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# Academic Collaboration Sweden - China

Hans Pohl

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Oktober 2018



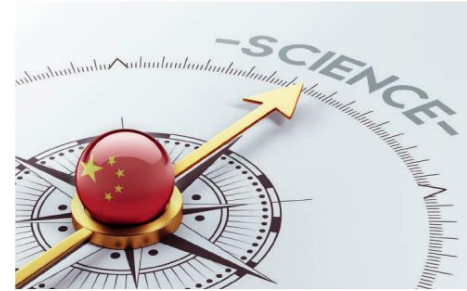


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# Bakgrund och data

- STINT är en s.k. löntagarfondsstiftelse vars ändamål är att internationalisera svensk högre utbildning och forskning
- Vårt största bilaterala program är med Kina
- Vi bedriver sedan nyligen särskilda aktiviteter för att utveckla nyttan av akademiska samarbeten med Kina.
  
- Data är till största delen från Scopus (Elsevier), den bredaste publikationsdatabasen
- Publikationsanalysen gjordes våren 2018.



Academic collaboration:  
Sweden–China



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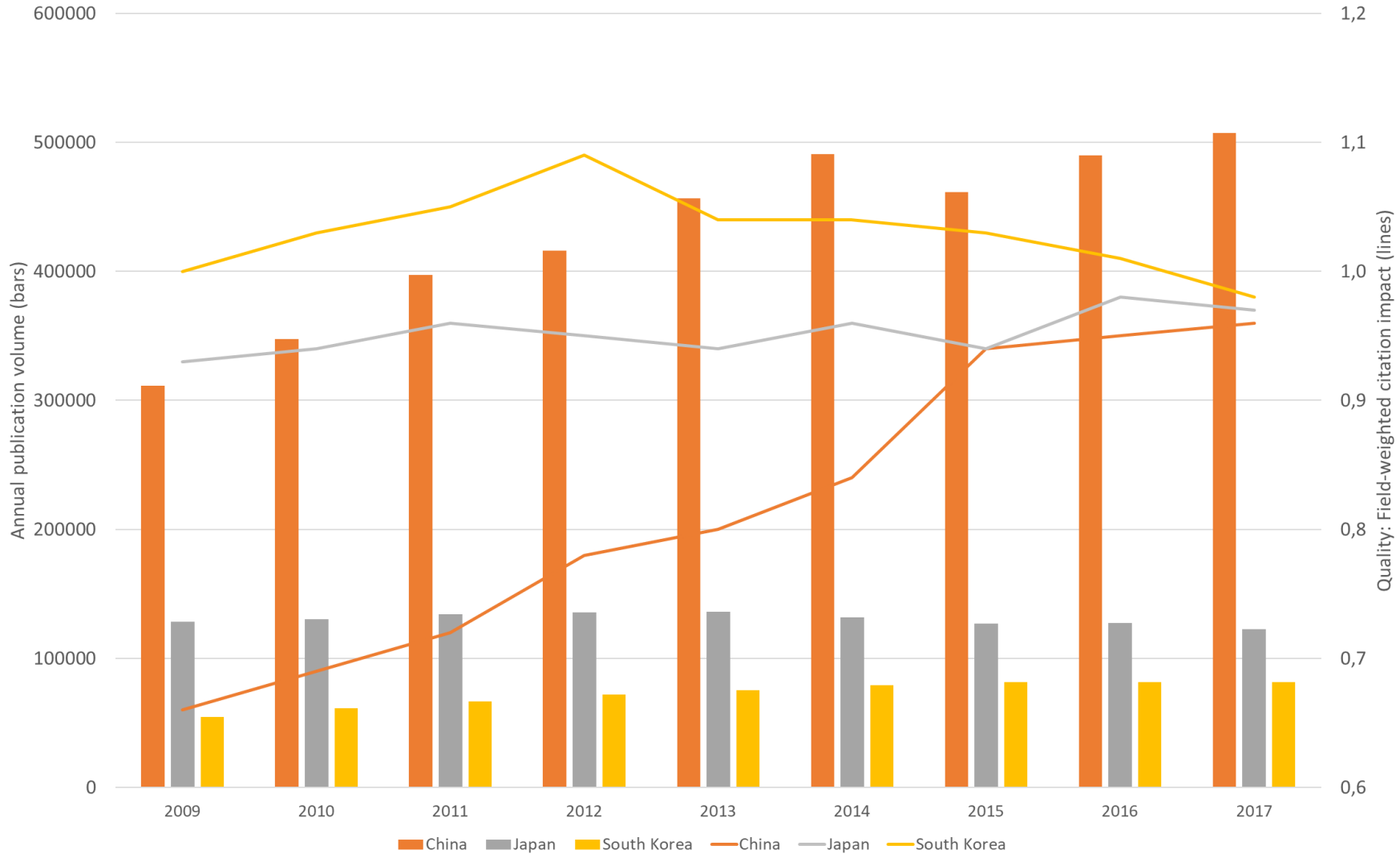
# Varför Kina?



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### Volume and citation impact development

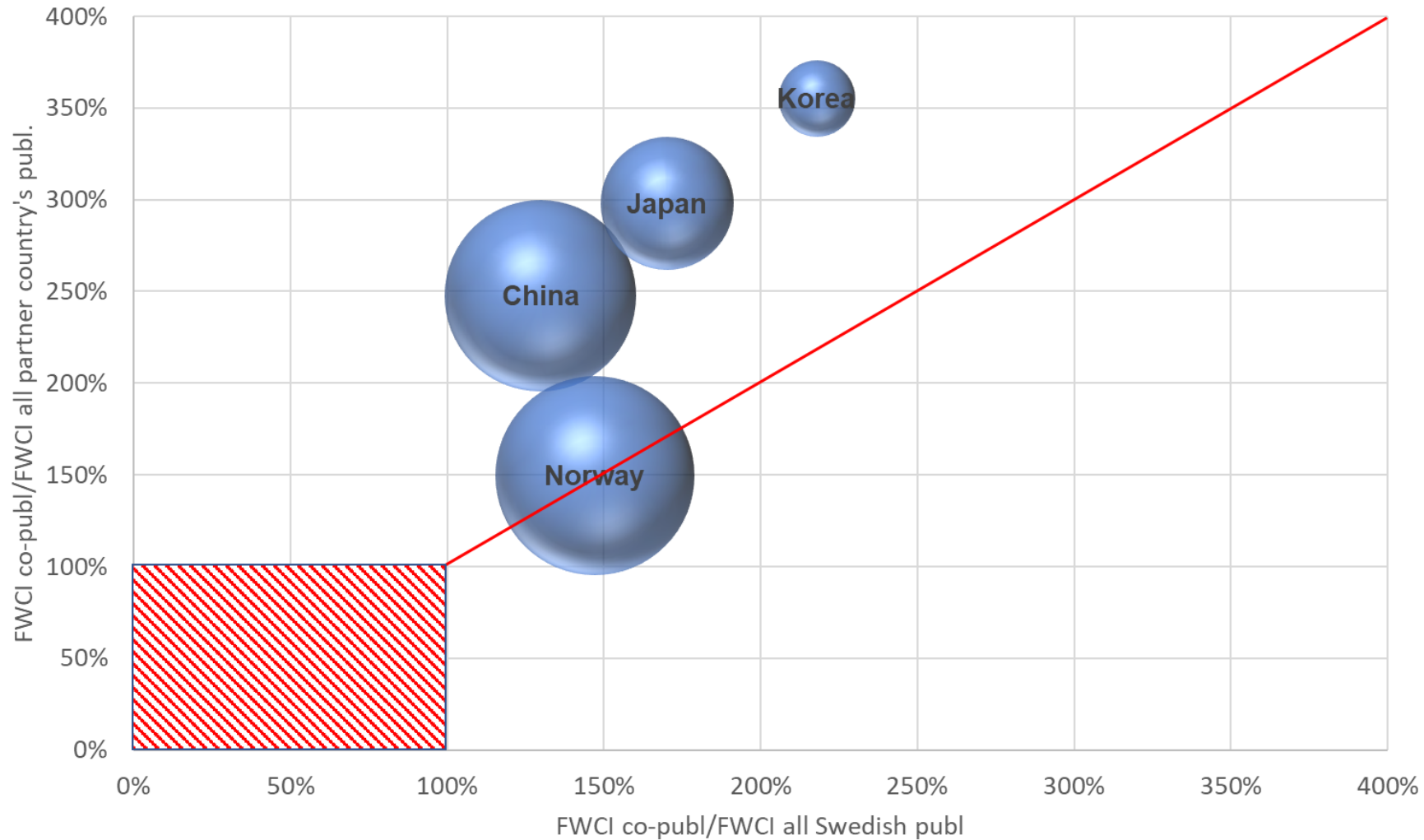




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### Bubble size: Co-publications with Sweden (<100 authors)





