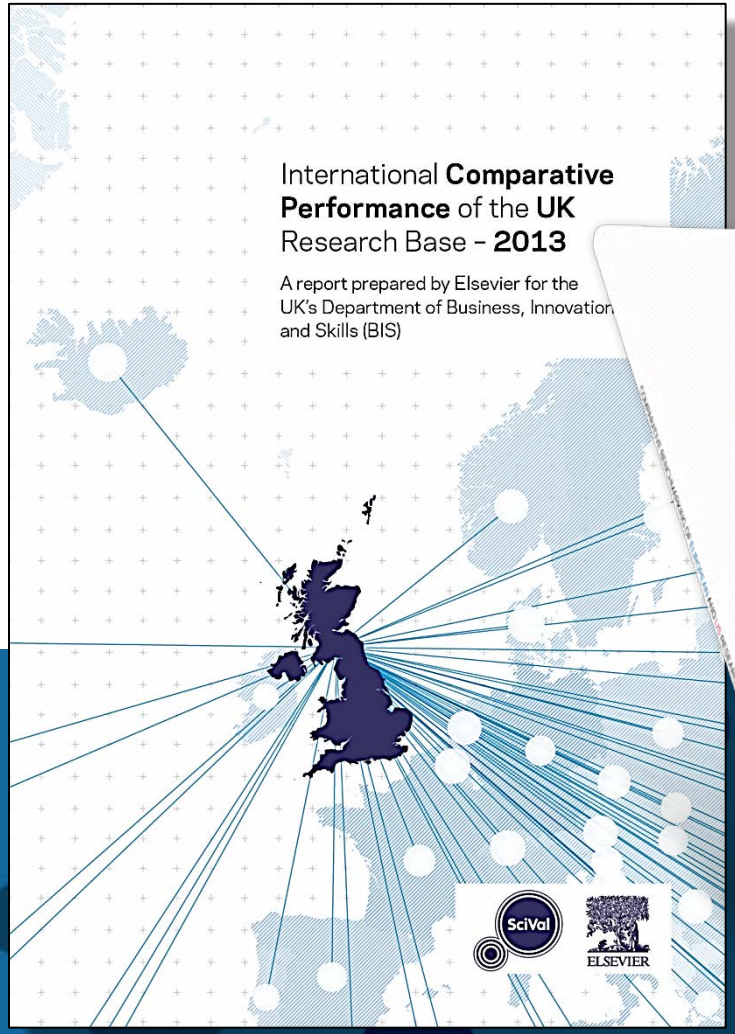

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http://info.scival.com/research-initiatives/science-europe

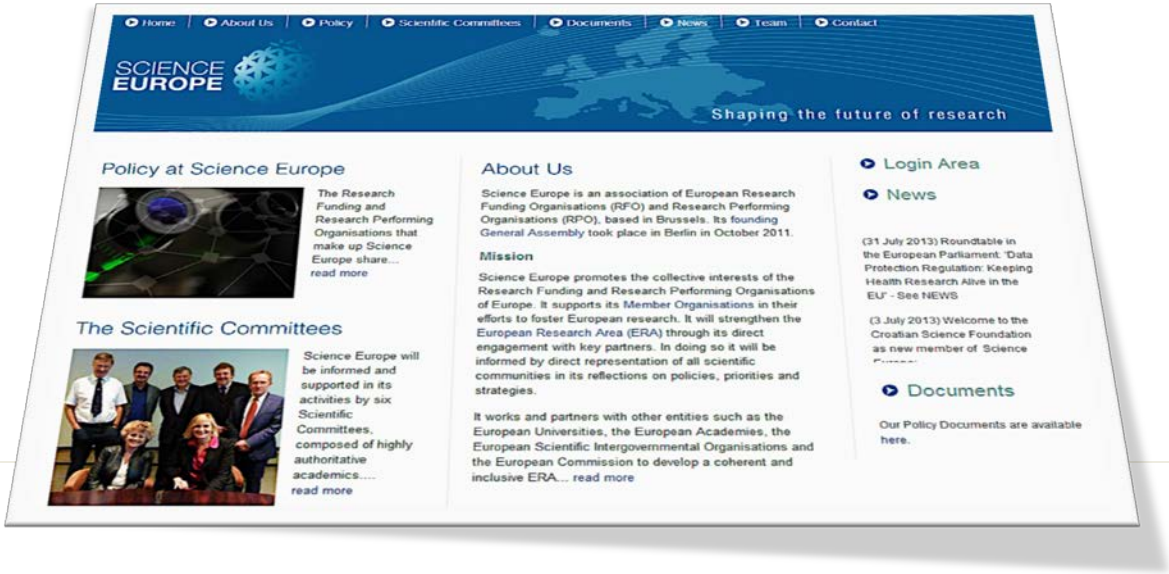
https://www.gov.uk/government/publications/performance-of-the-uk-research-base-international-comparison-2013

