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Influential Publications in Ecological Economics Revisited

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Introduction

Follow up of Costanza et al., 2004:

Results

- Broad range of influences on the field of ecological economics
- A field that was quite young
- Prediction: some articles published in the journal were receiving high numbers of citations per year

Why focus on Ecological Economics?

- Comparability, feasibility, representativeness

The dynamic of citation reflects the evolution and the structuration of a field

Has the field matured, and how?

Ma and Stern, 2006:

- Citation analysis
- Ecological economics tends to cite (but not be cited by) general natural science journals
- Influential themes: green accounting, sustainability, and EKC

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Plumecocq, 2014:

- Lexicometric analysis of the abstracts
- The themes of « ecosystem services » and « monetary valuation » are growing



Data, method... and results

Citation analysis : counting citations between 2004 and 2014

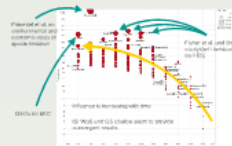
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Influential disciplines in Ecological Economics 2004-2014



Distinction between:

Outward influence → 289 articles 390 references ← Inward influence



Cluster method to characterize influential themes

- Weighting choices
- Clusterization of weighted titles according to the co-occurrence of words



Thank you

Conclusion:

The theme of "ecosystem services" is dominant, but other influential themes are emerging (e.g. input-output analysis)

A field that is getting more applied (maybe look at the influence of reports)

Importance of economic references

Founding publications disappear while other keep being cited



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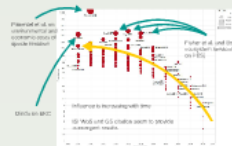
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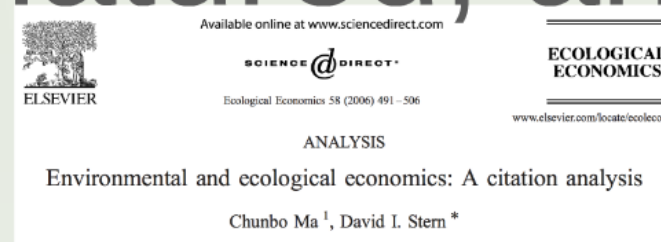
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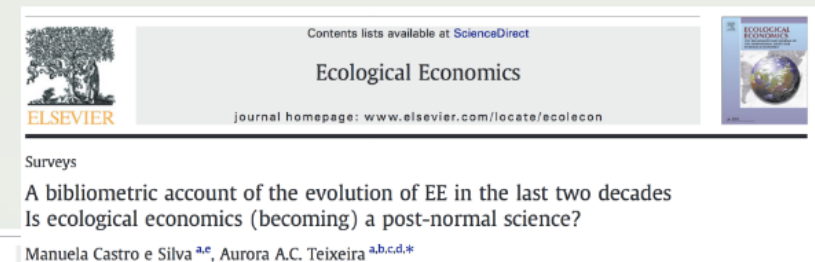
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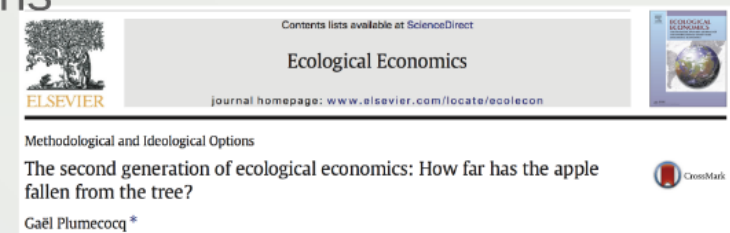
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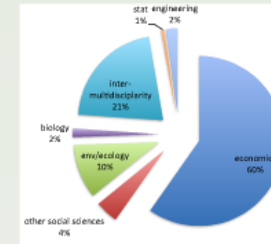


