

Heterogeneity in knowledge flows across regions: Investigating patterns and mechanisms

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1 Regression Results

The results are in Table 1

Table 1: Effect of Geographic Distribution of Citations Made on Citations Received

	(1) Citations Received	(2) Citations Received	(3) Citations Received
Citations Received			
Share Citations Made[Same Region, Same Assignee]	-0.169 (0.218)	-0.104 (0.623)	-0.134 (0.454)
Share Citations Made[Same Region, Different Assignee]	-0.149 (0.215)	-0.191 (0.458)	-0.0919 (0.468)
Share Citations Made[Different Region, Same Assignee]	0.217* (0.012)	0.266* (0.037)	0.348** (0.004)
Share Citations Made[Different Region, Different Assignee]	0.00828 (0.789)	0.0315 (0.499)	0.0179 (0.661)
Log(Total Citations Made)	0.0180*** (0.000)	0.0198*** (0.001)	0.0134* (0.014)
Log (Num Patents)	0.785*** (0.000)	0.811*** (0.000)	0.830*** (0.000)
Log (Patent Pool Size)	-0.111*** (0.000)	-0.227*** (0.000)	-0.0944*** (0.000)
Constant	-0.0711 (0.487)	0.673*** (0.000)	-0.500*** (0.000)
Observations	9241	3885	5356
Groups	1314	529	785
Sample	All Locations (UC)	US Locations (UC)	Non-US Locations (UC)

p-values in parentheses

All models include region fixed effects, year dummies and technology subcategory controls

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

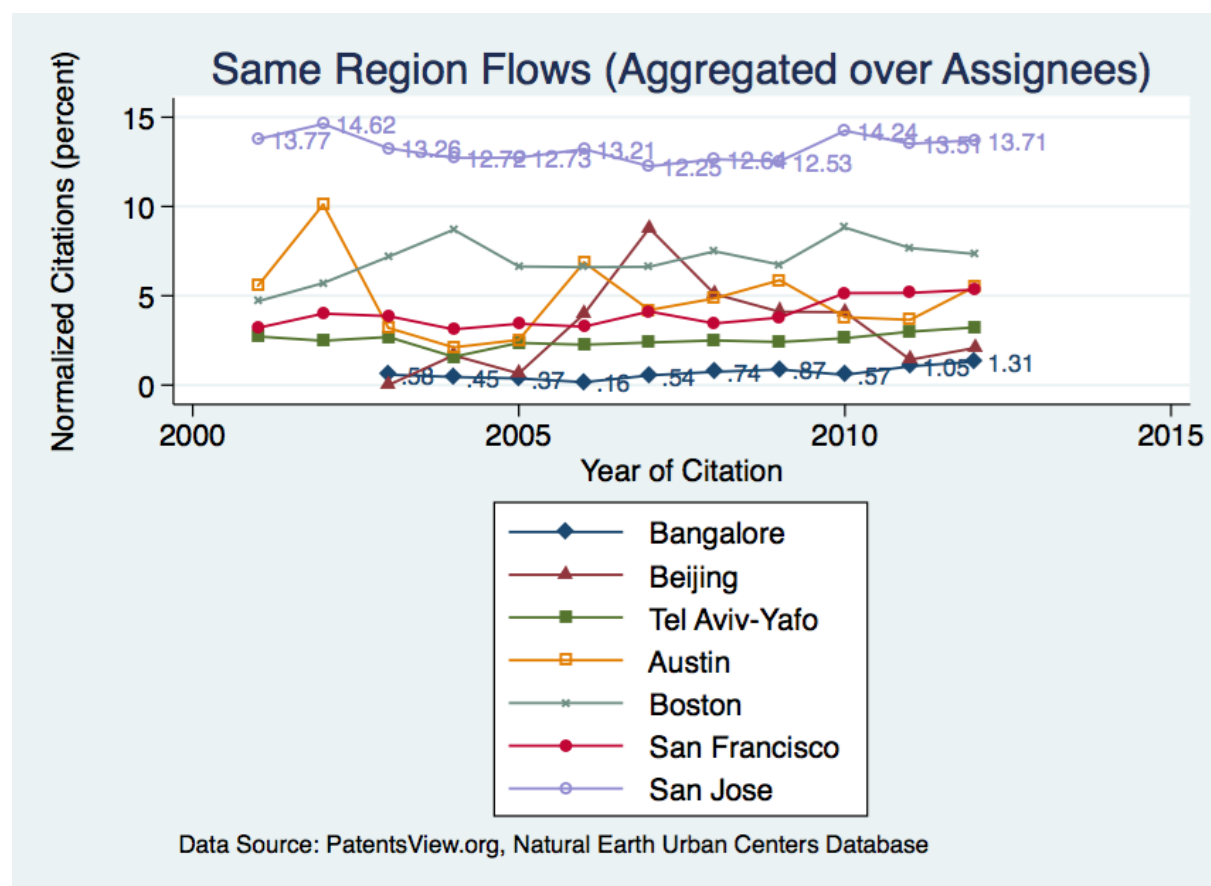
Table 2: Effect of Geographic Distribution of Citations Made on Citations Received