Elsevier / Science Europe Collaboration

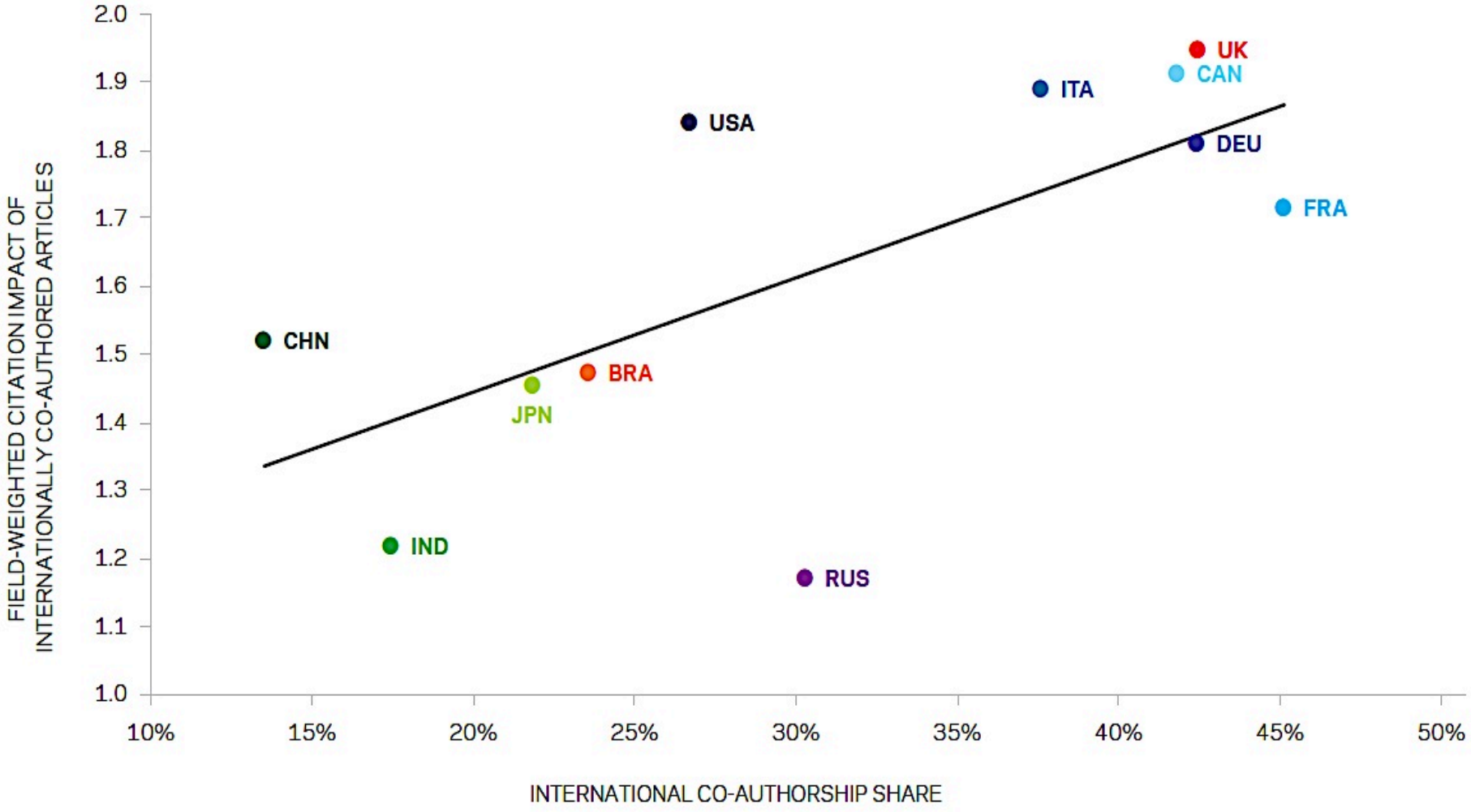
Aim:

To provide an **analysis of European and US research collaboration and researcher mobility patterns**, as reflected in the Scopus database.

- Although the countries of Europe are often grouped together, there is much variance between them
- An important issue for European research is the amount of academic collaboration taking place within Europe



International Collaboration has Positive Correlation with Quality



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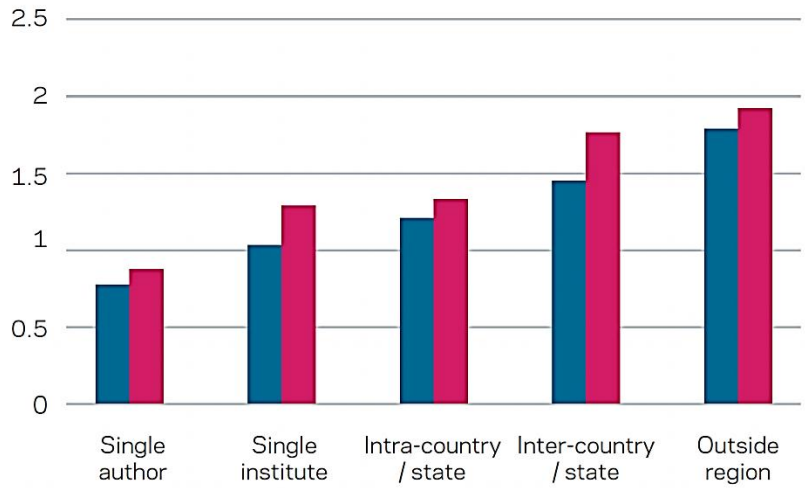
Outside Region Collaboration Advantage Particularly Strong in Europe

Both Europe and the US benefit most by collaborating outside their regions, but the relative advantage of this is particularly strong for Europe

FIELD-WEIGHTED CITATION IMPACT
PER COLLABORATION TYPE (2007-2011)