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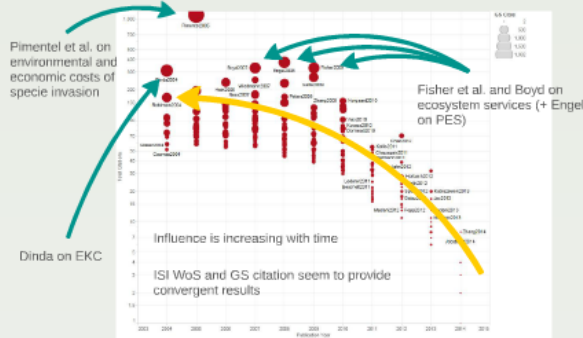
25% of the references most cited are books (vs. 57% before 2004)
27% of influential references are published in Ecological Economics

On the remaining half:

- Economics is the most influential discipline (60% vs. 68%)
- Interdisciplinarity (21% vs. 20%)
- Biology and other social sciences: 6% (vs. 11%)

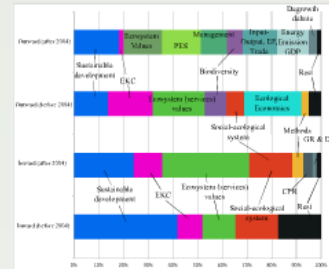
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Sustainable development (valuation, concept, principles) remains an important topic

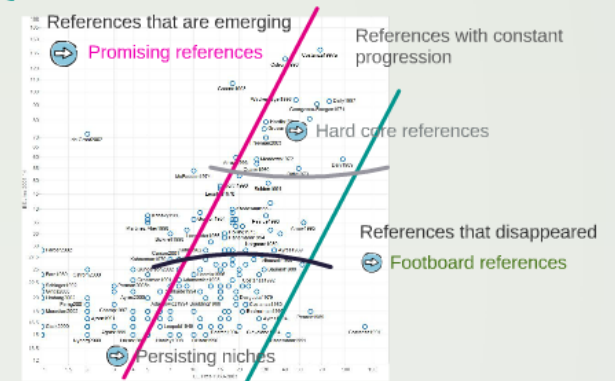
Ecosystem services is increasing both inward and outward



Energy issues (input-output) and emissions are emerging

Method: produced in early period of EE (transdisciplinary), but used as reference in later period (stat)

In the latest period: core ref of EE (GR + Daly), and niche (Degrowth debate)