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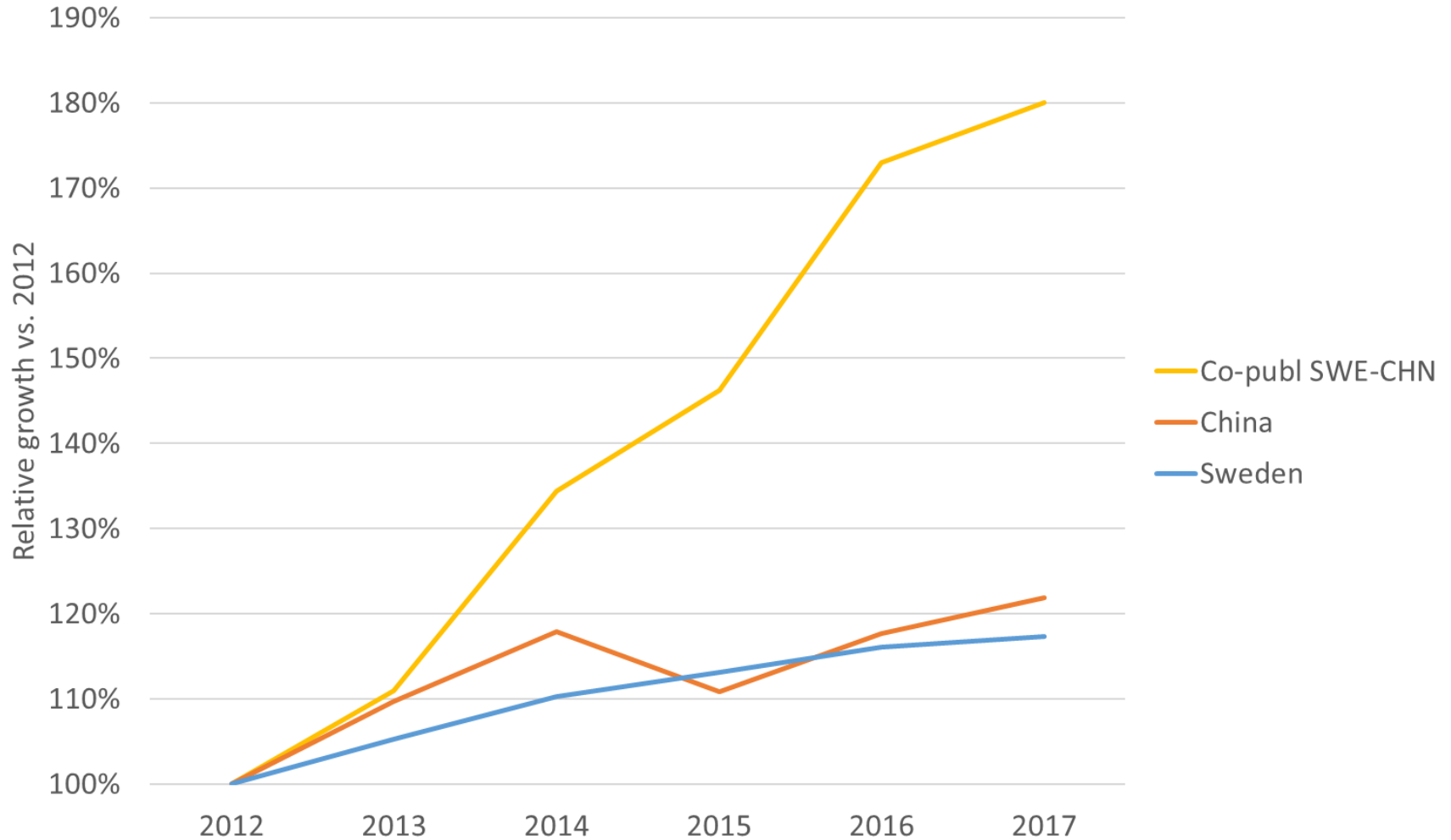
# Sampublikationer Sverige - Kina



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## Publication volume growth

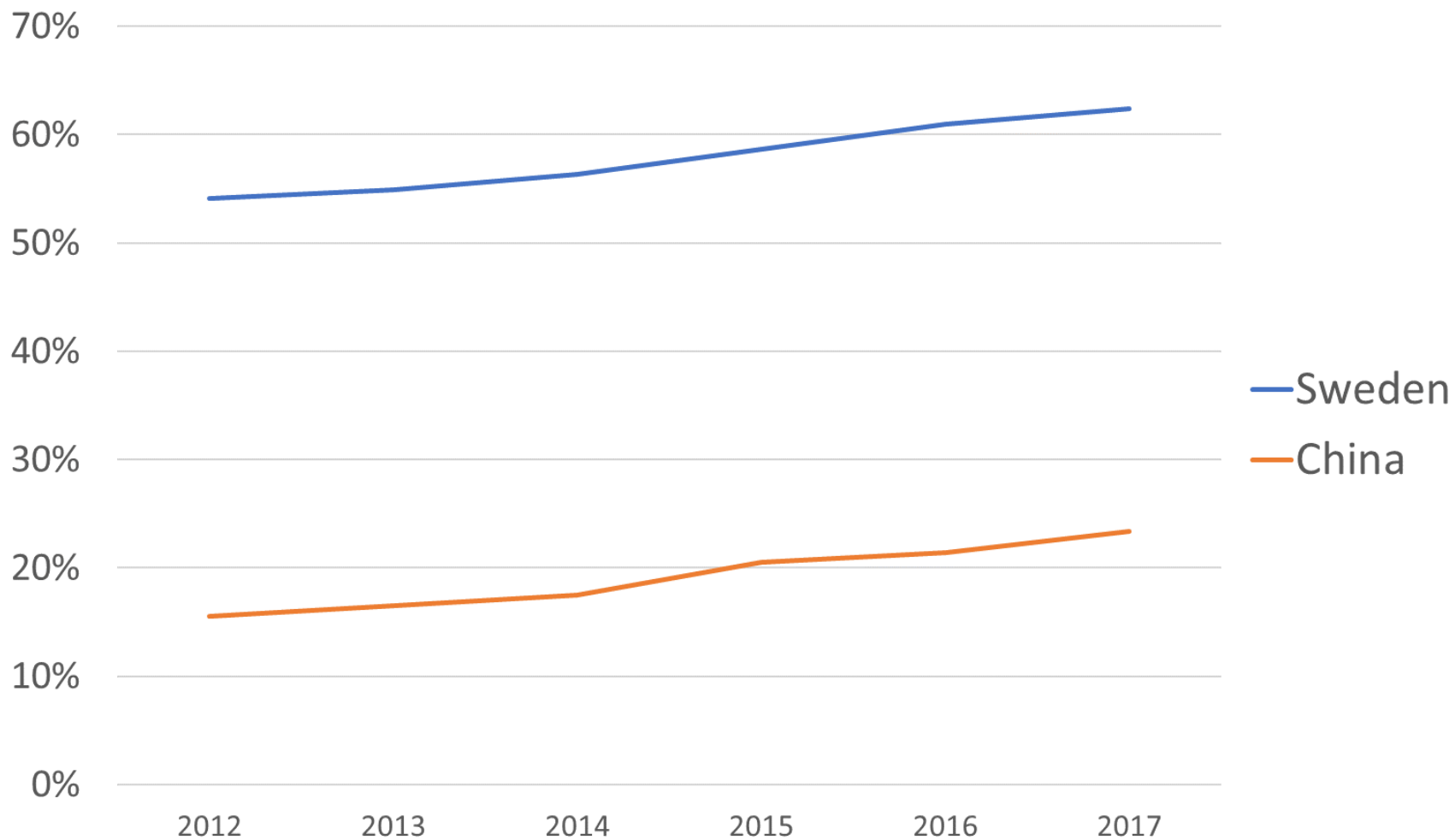




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## Share of international co-publications



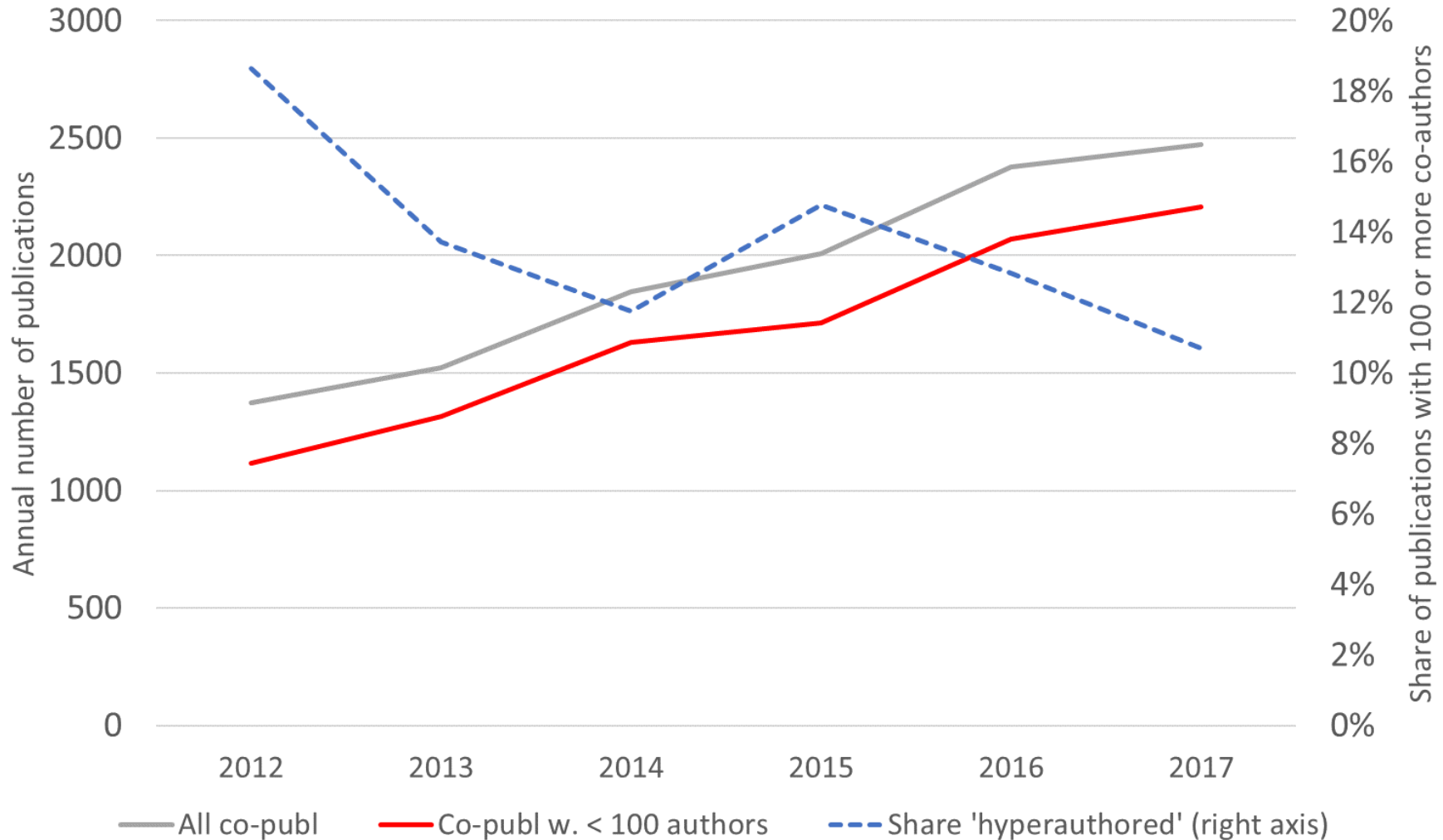




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## Co-publications Sweden - China

