



OECD 1963 Frascati Manual 가.

가

1) Frascati Manual

가 가 (1)

가 가 2)

< 1 >

(level), (sector), 가 가

가 ,가 2

Micro			
Meso			
Macro			

< 1. >

Micro

가

2 (productivity)

. Meso Macro 가 가

(global), 가, (道 ) (州)

(2)

(utility)

(Bibliometric indicators)

가

가

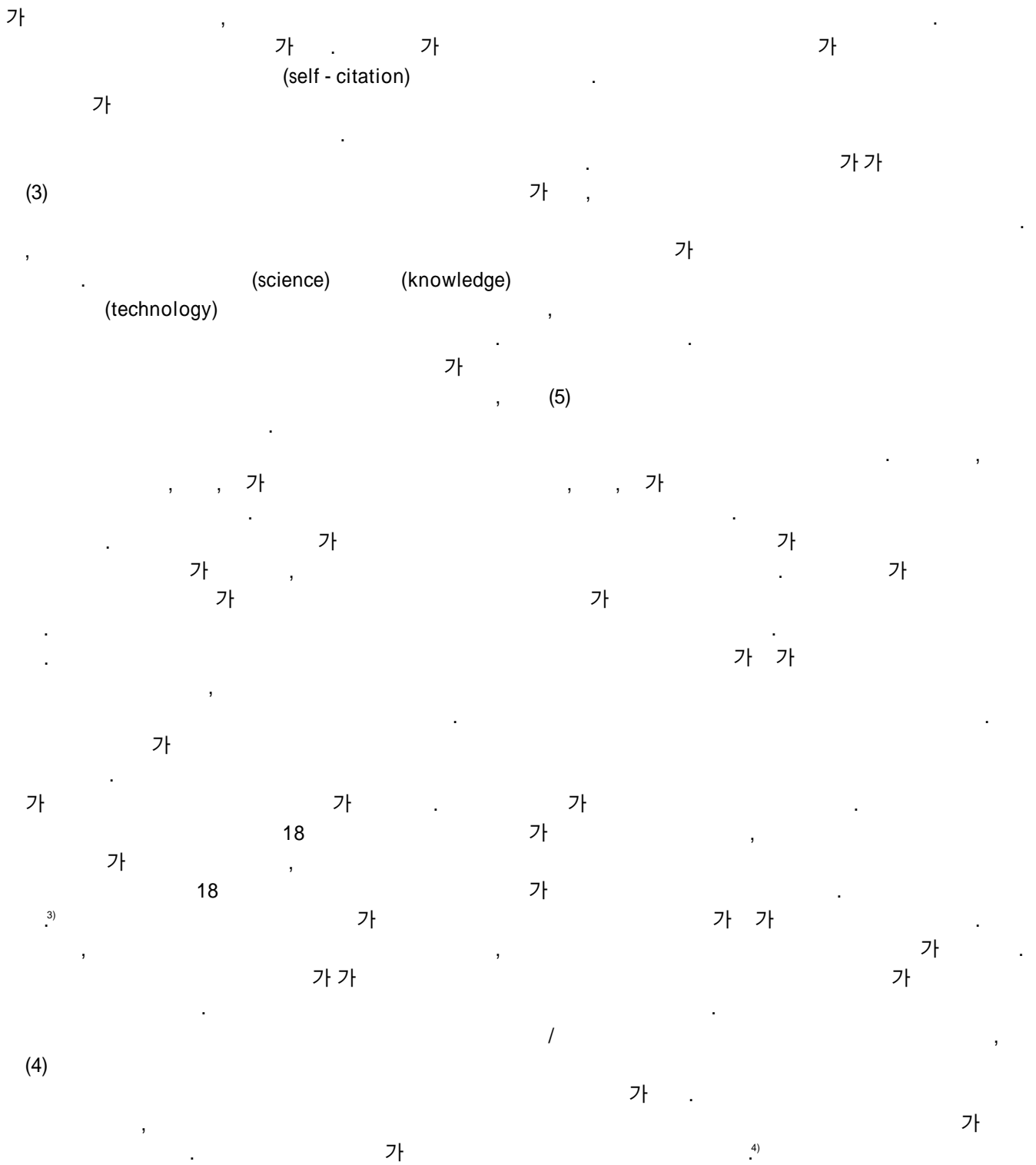
(activity indicator),

(relational indicator)

가 (evaluative indicator) 가

1) Sample method for survey of experimental research and development.

2)



3) , 2004.  
4)

(relational analysis)

(flow indicator)

(1) (Co-publication, co-authorship analysis) (co - authorship analysis)

(2) (Affinity index)

$$\frac{COP(A - B)}{COP(A - WD)} \times 100^7$$

(first author)

(3)

1984 - 1988 [ 1 ]

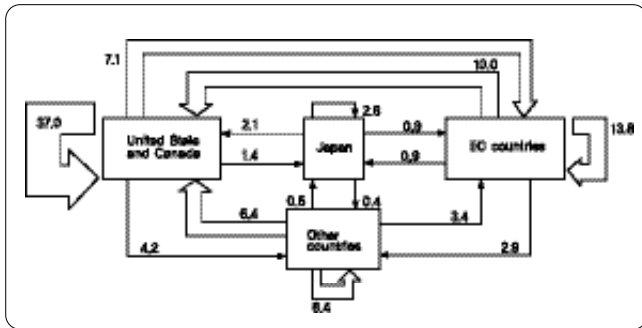
55.5%

5) Fractional counting breakdown counting method.  
 6) Whole counting method.  
 7) CNRS Laboratoire d'évaluation et de prospective internationale(LEPI)

8) 가가

가

9)



< 1. 1984 - 1988 ( : %)>

(5) (Co-word analysis)

(co - word)가

(keyword)

가

가

가

(4) (Co-citation analysis)

3

가 . [ 2 ]

A B가 가 3

C가 A B A B

(linked, connected coupled)

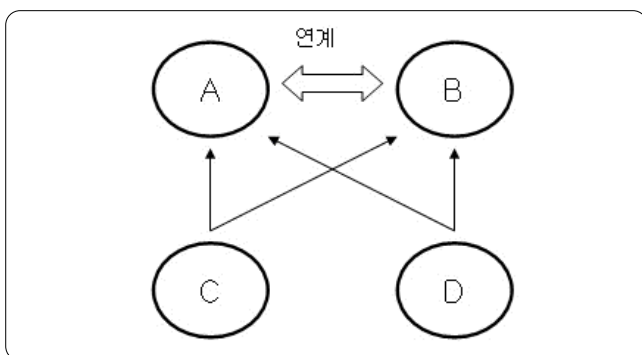
A B 가 (linkage connectivity) 가

가 . 2

10)

가

가



< 2. >

가

가가

가 2

가

가

(macro, meso, micro)

가

가

가

8) Science and Technology Agency (Japan) 1991, p.17.

9) Thomson - ISI SCI SCIE 가

10) (BA203): 2 , , 2005.