Cluster method to characterize **influential themes**

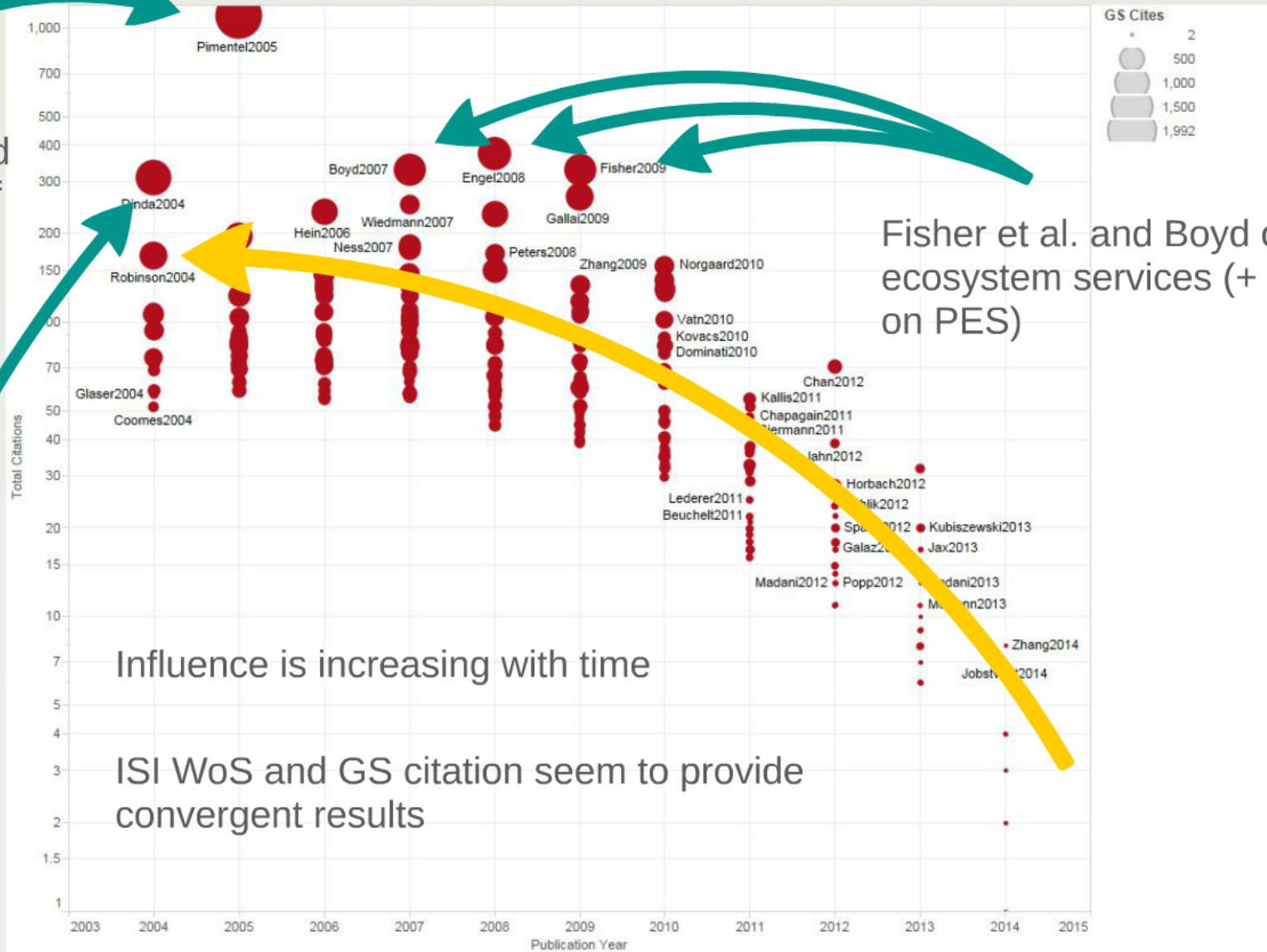
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	Outward	Inward
1989-2003	<ul style="list-style-type: none"> Sustainable development (13%) Ecological economics (13%) 	<ul style="list-style-type: none"> Sustainable development (9%) Ecological Economics (8%) Resource economics (7%)
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⚠ 5% of the titles: "case" + "study" since 2009