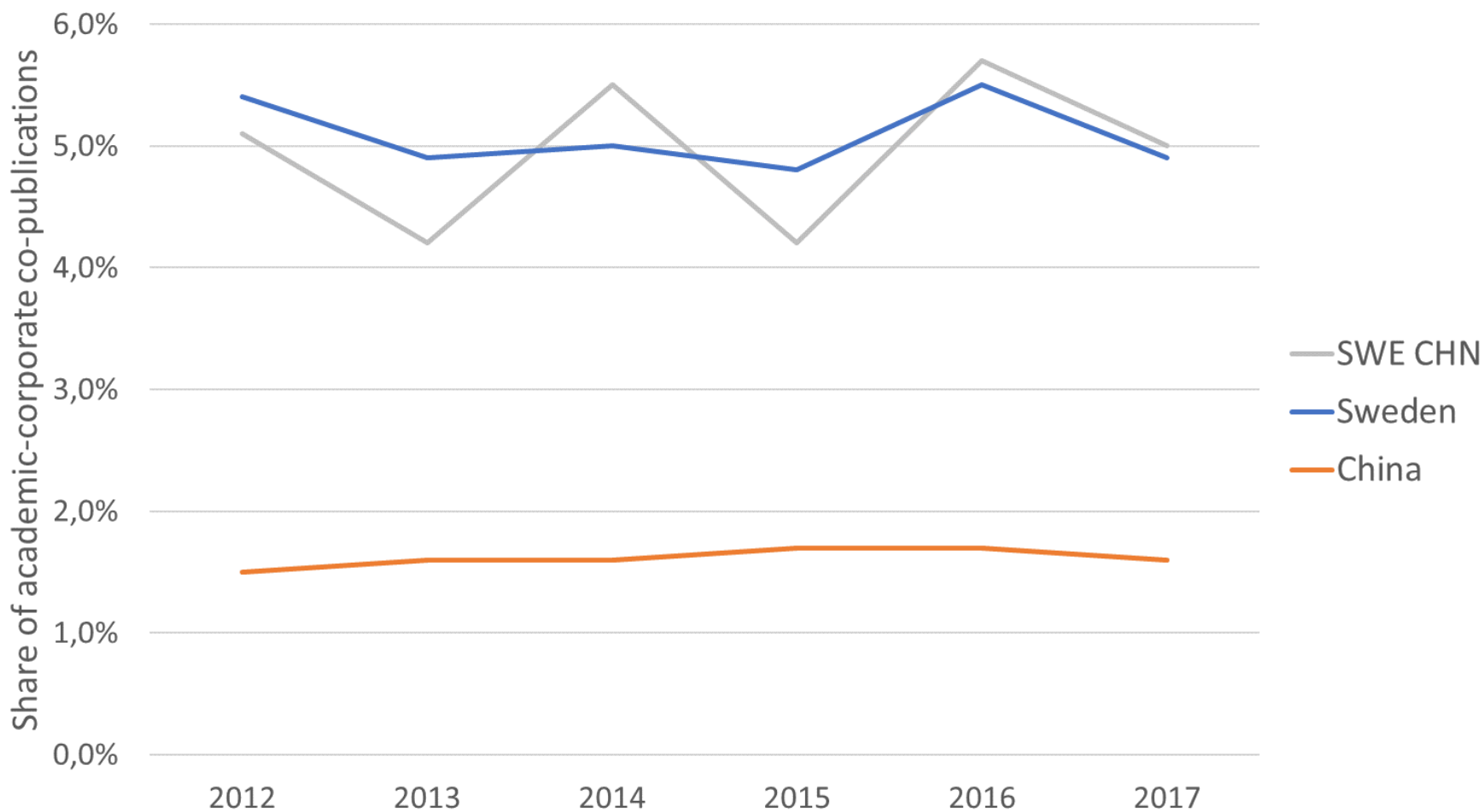




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## Academic-corporate co-publications in Sweden- China co-publications (<100 authors)



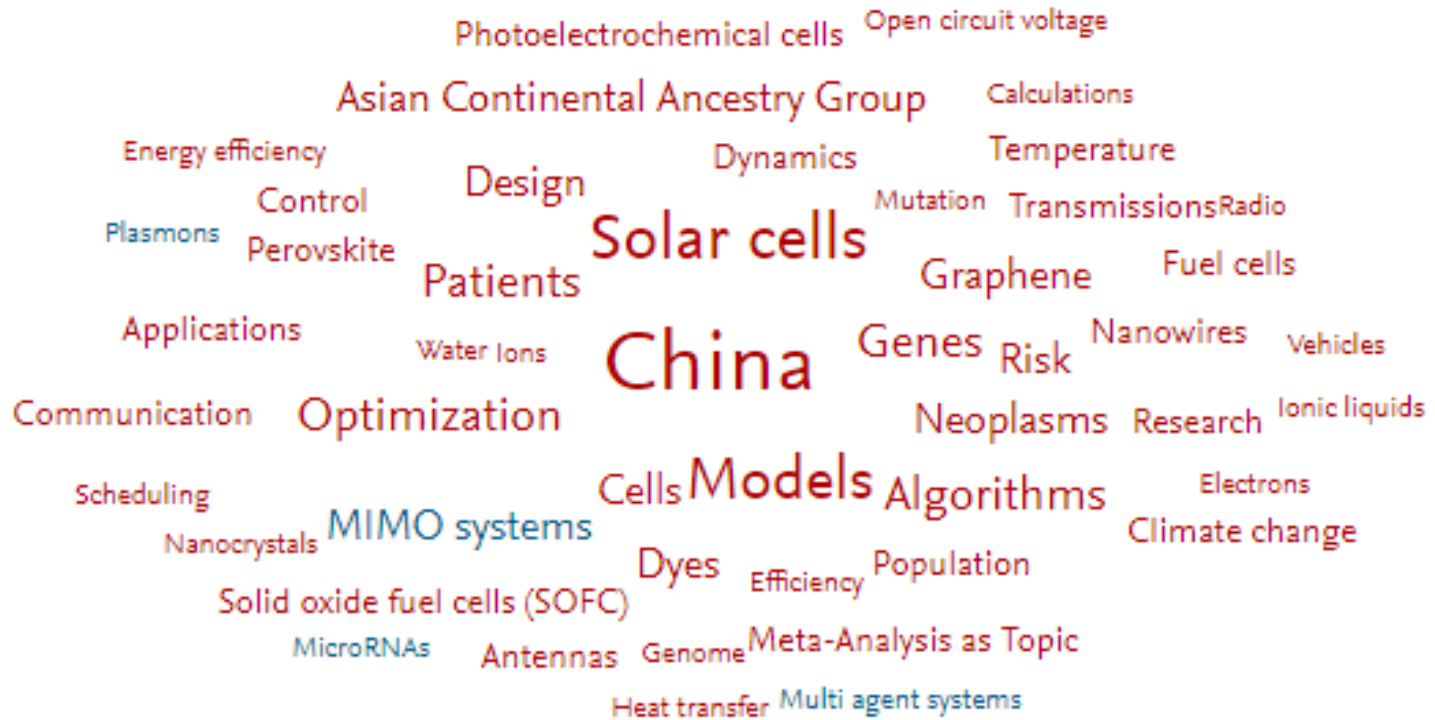


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Co-publications Sweden - China

# Fingerprint of co-publ. <100 authors



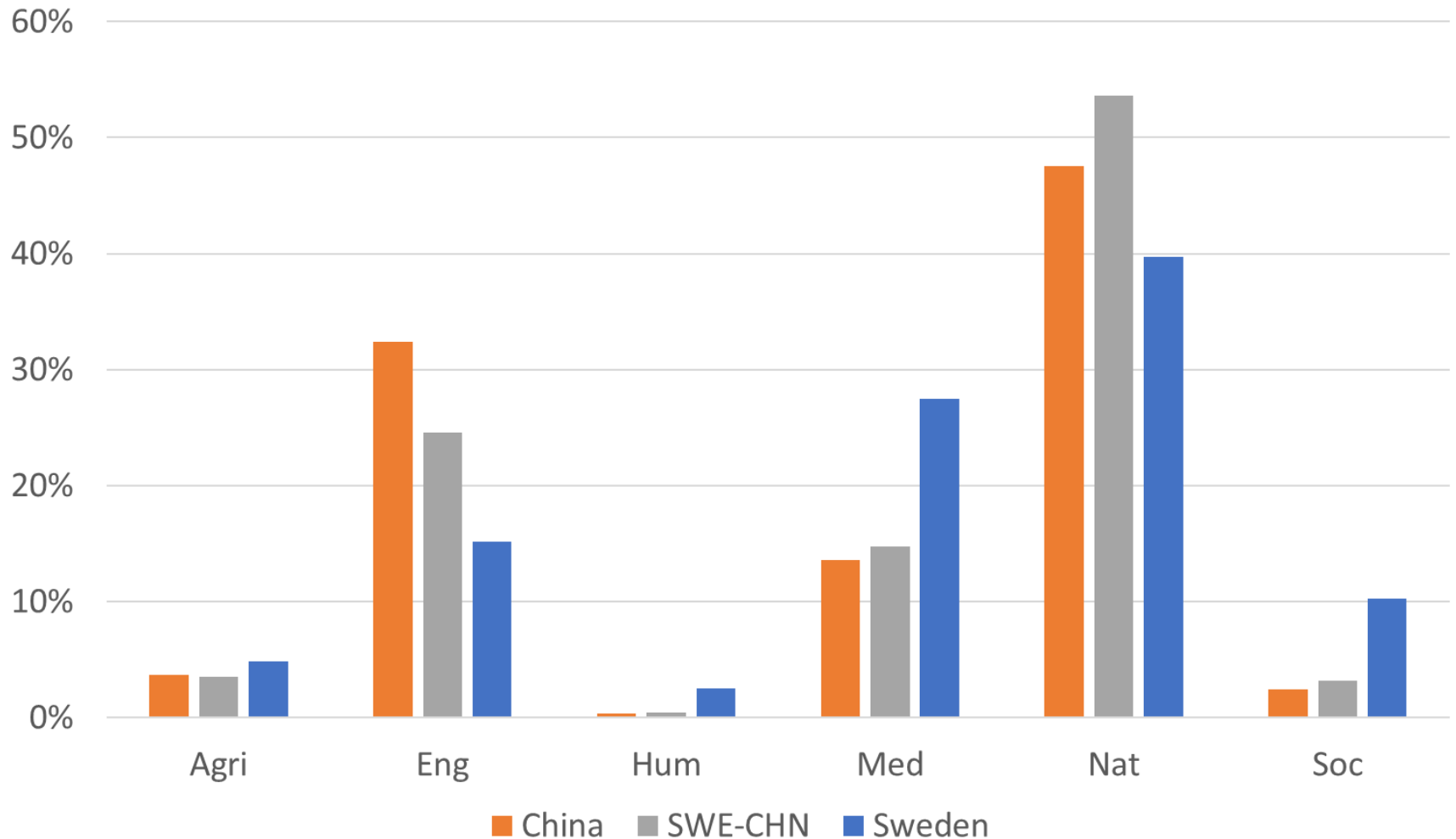
AAA relevance of keyphrase | declining growing (2012-2016)