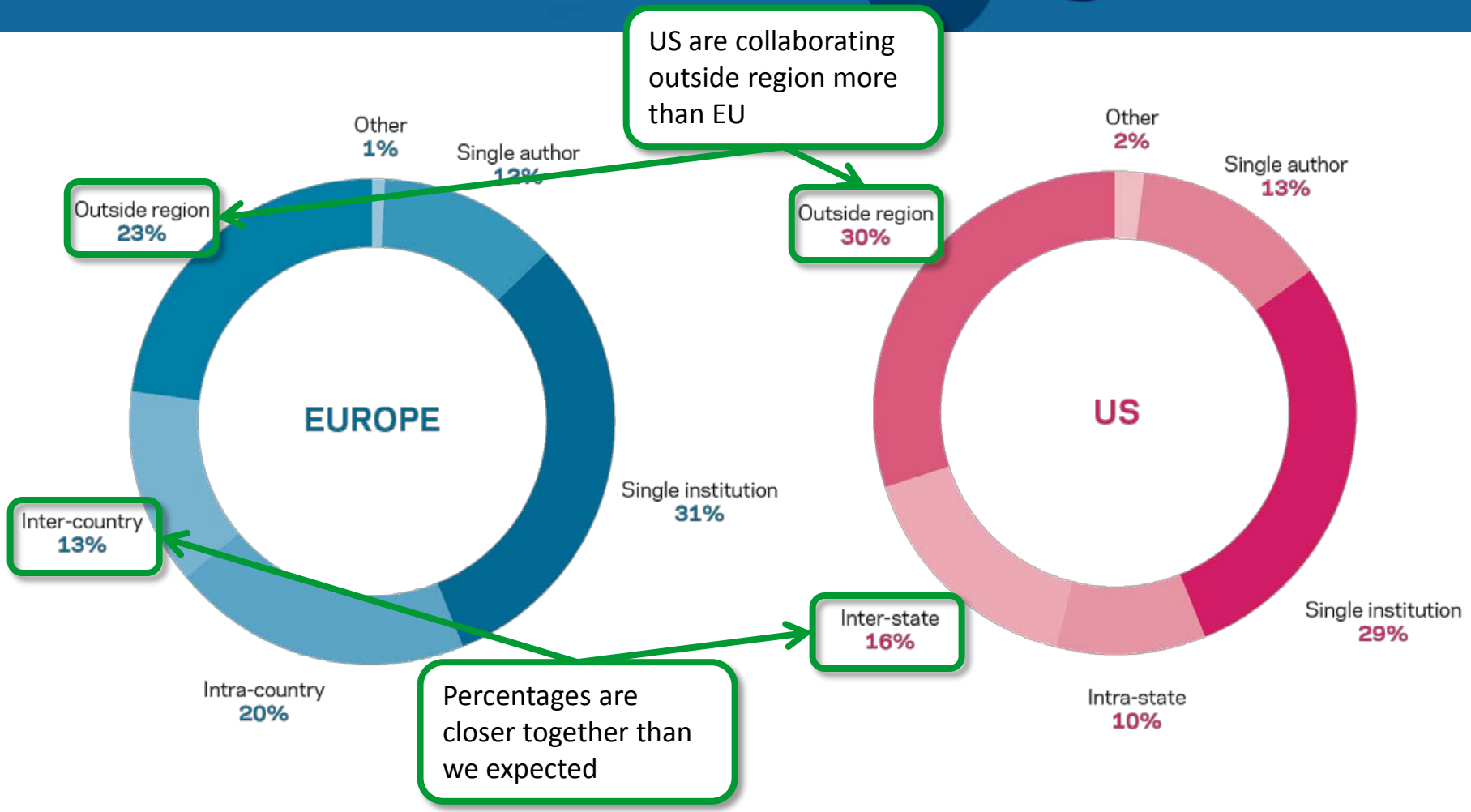


FWCI FOLD INCREASE OVER INSTITUTIONAL COLLABORATION

	Institutional	Intra-country / state	Inter-country / state	Outside region
EUROPE	1	1.17	1.41	1.73
US	1	1.03	1.37	1.49

European and US field-weighted citation impact by collaboration type, 2007-2011, (left) absolute values per collaboration type, (right) fold increase over institutional collaboration