	(1) Citations Received	(2) Citations Received	(3) Citations Received
Citations Received			
Share Citations Made[Same Region, Same Assignee]	-0.169 (0.158)	-0.213 (0.177)	-0.0200 (0.913)
Share Citations Made[Same Region, Different Assignee]	-0.0597 (0.593)	0.252 (0.214)	-0.125 (0.351)
Share Citations Made[Different Region, Same Assignee]	0.0630 (0.336)	0.0570 (0.549)	0.185* (0.041)
Share Citations Made[Different Region, Different Assignee]	0.0488 (0.056)	0.0678* (0.043)	0.0641 (0.107)
Log(Total Citations Made)	0.0131*** (0.001)	0.00710 (0.184)	0.0126* (0.025)
Log (Num Patents)	0.779*** (0.000)	0.788*** (0.000)	0.852*** (0.000)
Log (Patent Pool Size)	-0.128*** (0.000)	-0.198*** (0.000)	-0.123*** (0.000)
Constant	-0.177* (0.047)	0.329* (0.011)	-0.748*** (0.000)
Observations	10966	5677	5289
Groups	1590	816	774
Sample	All Locations (MSA-UC)	US Locations (MSA-UC)	Non-US (MSA-UC)

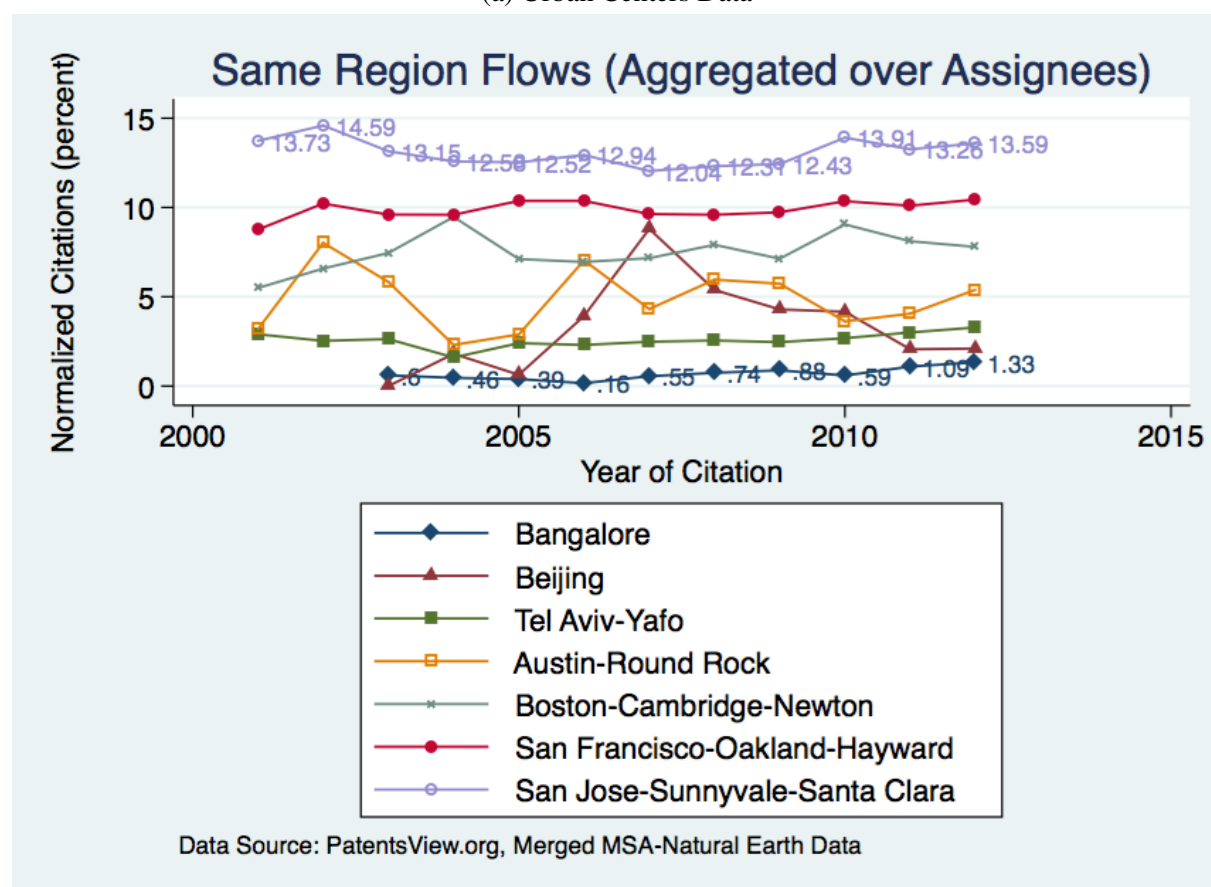
p-values in parentheses

All models include region fixed effects, year dummies and technology subcategory controls

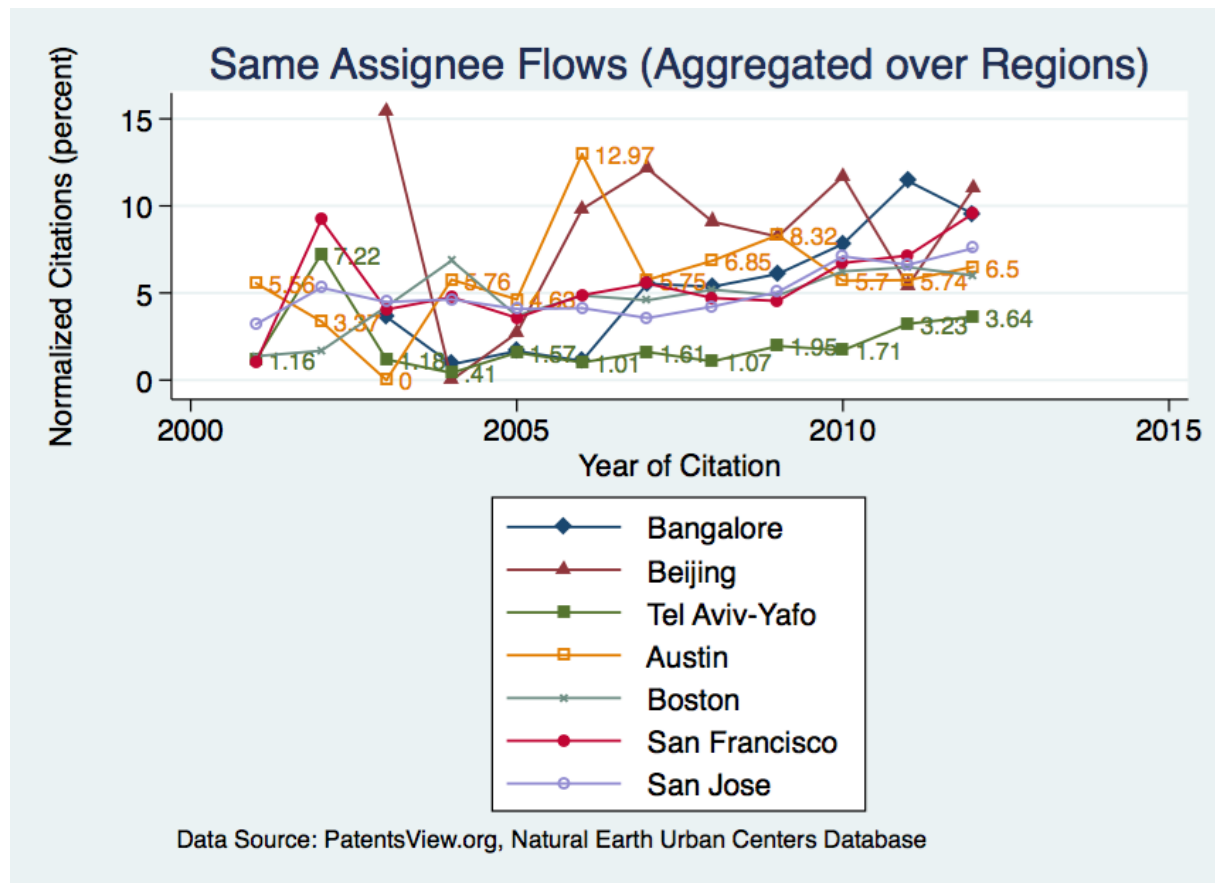
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$



