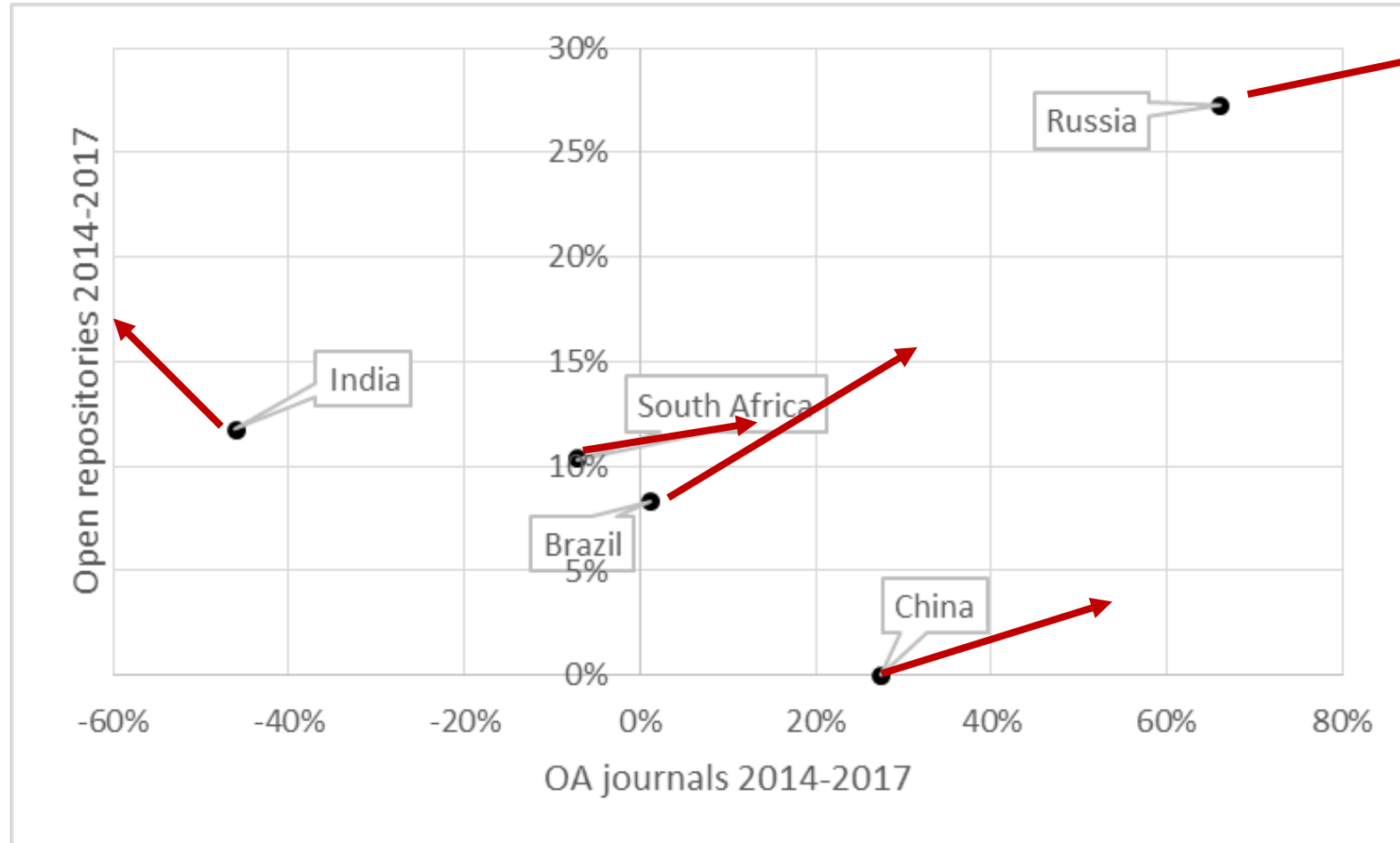
In 2018, one year later, the situation remains unchanged.