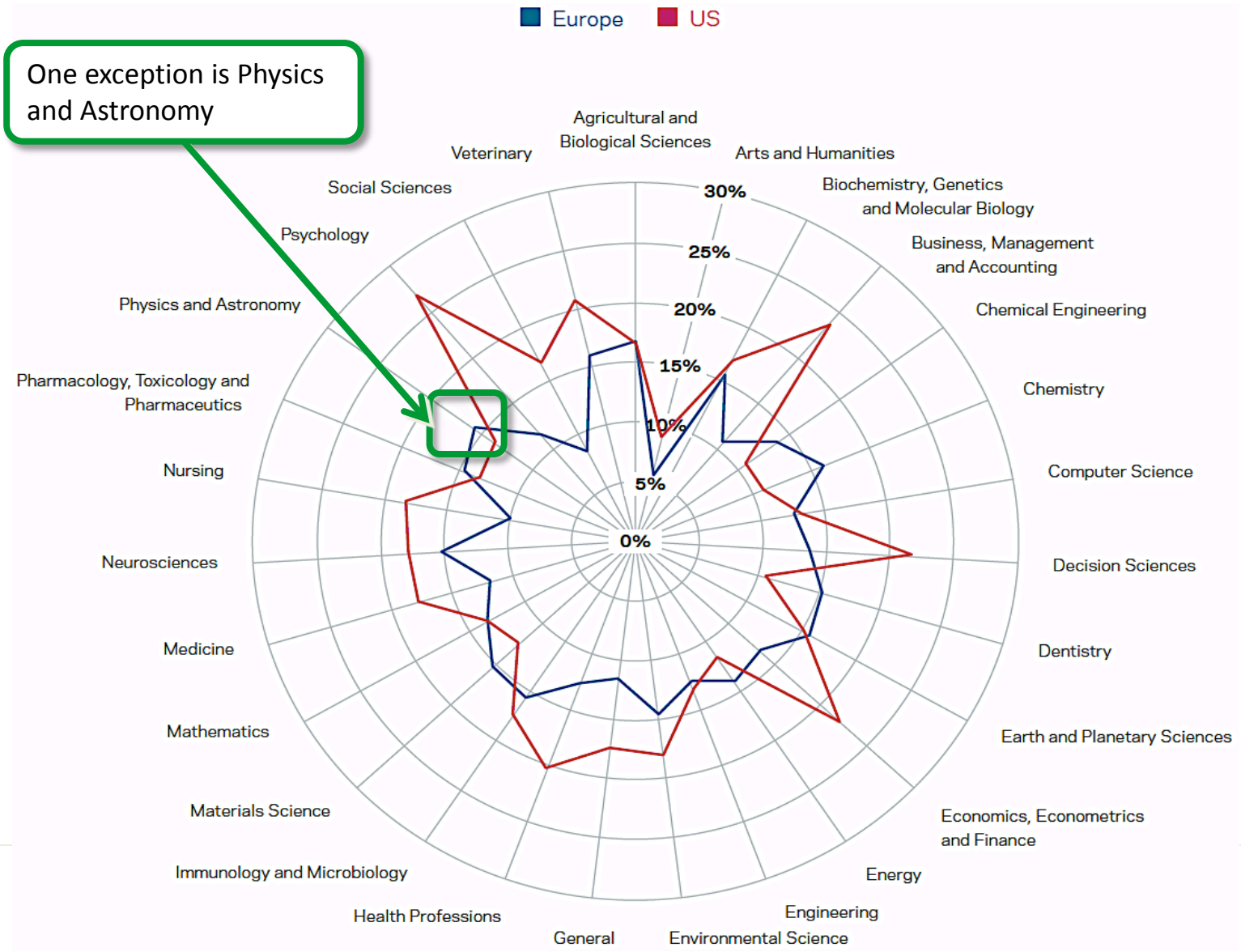
Europe and US show similar inter-country/state collaboration



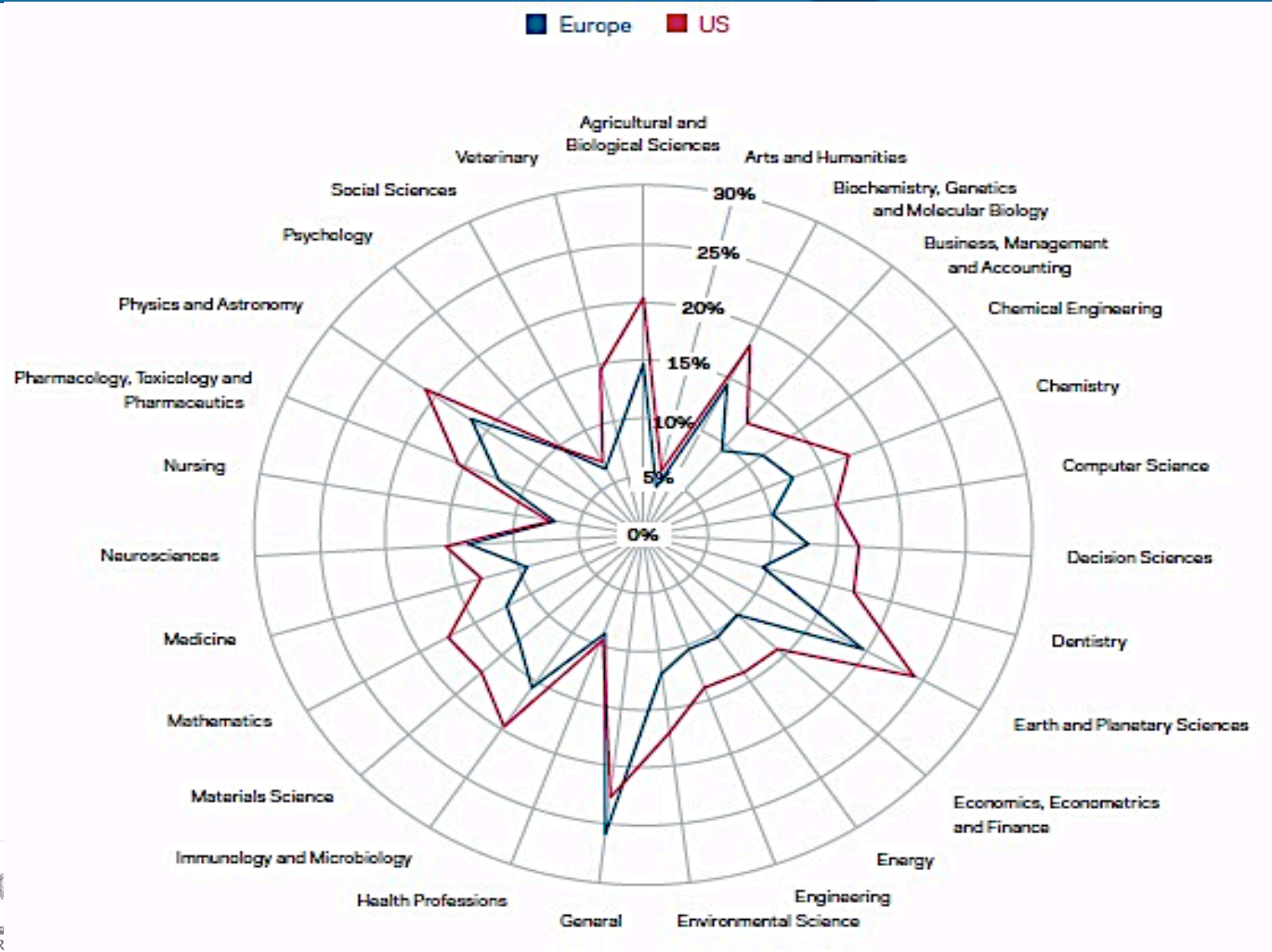
European and US research collaboration patterns, 2011.

