

TABLE 6b

Decomposition of patenting rates for commuting zones based on level of urbanization

(Rate and composition factors pertaining to patenting)

Comparison of commuting zones	Summary occupations ^a				Detailed occupations			
	Decomposition of effects							
	Effects		Percent distribution of effects		Effects		Percent distribution of effects	
	RF	CF	RF	CF	RF	CF	RF	CF
UCGC vs. UWGC	-0.00095	-0.00044	68.4	31.6	-0.00062	-0.00076	44.68	55.32
UWGC vs. rural	-0.00071	-0.00034	67.59	32.41	-0.00052	-0.00054	49.3	50.7
Rural vs. UCGC	0.00166	0.00078	68.05	31.95	0.00114	0.0013	46.68	53.32

CF = compositional factor; RF = rate factor; UCGC = urban, containing a global city; UWGC = urban, without a global city.

^a See Wojan TR, Dotzel KR, Low SA, 2015, Decomposing Regional Patenting Rates: How the Composition Factor Confounds the Rate Factor, *Regional Studies, Regional Science* 2(1):535–51.**Note(s):**

RF is patents per inventive class member, and CF is inventive class as a share of total commuting zone population. In a departure from Wojan, Dotzel, and Low (2015), all Hawaiian and Alaskan commuting zones (including Aleutians West Census Area, AK, part of the Seattle, WA, commuting zone) are omitted. This change results in slight discrepancies in observed patenting rates across studies.

Source(s):

U.S. Patent and Trademark Office; Census Bureau, special tabulations (2015) of the 2000 Census.