# Different profiles

- Brazil and India are at the head of the open access movement, with a significant number of open access journals and open repositories.
- Brazil, Russia and India have a high ratio of gold open access (journals), compared to the green road (repositories); this ratio is higher than in China or South Africa but also higher than in the United States, in Germany or France.
- Compared to the scientific output, Brazil produces much more open access journals (1.54) than the other BRICS countries (<0.4) and moreover, more than the most important research producing countries from the Global North (<0.6).
- Brazil and South Africa have similar ratios between open repositories and scientific output (0.16-0.21) with the countries from the Global North (United States, UK, Germany, France, Japan), significantly higher than India, China or Russia (<0.07).

# Different developments

(figures from January 2017)



- In red: development 2017-2018
- Increase above all of OA journals
- Special case of India

# Insight – learning from people

- Brazil — Leadership in Open Access Publishing
  - More than a simple project, SciELO is today a reference and a model for other emerging and developing countries, as a specific Global South solution to open access
- Russia — the Impact of History
  - Public institutions and authorities play a substantial role in the open access movement, prevailing on individual initiatives
- India — Progress and Barriers
  - The picture of open access in India looks promising as policy makers are taking a keen interest in the development of the movement
- China — the Gold Road
  - The Chinese figures in the international directories are only the tip of the iceberg
- South Africa — the Philosophy of Ubuntu
  - But open access is still seen as an experimental option



# Lessons learned

- Each country must face particular challenges and seize its own opportunities
- To become sustainable, open access must adjust to local conditions and even more, be assimilated into local political and scientific culture, as a local initiative supported by local communities
- Some common features, above all a strong commitment to open access shared by scientific and political authorities in order to increase the impact of the countries' research output and the availability of scientific information
- While the BRICS countries started to coordinate in crucial fields such as finance, economics, energy or nuclear security, there is no open access coordination up to now (except for the SciELO partnership between Brazil and RSA)

# Open divide?



# Questions

- There is no way back behind the pay walls
- Many scientists and librarians believe in the positive qualities and promises of OA
- However, a growing number of them also express worries and reservations about dysfunctional developments and risks of even more inequalities between rich institutions, organizations and countries which can afford the costs of access scientific information *AND* the transition to OA via offsetting agreements and expensive APCs, and all the others that cannot
- It is time for a critical assessment of open access, of its dialectics, contradictions and ambivalences

# (Some) global issues of critical appraisal

- The political use of OA: acceleration, performance evaluation, economization and privatization
- OA as a new kind of knowledge regime?
- The complex genealogy of OA and the illusion of a consistent movement
- OA between bottom-up (community) and top-down (management, commercial publishing, governments)
- Symbolic goods and gift giving – a sociology of OA (Bourdieu)
- Scientific commons in the digital society

# The gold illusion

- *“There is currently already enough money in the system. A large-scale transformation from subscription to open access publishing is possible without added expense.”* (Max Planck Digital Library Open Access Policy White Paper 2015)
- Three years later, business as usual
  - *« we never said that it would be less expensive »*
- Yesterday, some people couldn't read; tomorrow they can't write?
- On the gold road to OA.com?

# Creating new gaps and inequities?

(Sotudeh & Ghasempour 2018, Shiraz University)

- “APC is believed to have created a **scholarly gap** between those scholars who get the financial support and those who are (...) deprived
- (...) the not-yet-resolved issue of **inequity** for less-endowed authors, especially those from the third world, may imperil long-term sustainability of scientific publishing based on free and instant access on the cost of authors.
- (...) their share would relatively **decrease** in time (...) Especially significant is the fact that they have to publish their papers in **low-tiered journals** where they can afford the publication fees.
- Hence, the question is whether the APC model is here to bridge **the gap between the first and the third worlds** or to increase it and thereby further **marginalize the role of the latter’s already lost science.**”

# Sorry, no helpful advice

- Open is not good because it is open
- Input is not output but there is a link
- Sharing is good with friends
- One size fits not all
- Western strategies are not necessarily good (for other countries)
- Keep an eye on your data: who controls them? Do you/we contribute to a kind of Facebook of Science, giving away all data for nothing?
- *“Asymmetry and inequality remain a challenge for OA”* (Leslie Chan, UToronto)

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# Thank you!

[joachim.schopfel@univ-lille.fr](mailto:joachim.schopfel@univ-lille.fr)