Outputs included are articles, reviews and conference papers indexed in sources covered by Scopus, primarily journals, conference proceedings, book series, and trade publications.

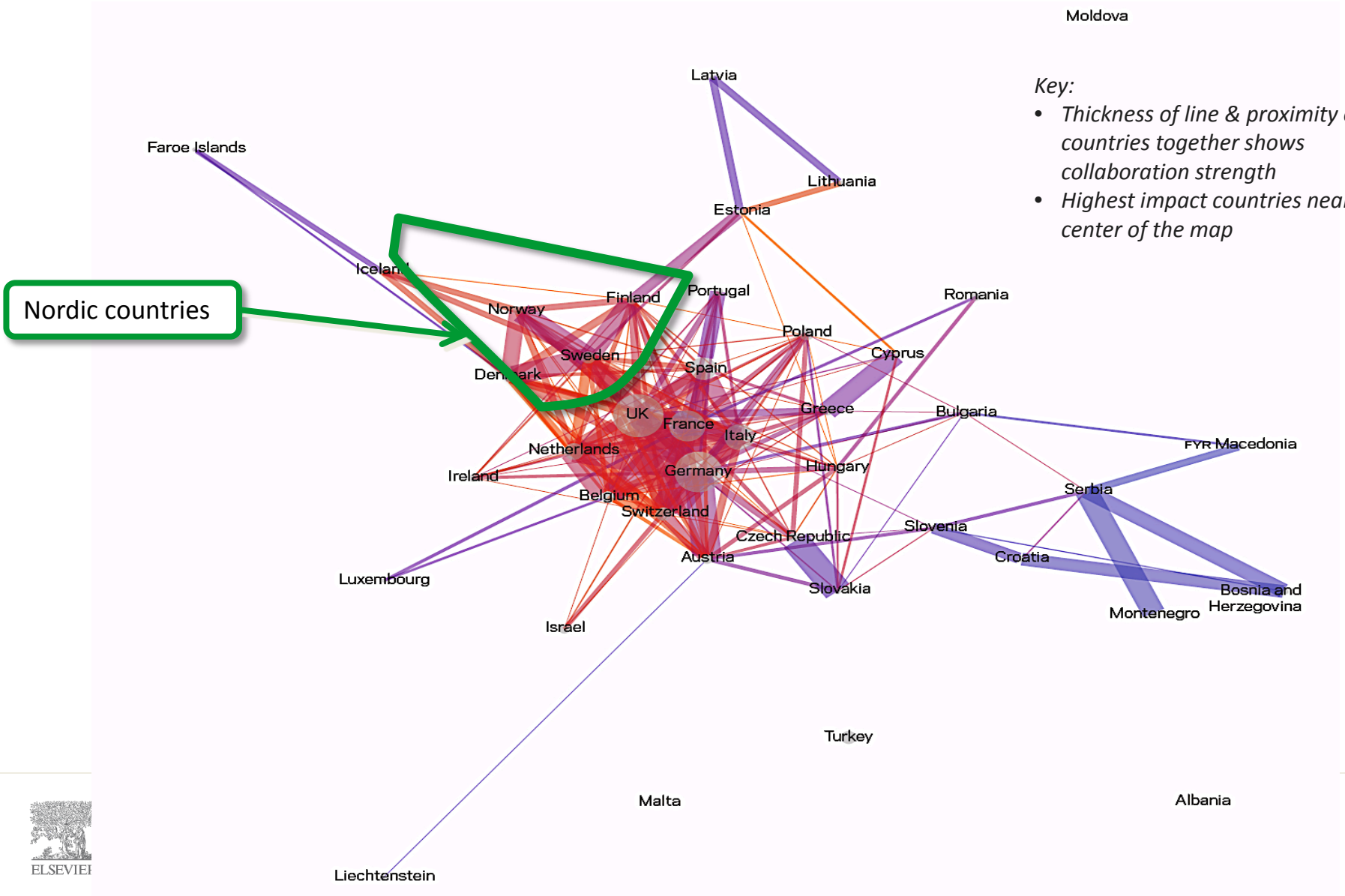
Inter-State Collaboration by Fields



EU and US for Collaboration Rates Outside Their Region