Thank you

Outward influence



Pimentel et al. on environmental and economic costs of specie invasion

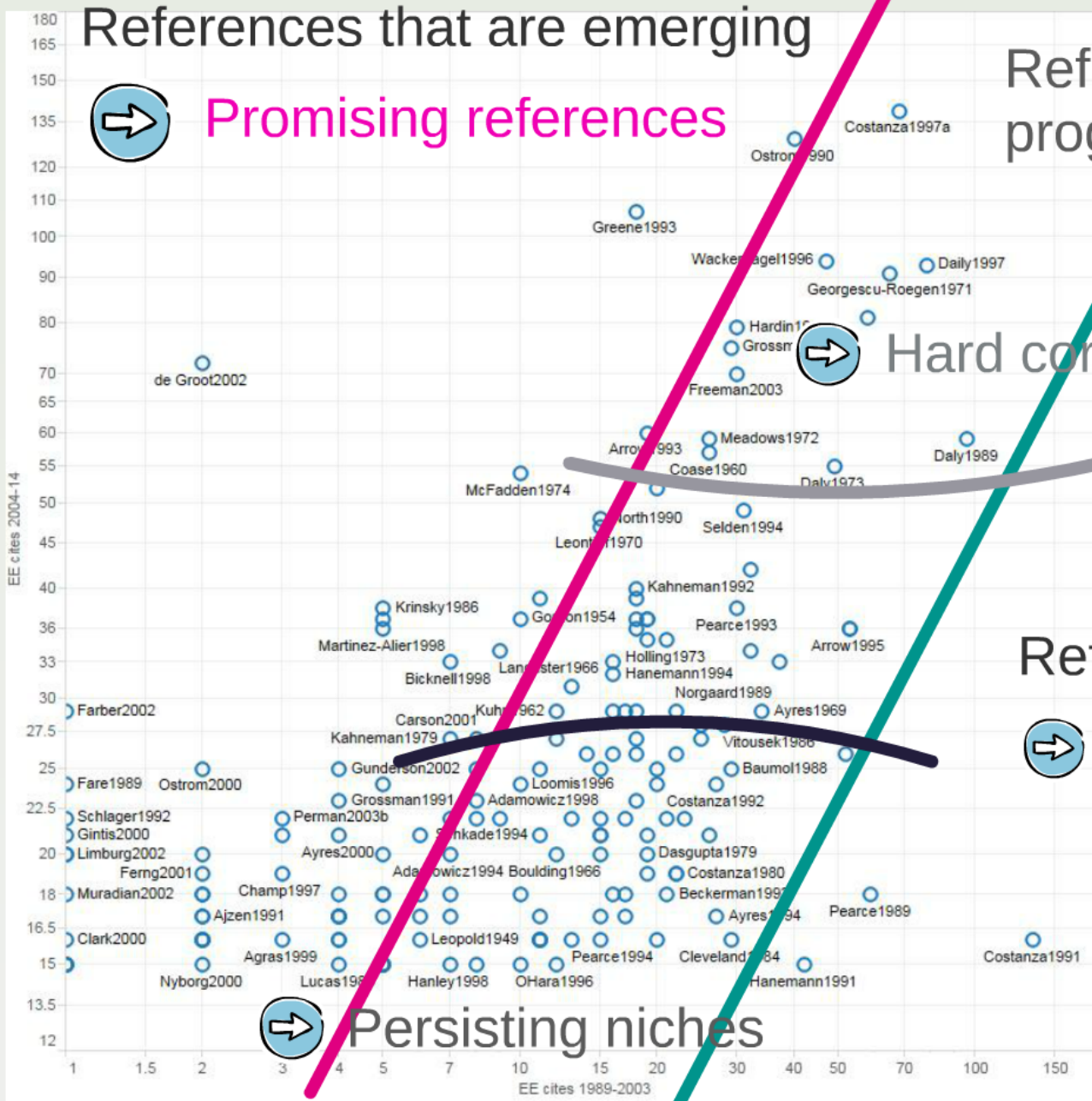
Fisher et al. and Boyd on ecosystem services (+ Engel on PES)