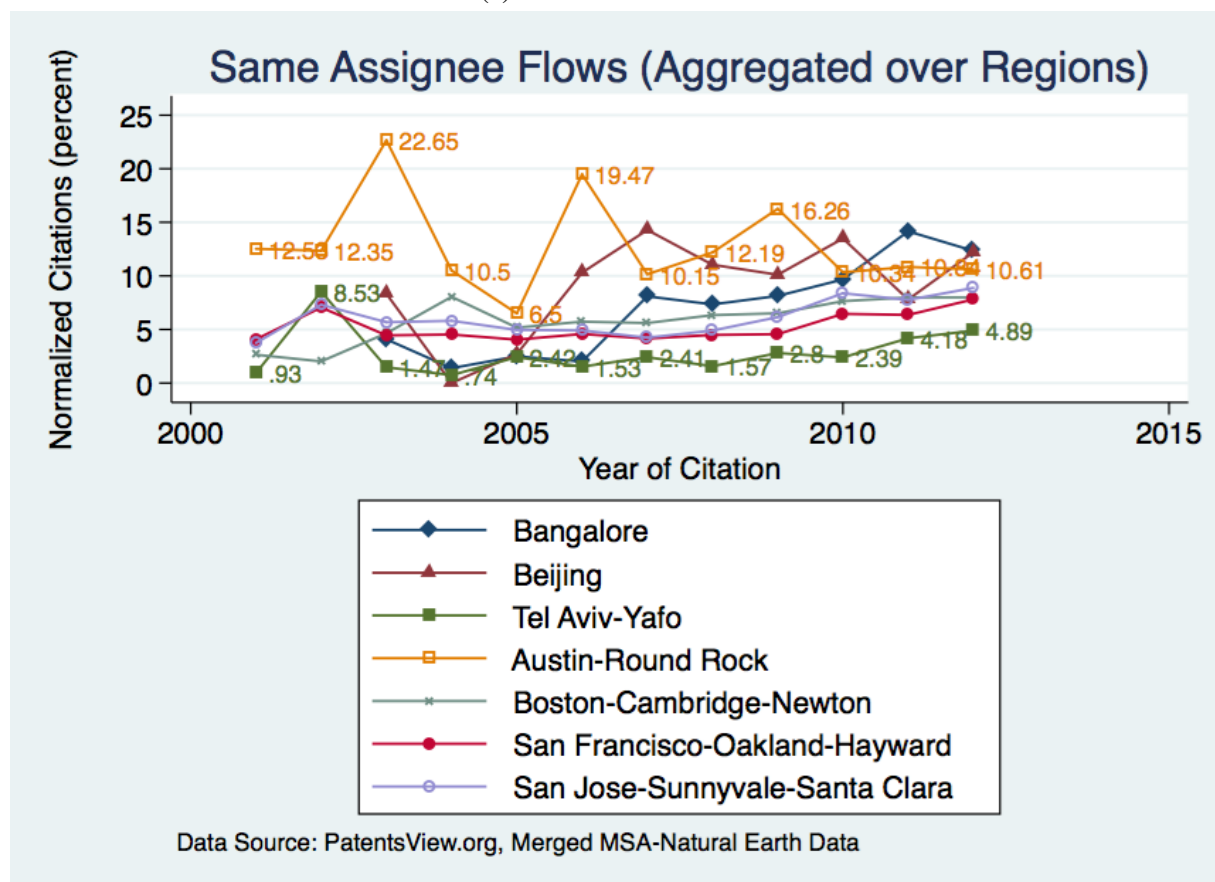
(a) Urban Centers Data



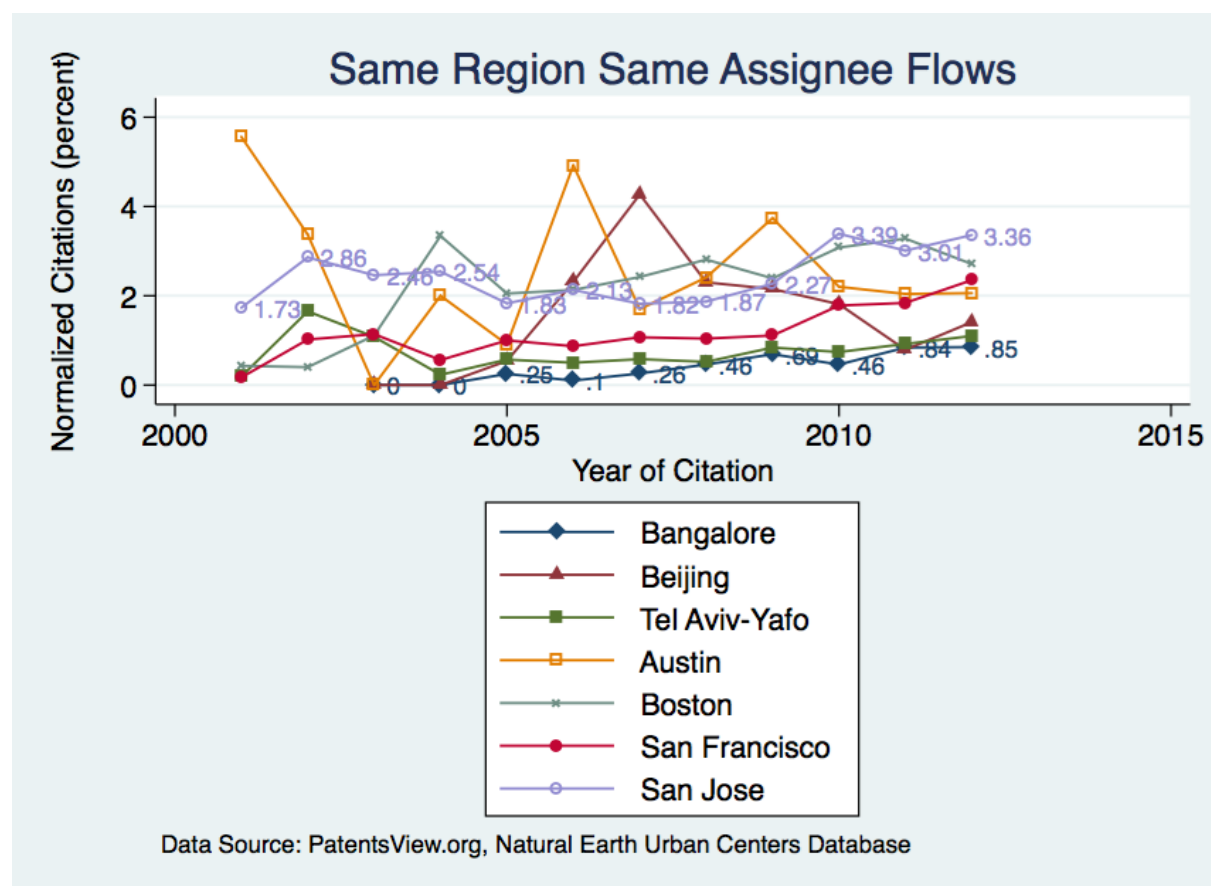
(b) MSA-Urban Centers Data with Missing Regions Filled from location.tsv