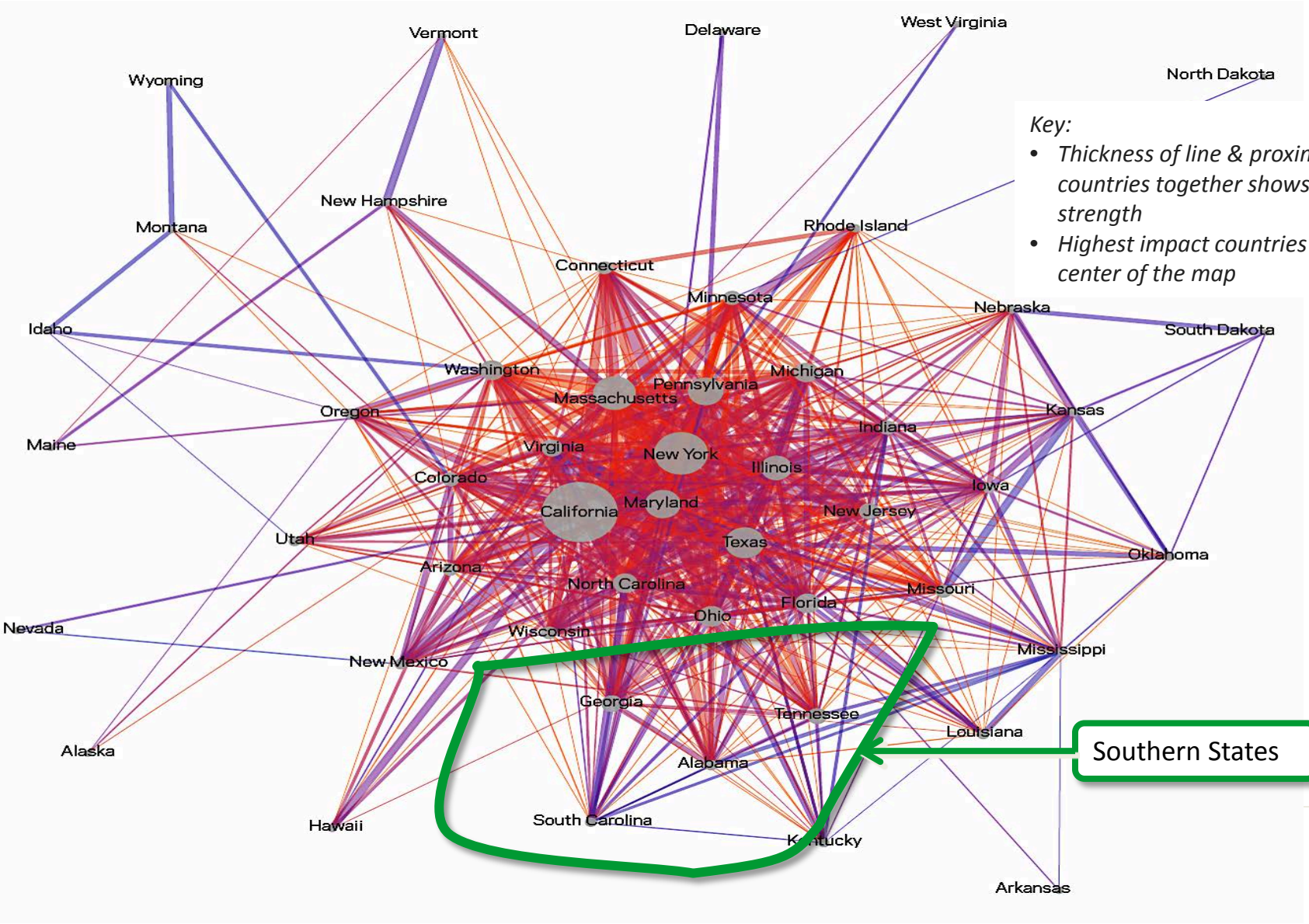
European Collaboration follows Geopolitical, Historical & Linguistic Ties



Key:

- *Thickness of line & proximity of countries together shows collaboration strength*
- *Highest impact countries nearer the center of the map*