Dinda on EKC

Influence is increasing with time

ISI WoS and GS citation seem to provide convergent results

Inward influence



References with constant progression

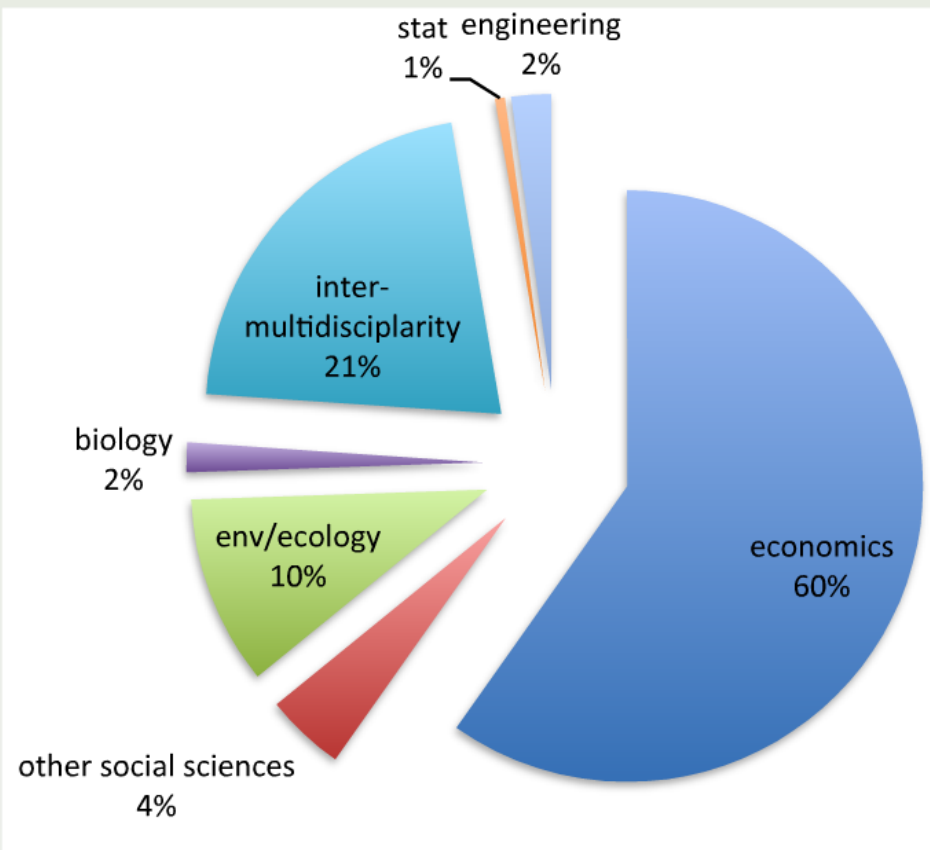
Hard core references

References that disappeared

Footboard references

Persisting niches

Influential disciplines in Ecological Economics 2004-2014



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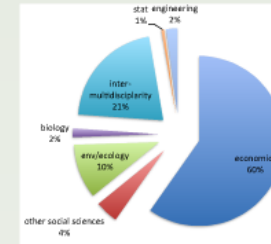