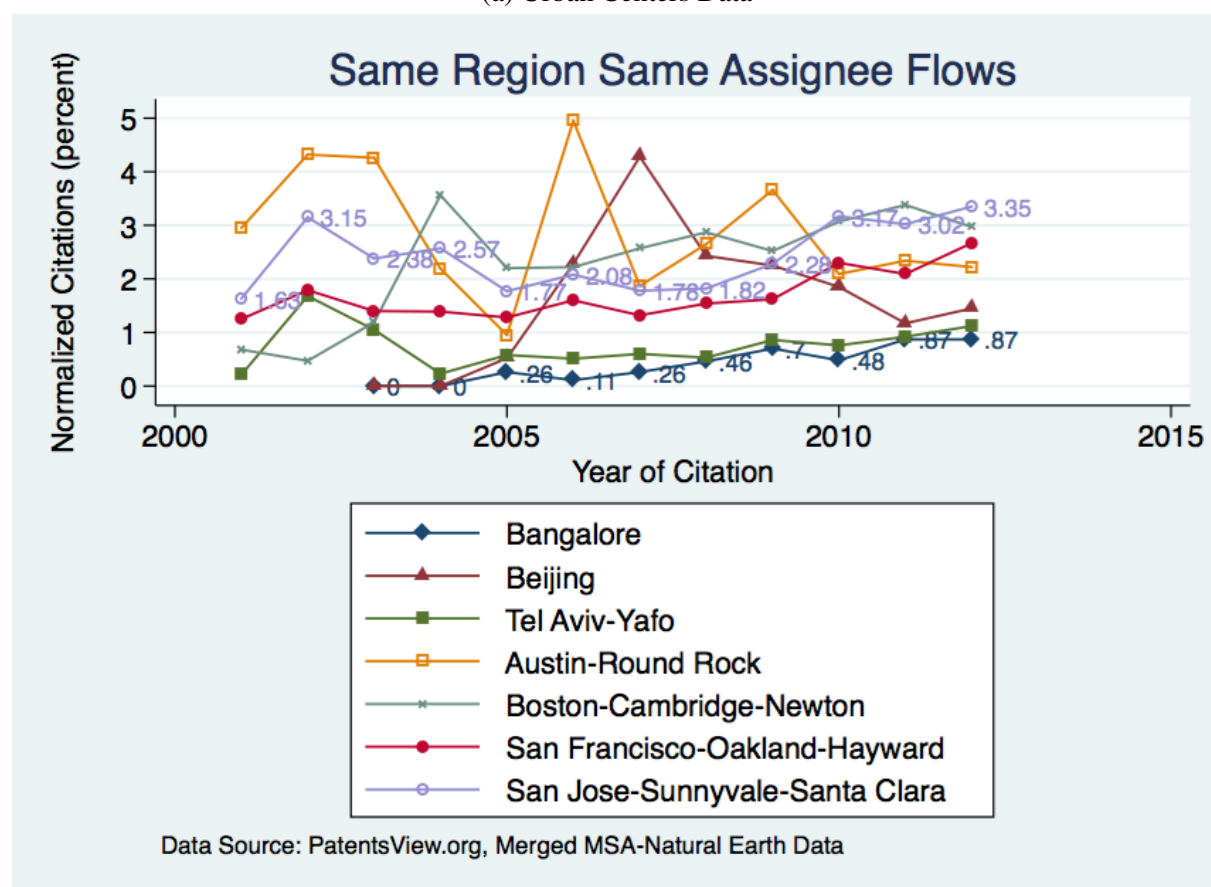
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