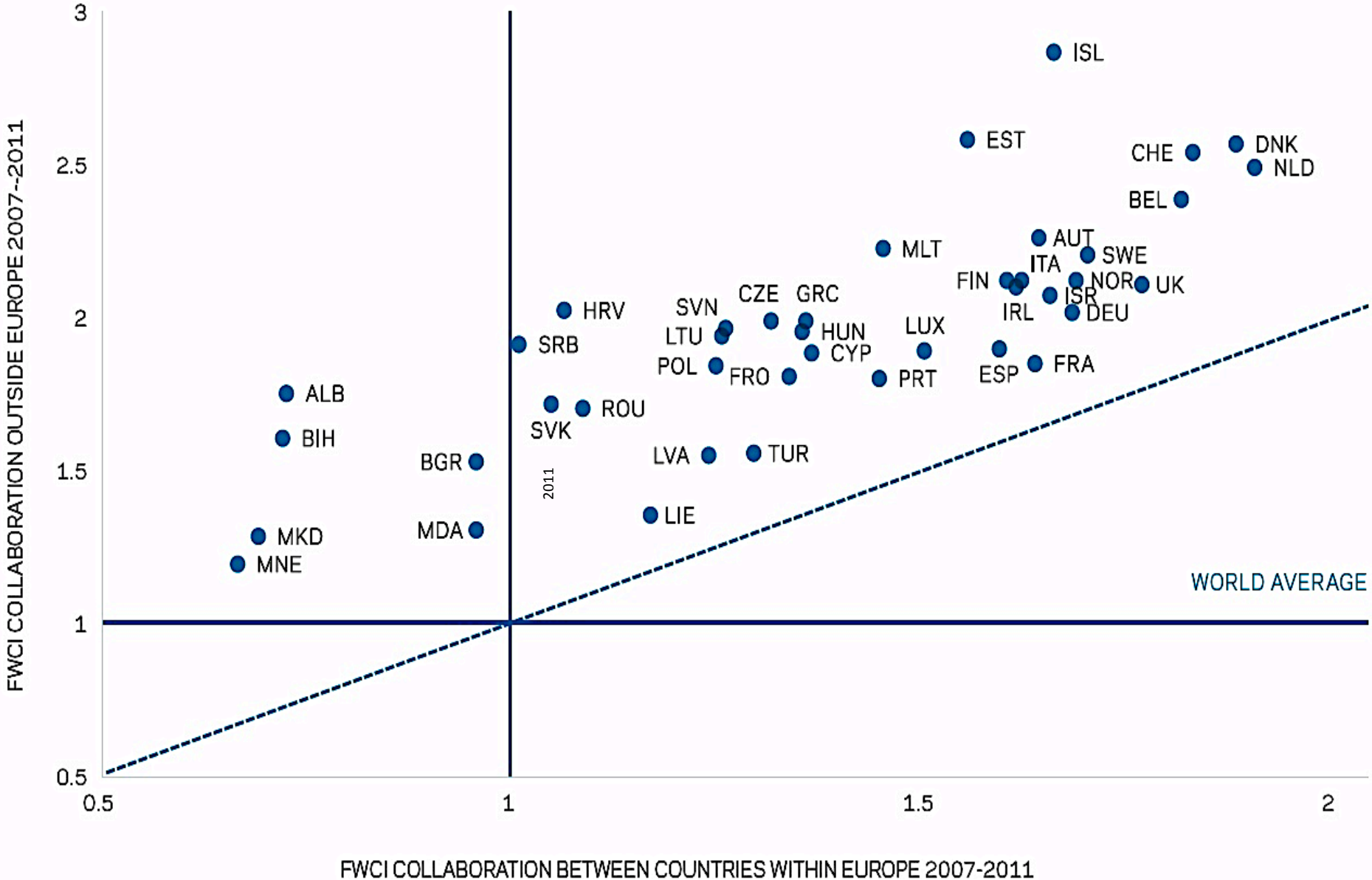
US Collaboration Follows Geopolitical & Historical Ties



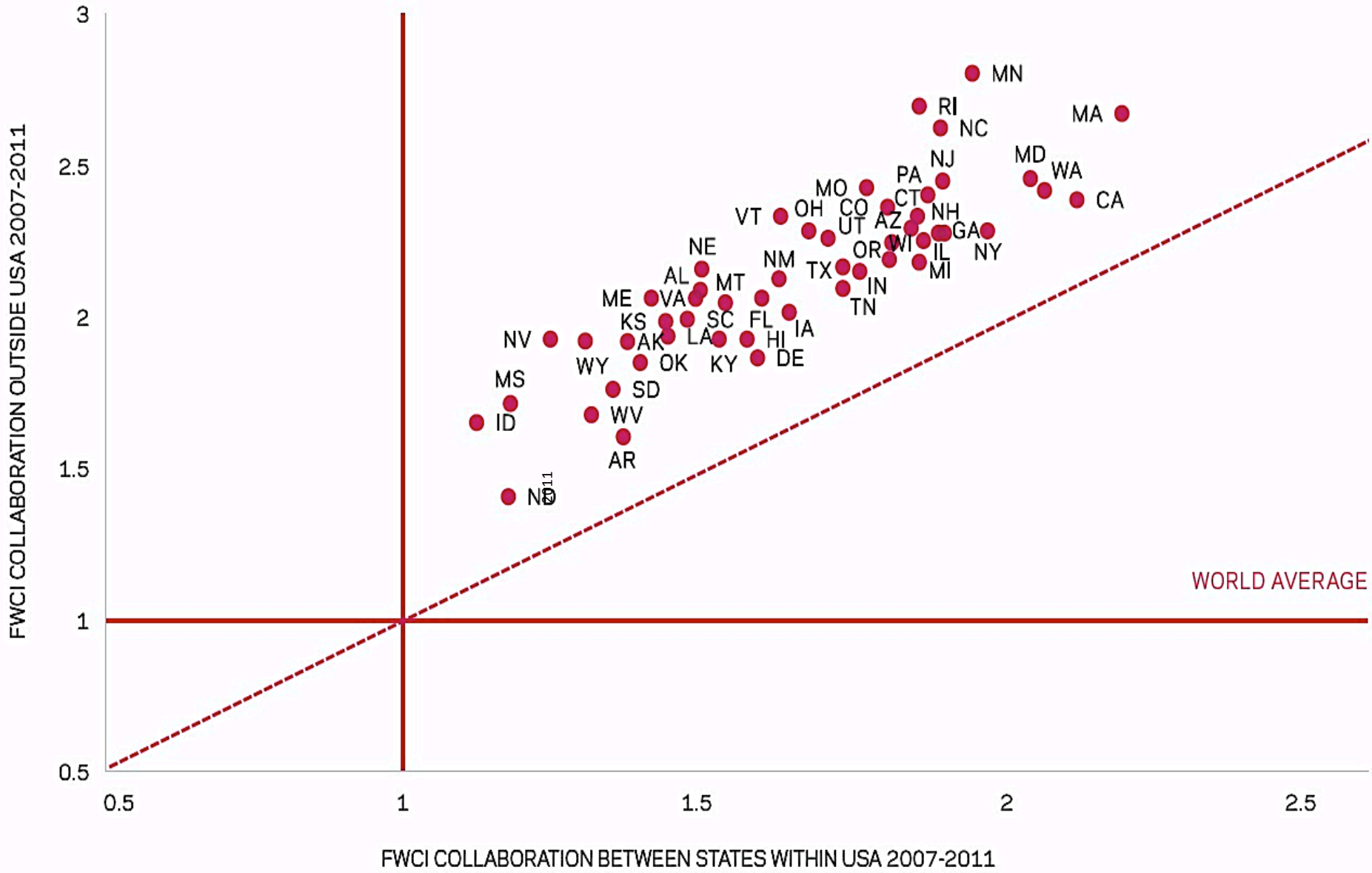
Key:

- *Thickness of line & proximity of countries together shows collaboration strength*
- *Highest impact countries nearer the center of the map*

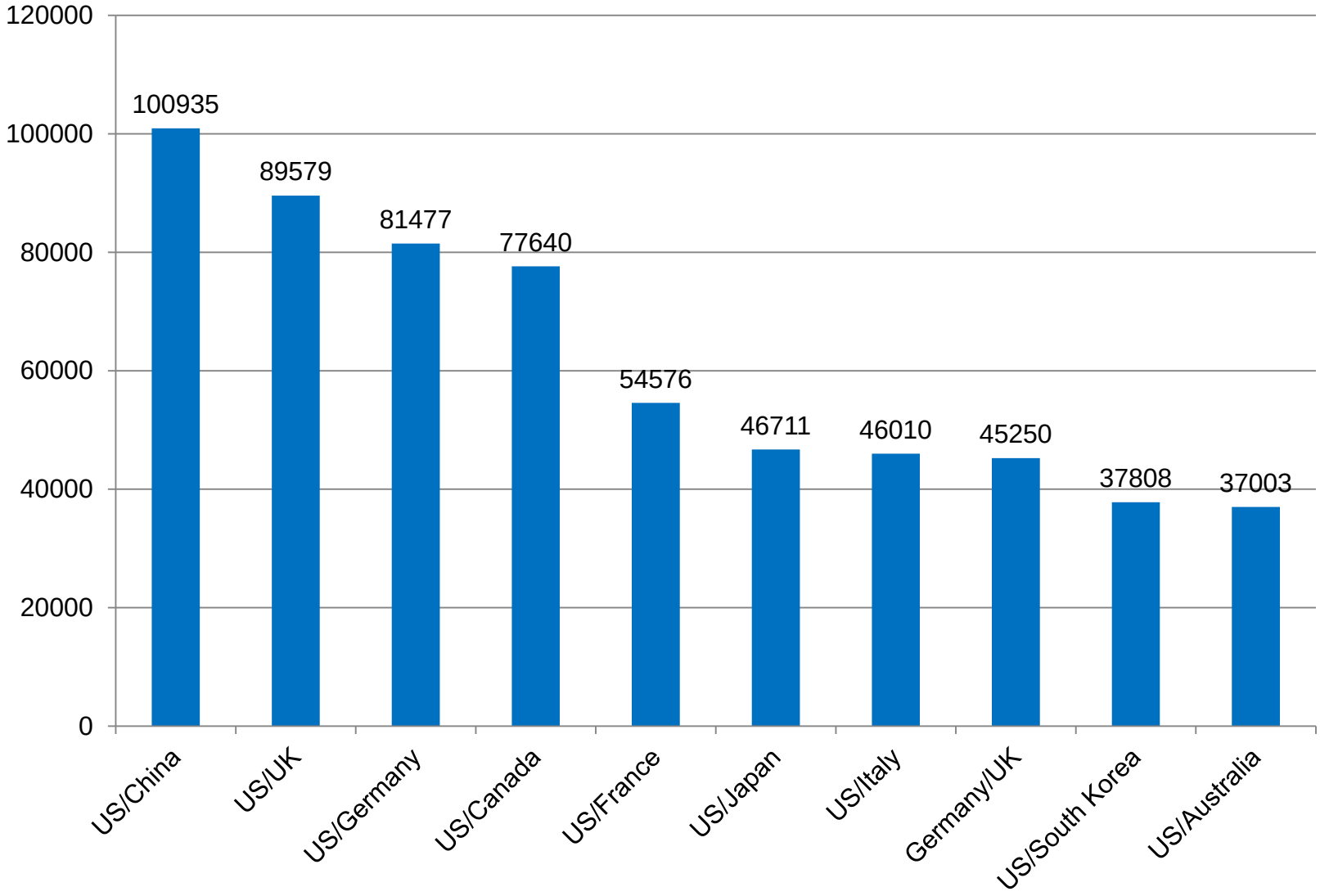
European field-weighted Citation Impact by Collaboration



US field-weighted Citation Impact by Collaboration



Top 10 International Collaborations 2008-2012



Data source: Scopus

Key Points

- ✓ Collaboration rate is increasing.
- ✓ Extended collaborations related to greater impact (better science).
- ✓ Collaborations are not uniform and influence by several factors.