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## Scientific profiles 2012-2017





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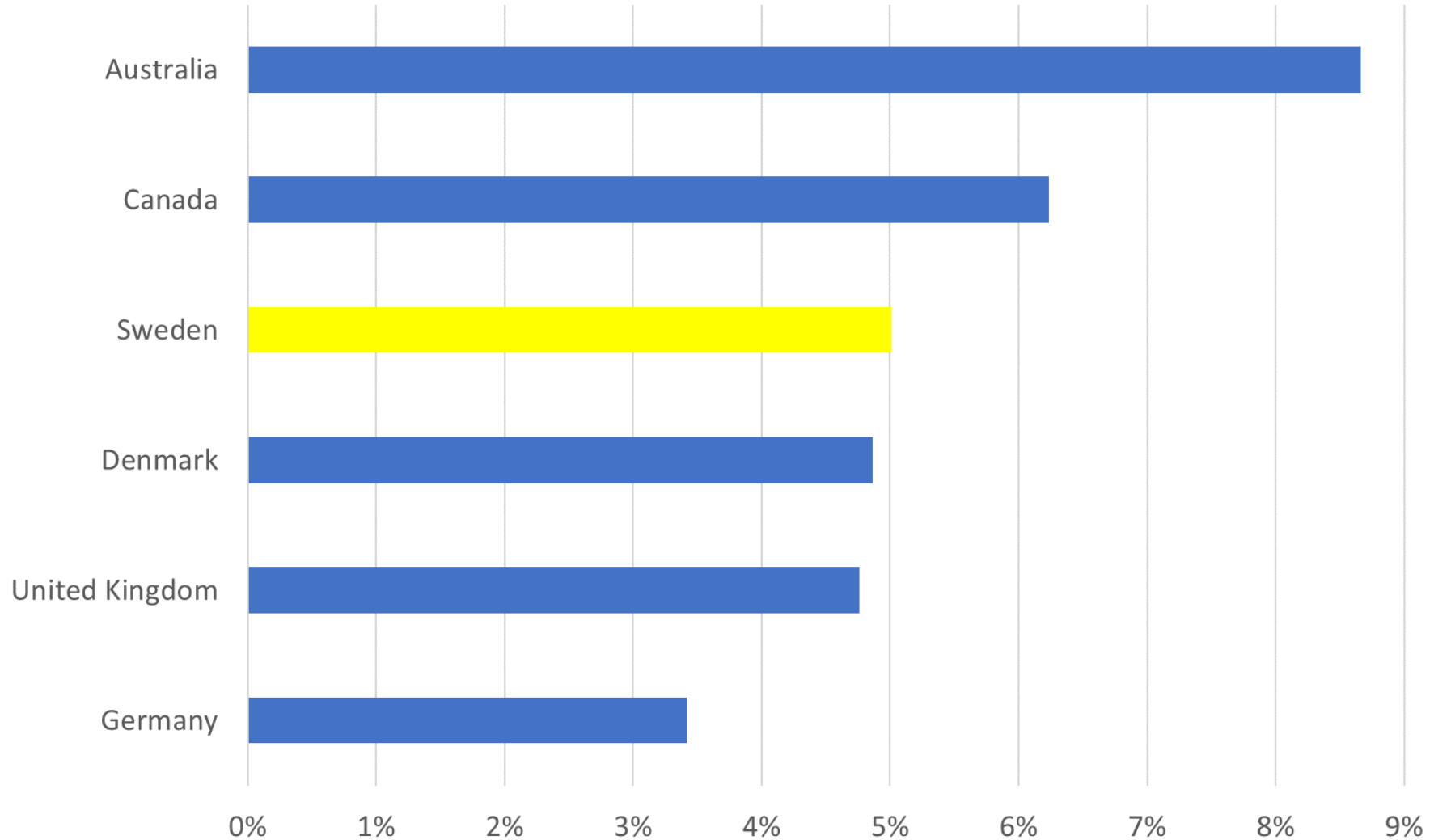
# Internationell jämförelse



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## Co-publications with China - share of total publication volume

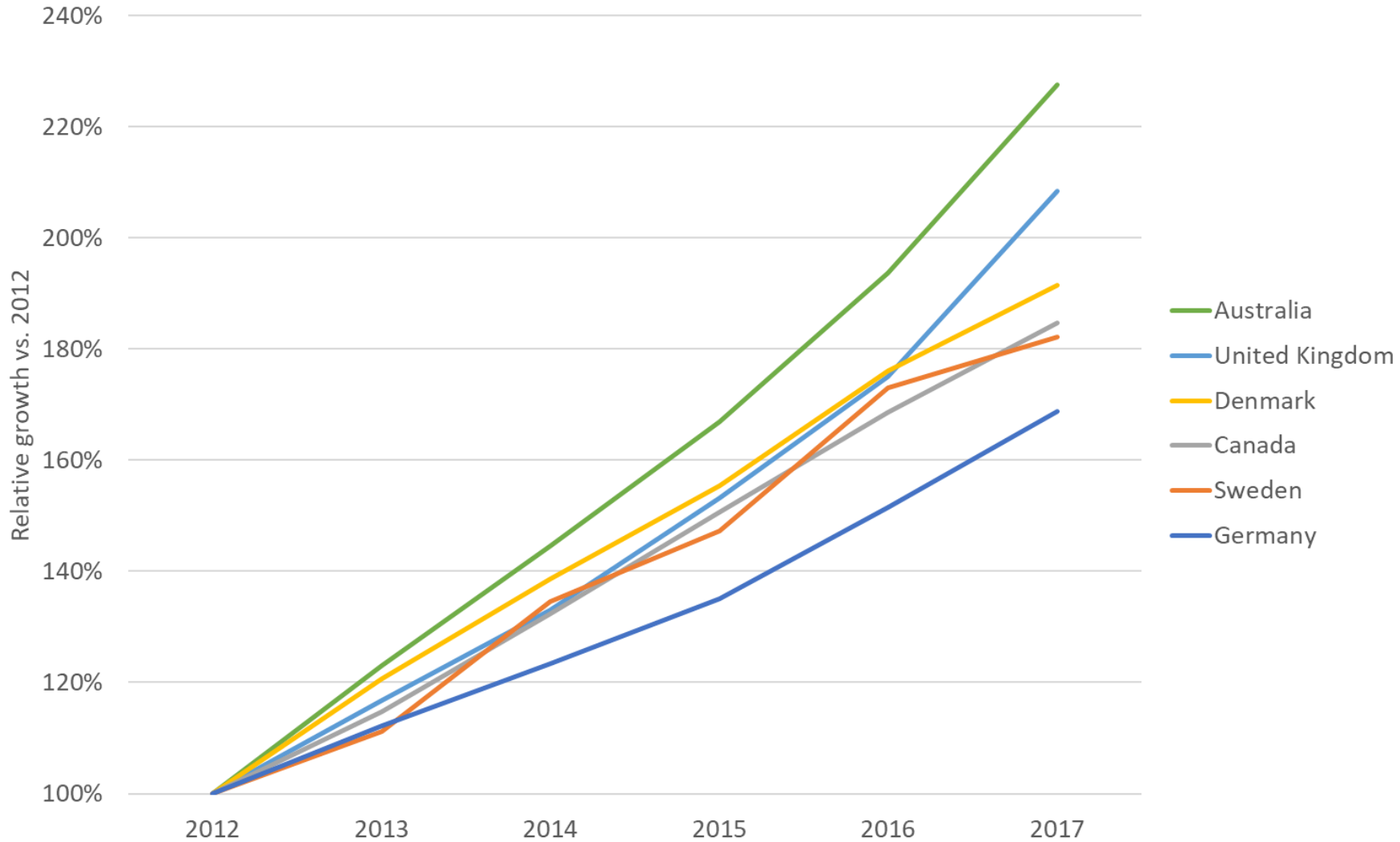




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## Relative growth in co-publications with China





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# Vilka svenska lärosäten samarbetar mest med Kina?