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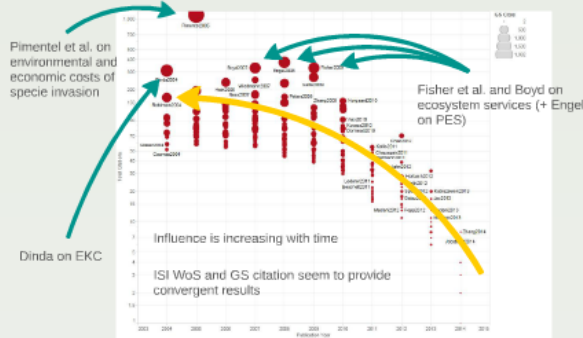
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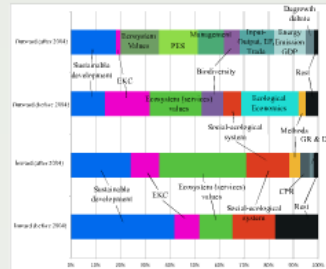
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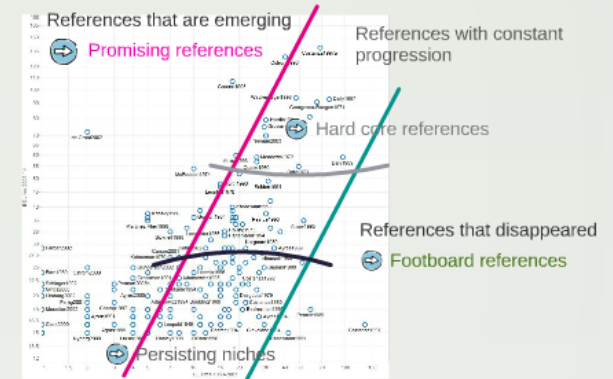
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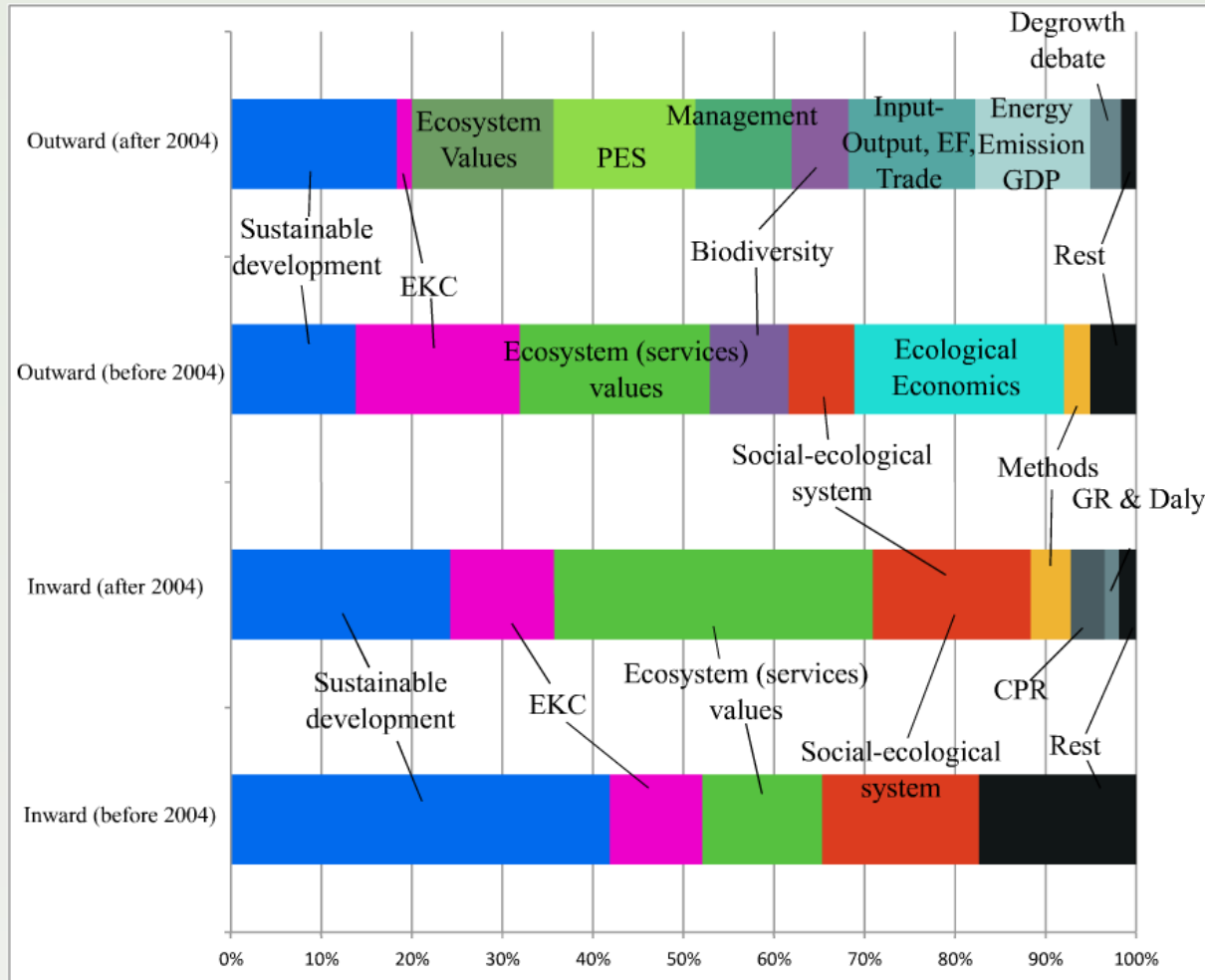
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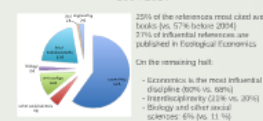