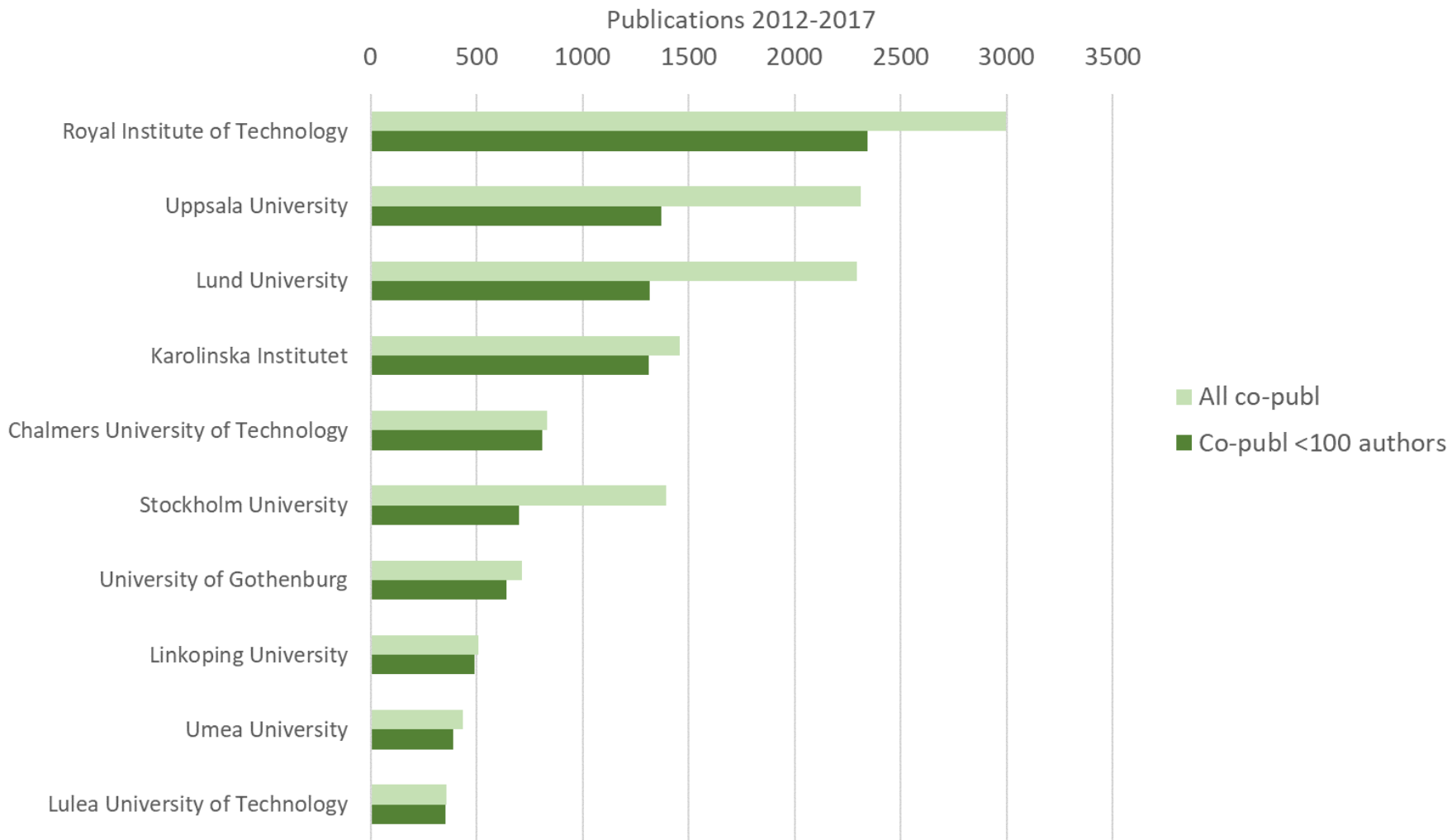




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## Co-publications with China - Top 10 HEIs in Sweden

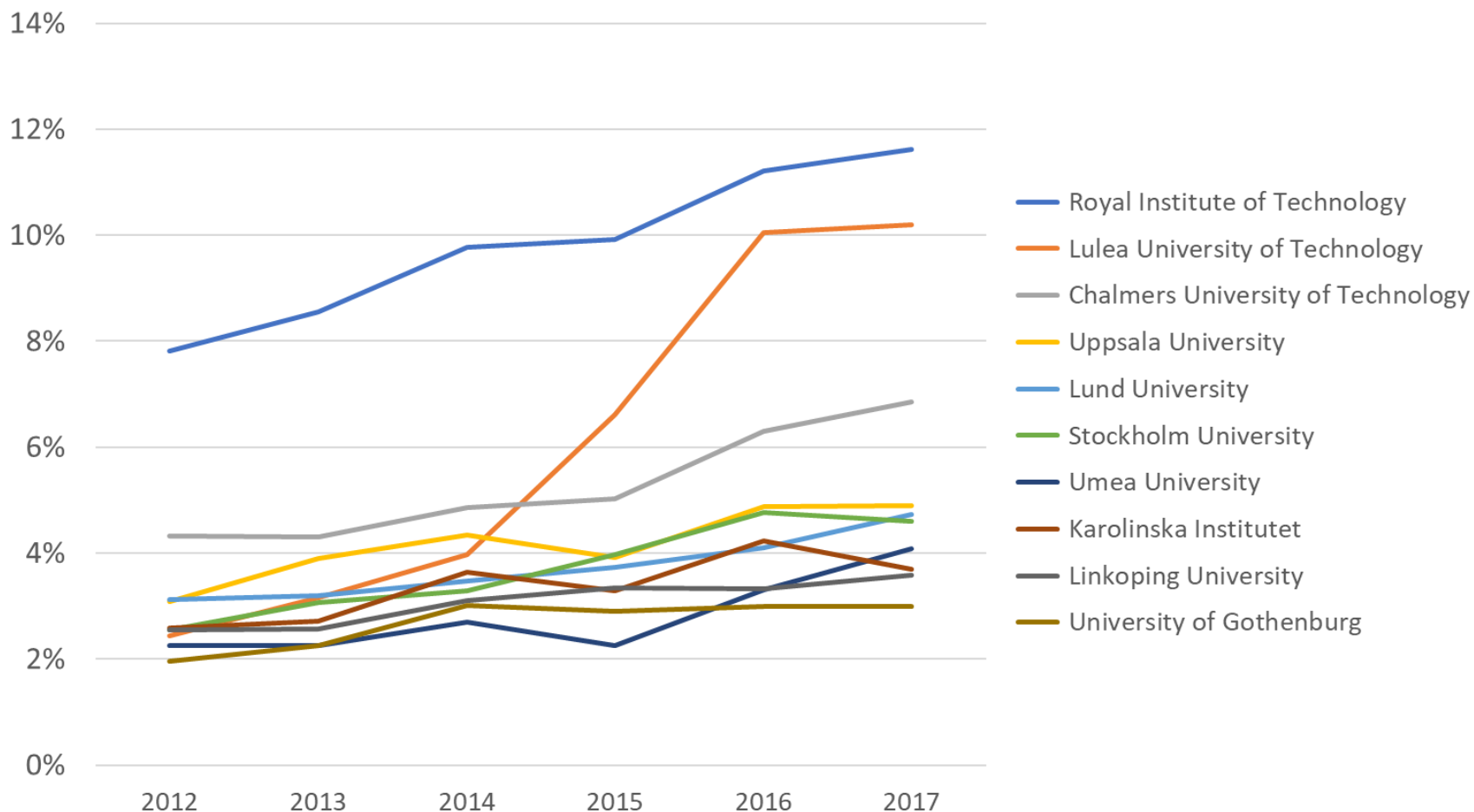




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## Co-publications with China (<100 authors) in relation to all publications at the HEI





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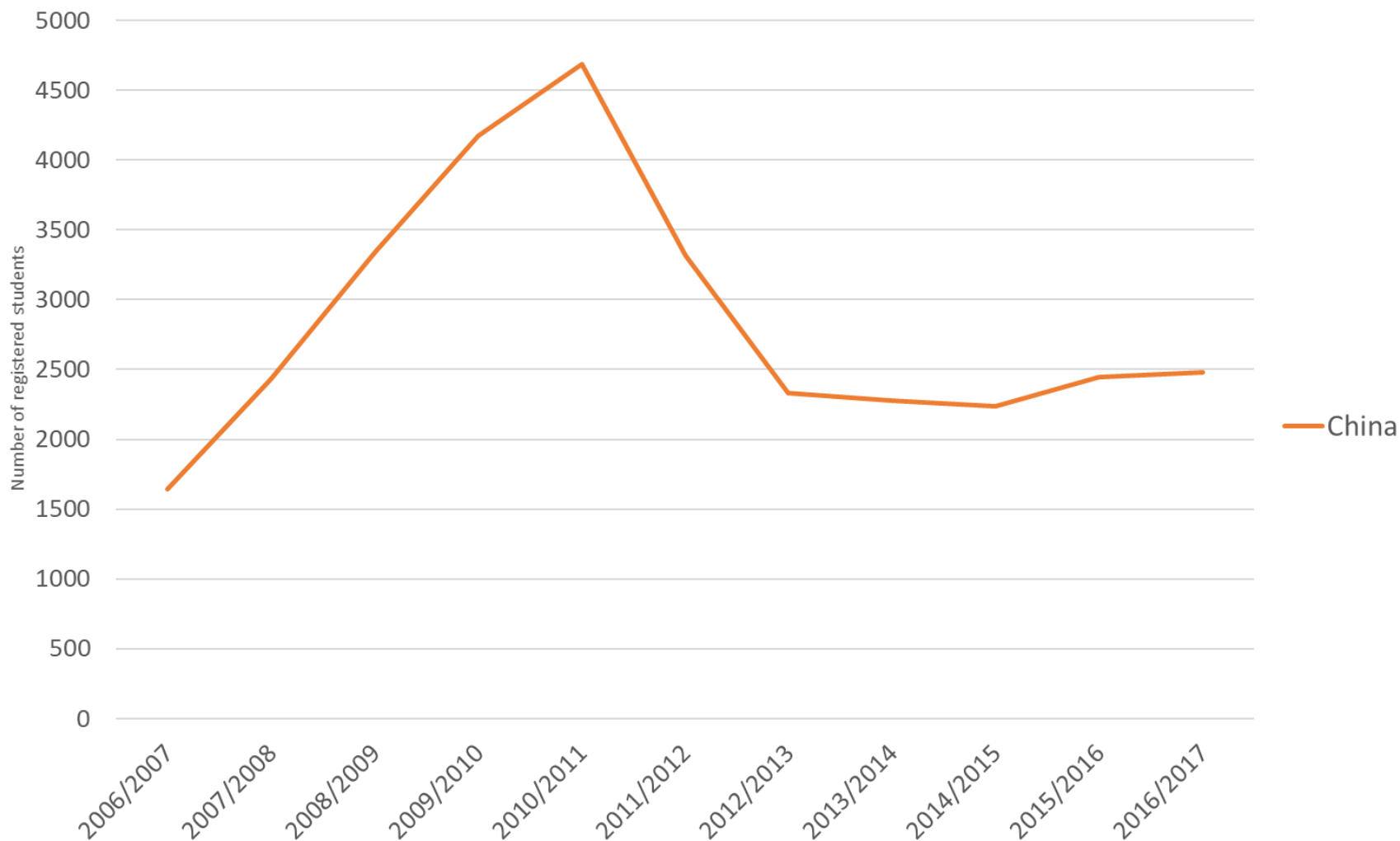
# Studenter från Kina



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## Registered students in Sweden

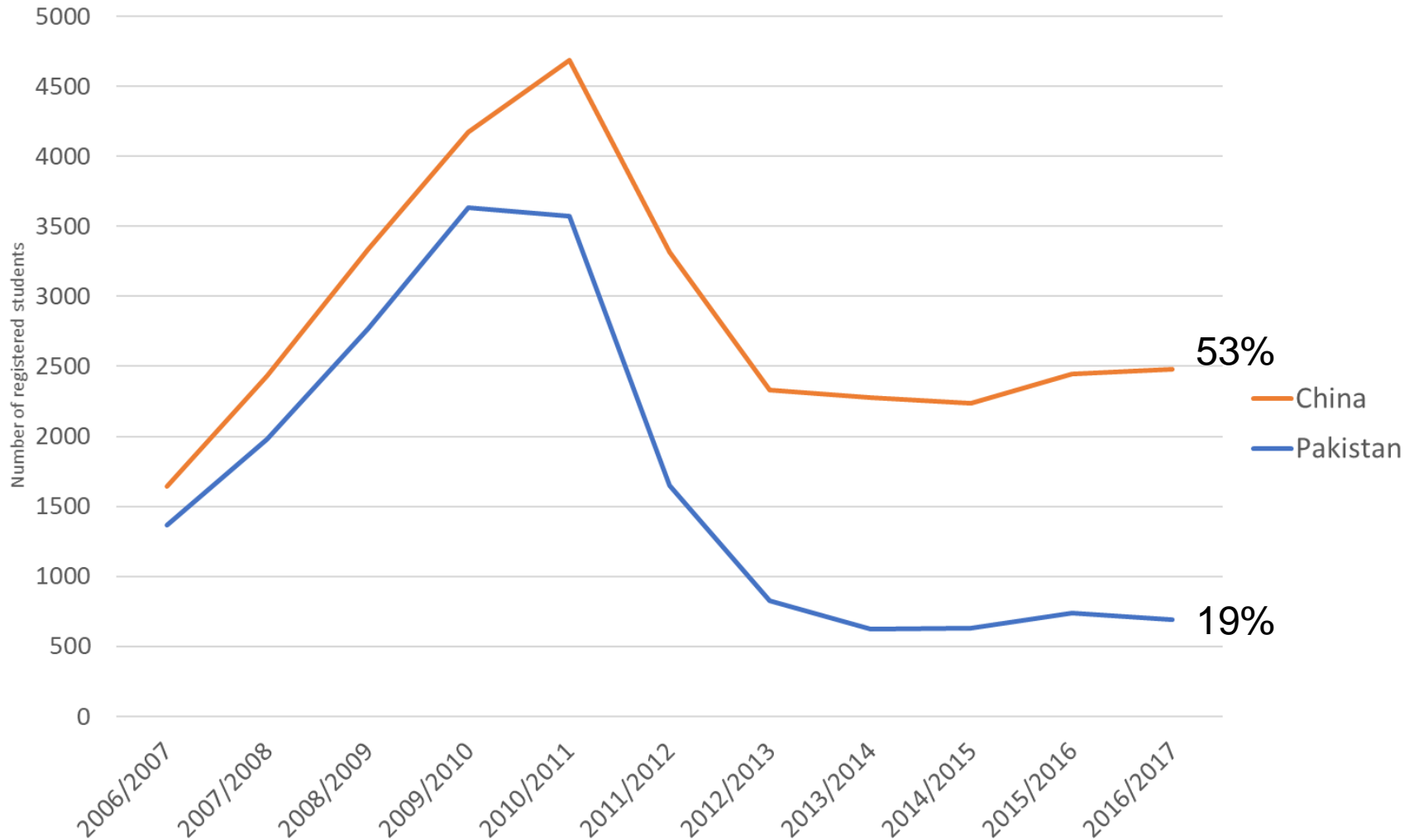




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## Registered students in Sweden

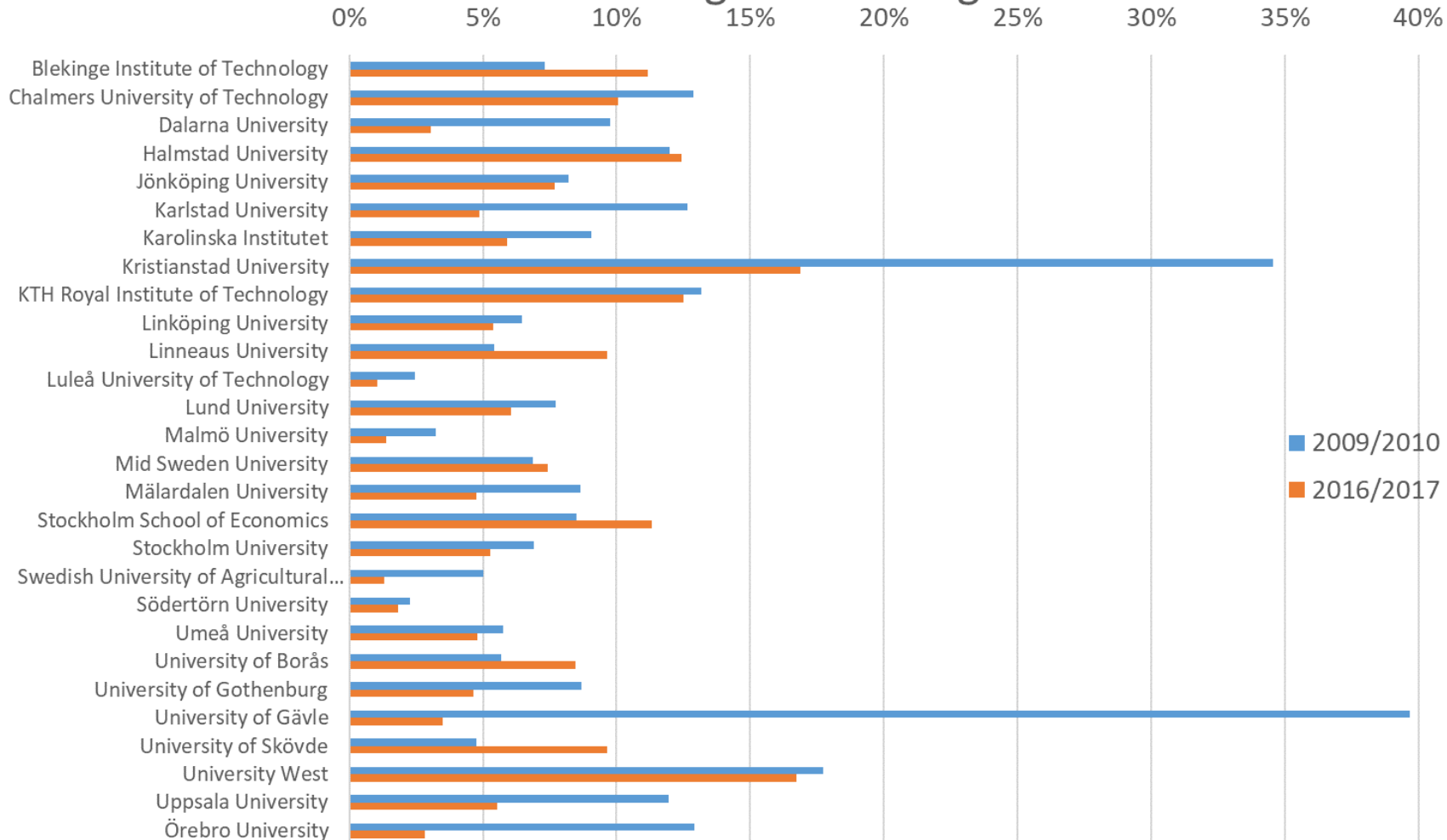




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## Share of Chinese among all incoming students





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# Slutsatser och rekommendationer

Forskningsarbetet mellan Sverige och Kina:

- Växer och ger bra citeringsgenomsnitt
- Har en tyngdpunkt i natur- och teknikvetenskaperna
- Handlar mer om Kina än om Sverige.

Fortsätt att utveckla samarbetet, exempelvis genom att:

- Bredda deltagandet (lärosäten såväl som vetenskapliga discipliner)
- Studera/säkerställ att studentmobilitet bidrar
- Öka bidraget till innovation.