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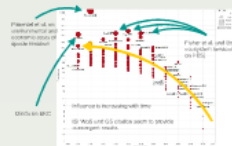
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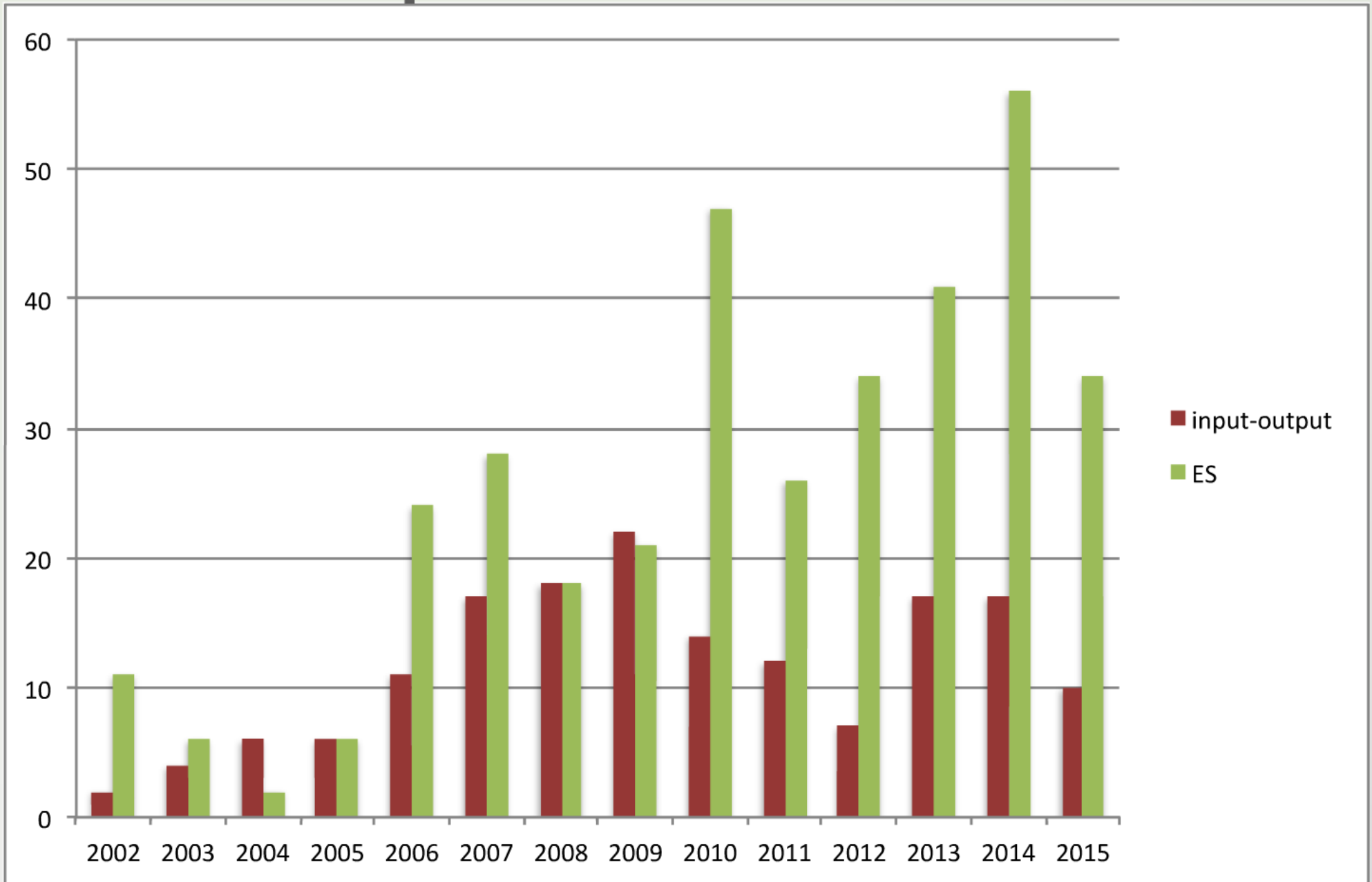
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Total publication in EE



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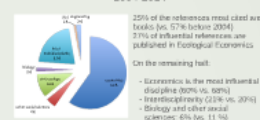


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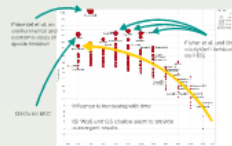
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