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# Research Collaboration Sweden - China

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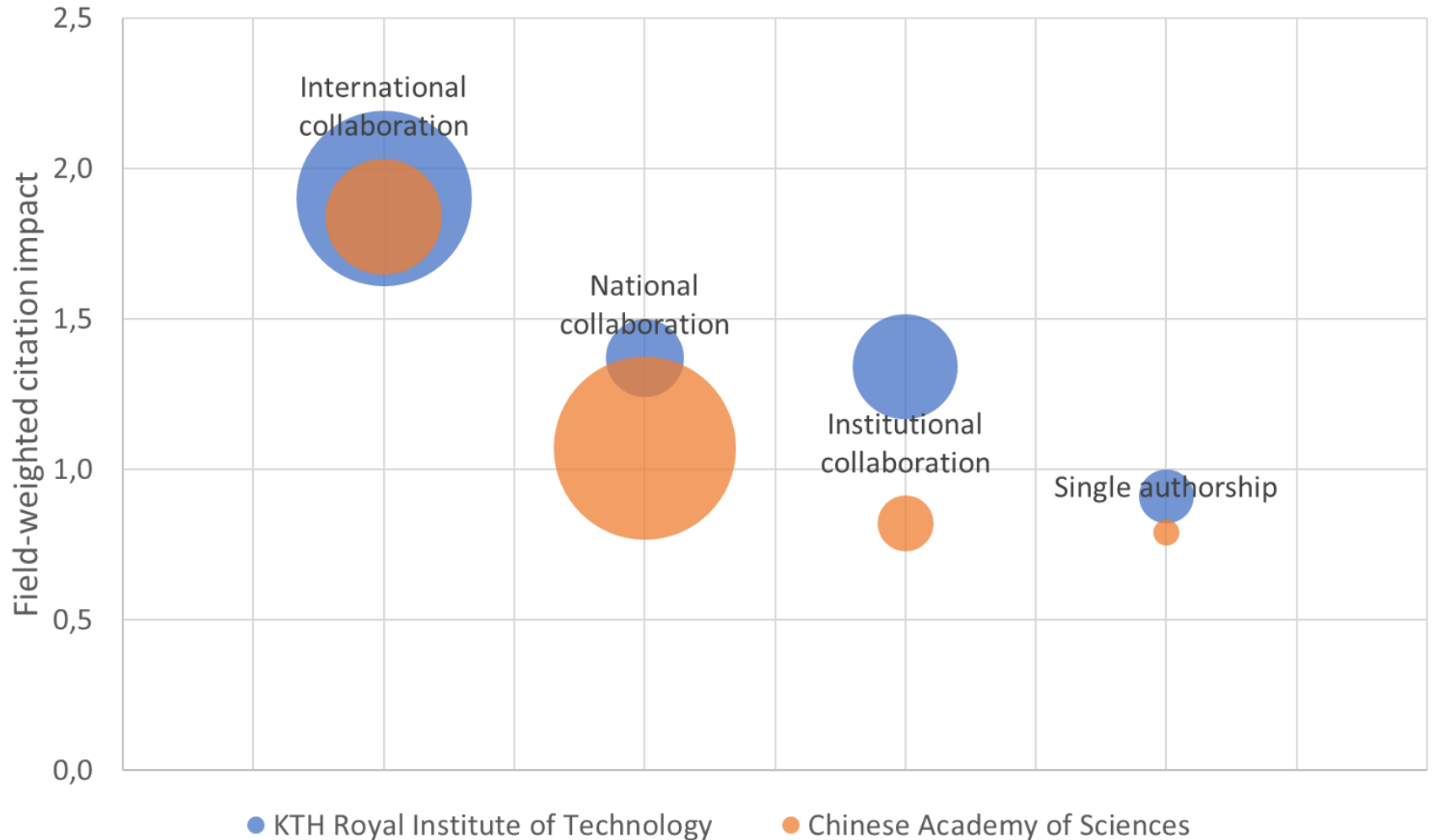




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## Type of collaboration and citation impact

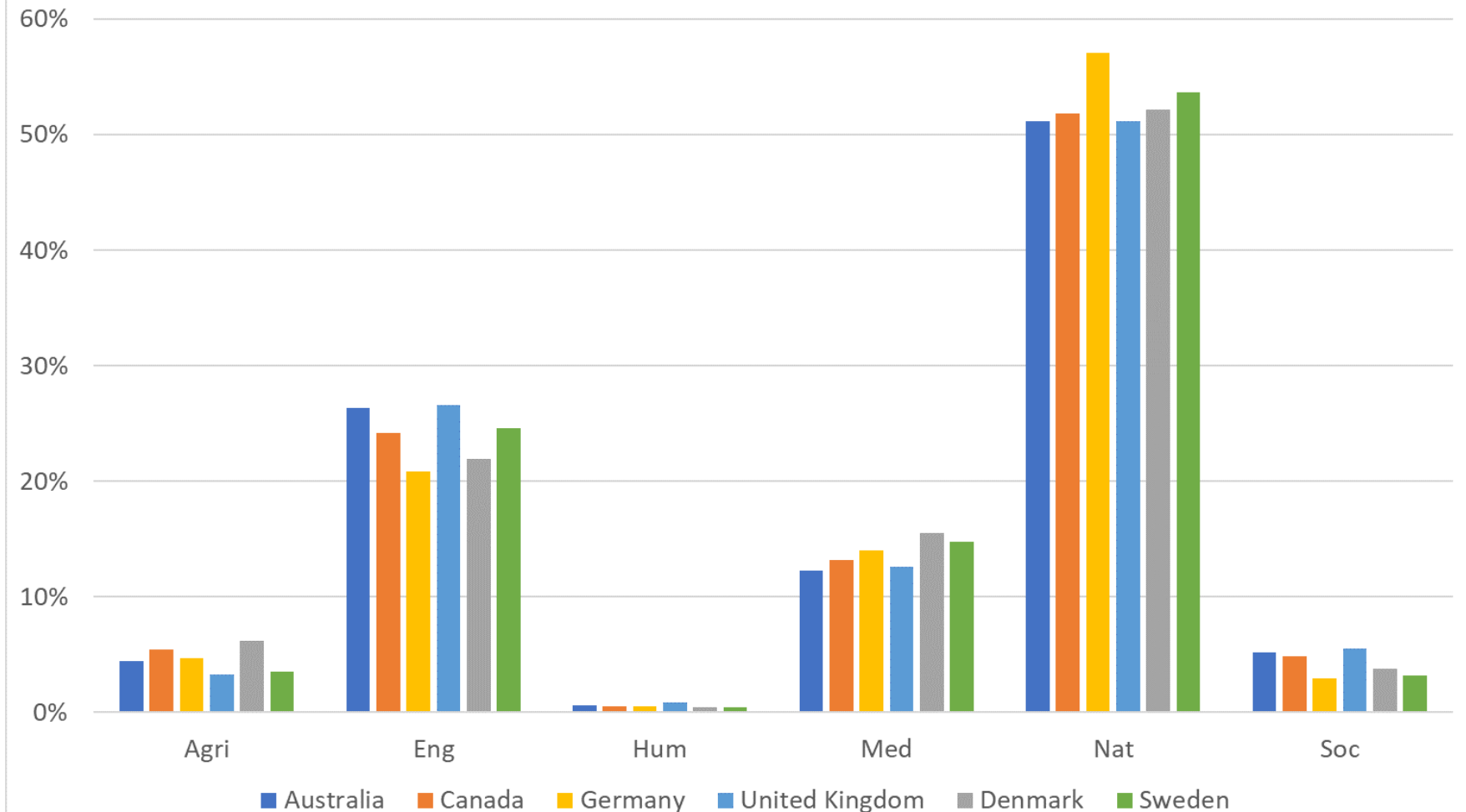




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### Share of co-publications with China in each discipline (2012-2017)





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# Incoming students from China

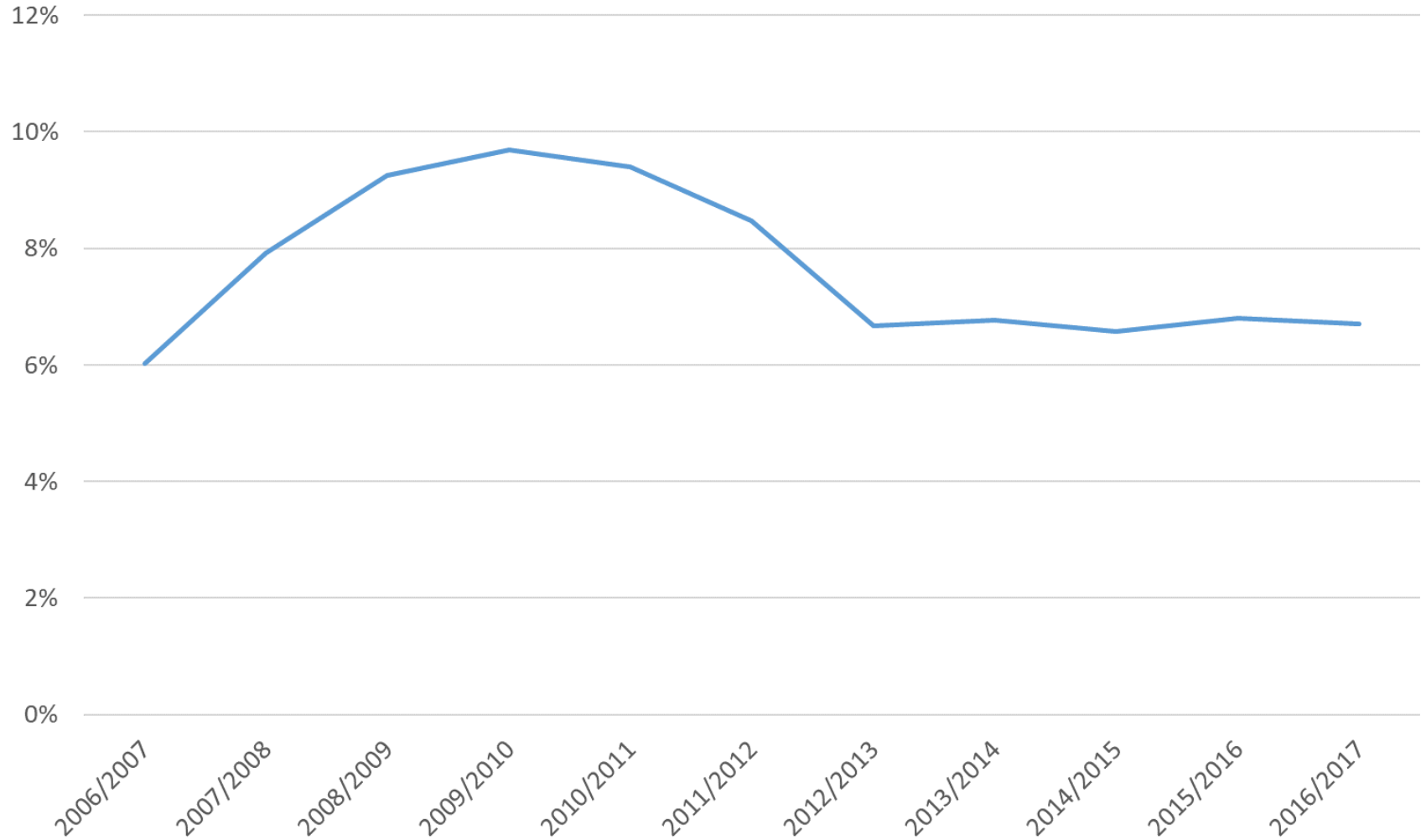
<b>Incoming Chinese students in relation to population size</b>	
<b>Australia</b>	0,472%
<b>New Zealand</b>	0,362%
<b>Canada</b>	0,170%
<b>United Kingdom</b>	0,140%
<b>United States</b>	0,091%
<b>Korea, Rep.</b>	0,068%
<b>Japan</b>	0,062%
<b>France</b>	0,038%
<b>Finland</b>	0,032%
<b>Germany</b>	0,029%
<b>Sweden</b>	0,024%
<b>Denmark</b>	0,023%
<b>Switzerland</b>	0,018%
<b>Norway</b>	0,013%
<b>Austria</b>	0,007%
<b>Belgium</b>	0,005%
<b>Brazil</b>	0,000%



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## Share of Chinese among all inbound students to Sweden

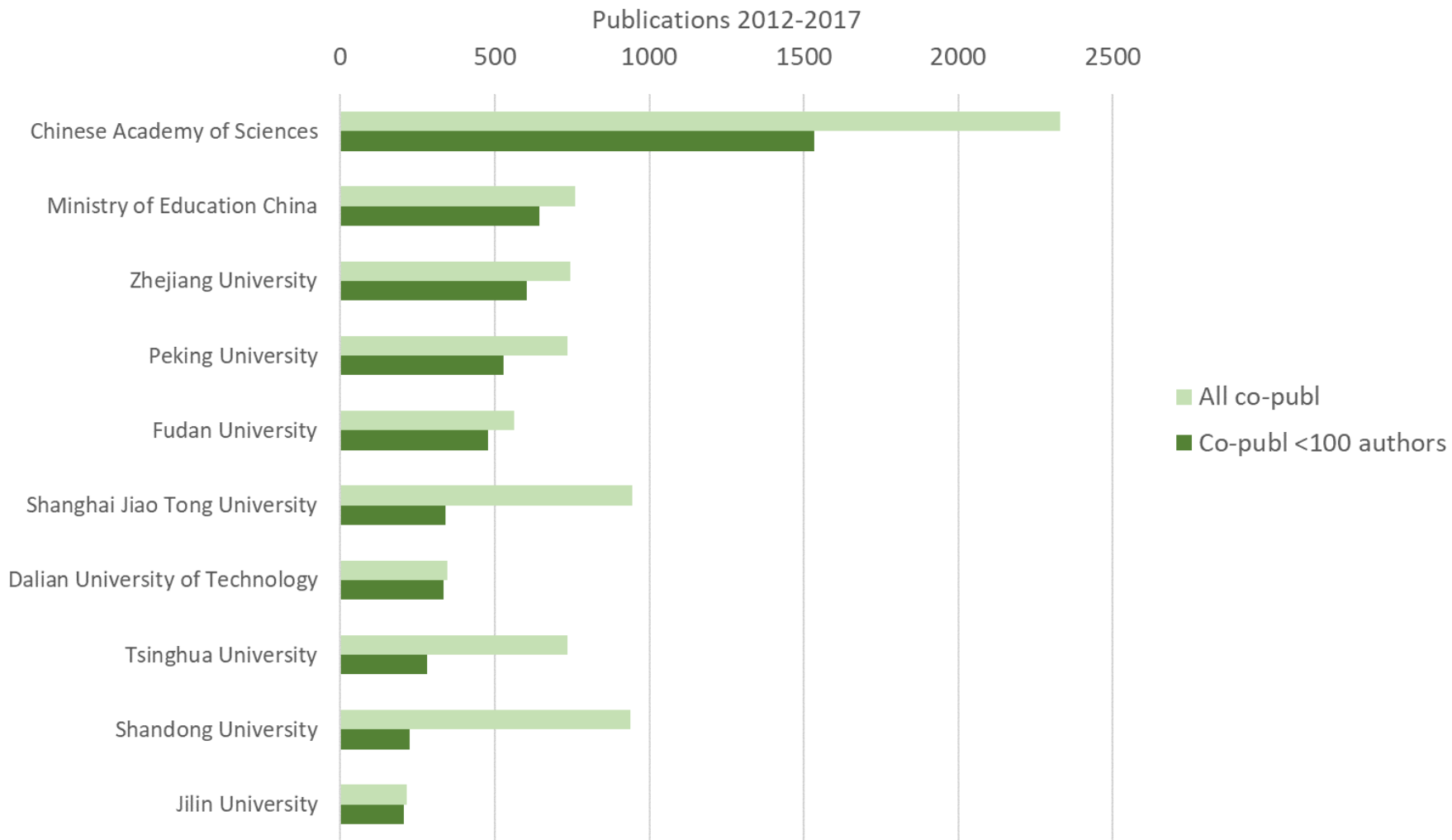




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## Co-publications with Sweden - Top 10 HEIs in China





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# Most productive researchers (<100 co-auth)

No. of publ.	Author	Scopus main affiliation	Second affiliation	Research area
215	Sun, Licheng	KTH Royal Institute of Technology	Dalian University of Technology	Catalysts, solar cells...
204	He, Sailing	KTH Royal Institute of Technology	Zhejiang University	Metamaterials,, antennas...
141	Sundén, Bengt	Lund University		Heat transfer, fuel cells..
115	Liu, Johan	Shanghai University	Chalmers University of Technology	Thermal insulating materials, graphene...
89	Wang, Shumin	Shanghai Institute of Microsystem and Information Technology Chinese Academy of Sciences	Chalmers University of Technology	Semiconductors...
86	Vasilakos, Athanisos V.	Lulea University of Technology		Wireless networks, cloud computing...
82	Li, Xin	KTH Royal Institute of Technology		Solar cells, fluorescence...
82	Yan, Jinyue	KTH Royal Institute of Technology	Mälardalen University	Solar cells, energy...
82	Zhu, Bin	China University of Geosciences	KTH Royal Institute of Technology	Fuel cells...
77	Luo, Yi	Hefei National Laboratory for Physical Sciences at	KTH Royal Institute of Technology	Materials science, chemical engineering...

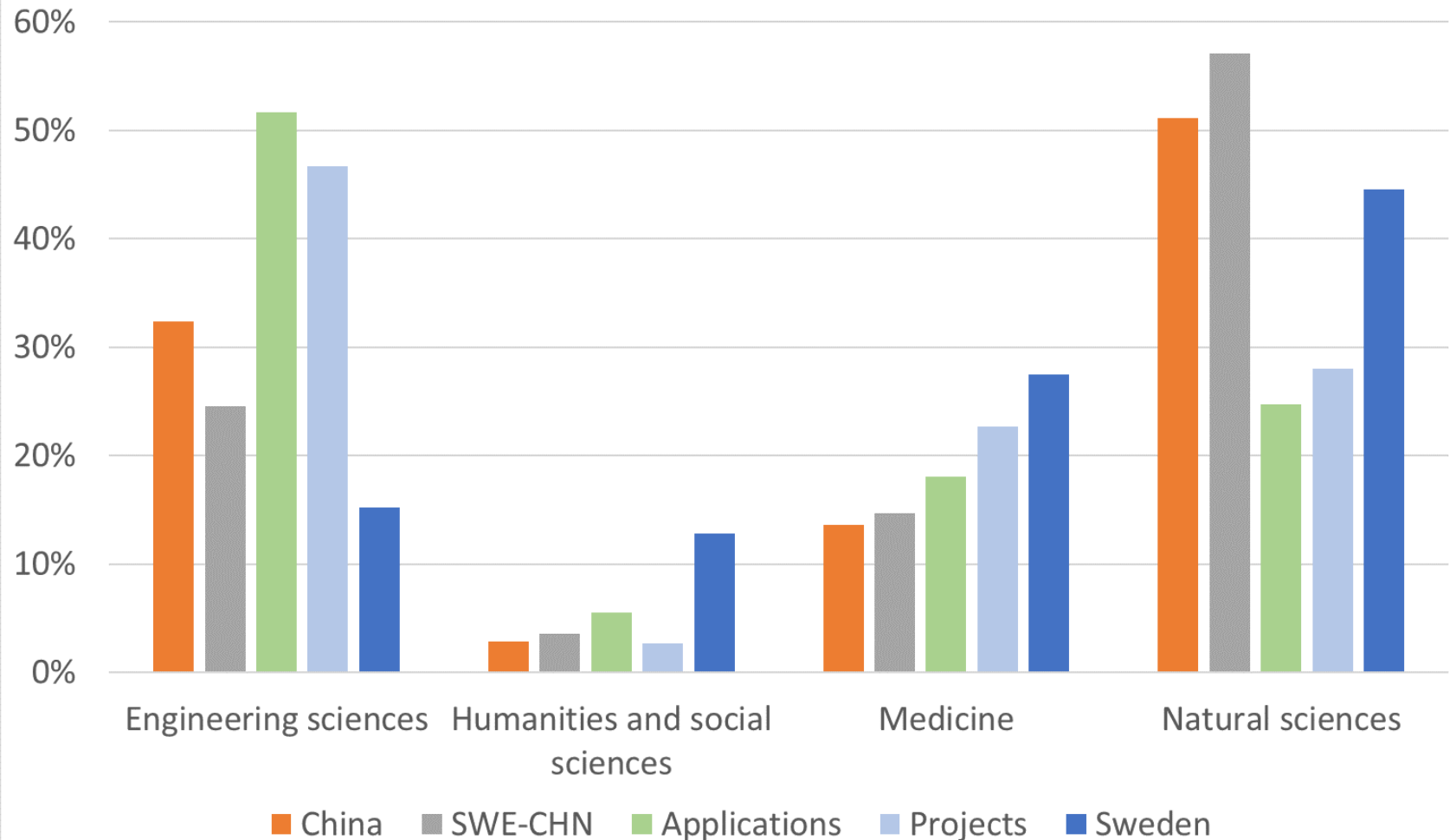


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# STINT – NSFC mobility programme

Scientific profiles 2012-2017





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# STINT – NSFC mobility programme

Share of applications and of Sweden-China co-publications with <100 authors