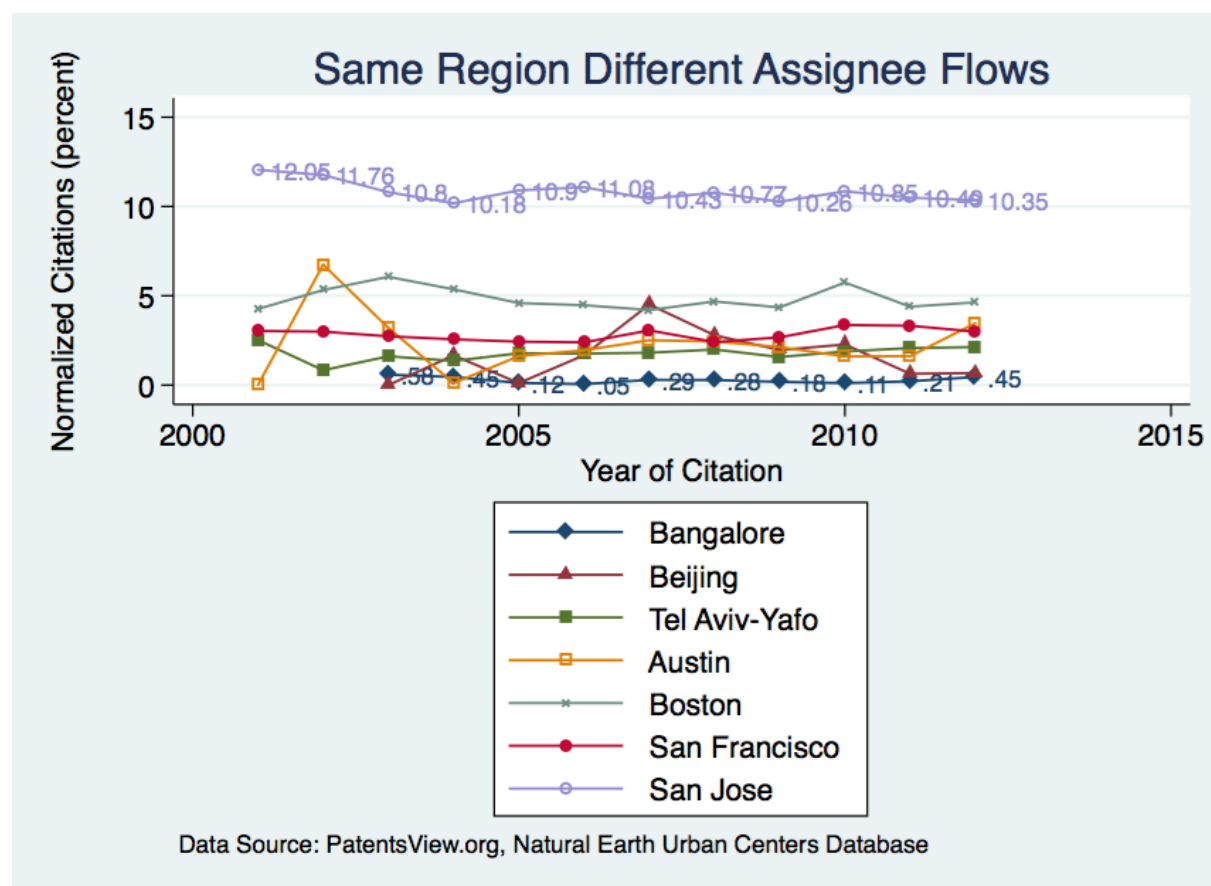
(b) MSA-Urban Centers Data with Missing Regions Filled from location.tsv



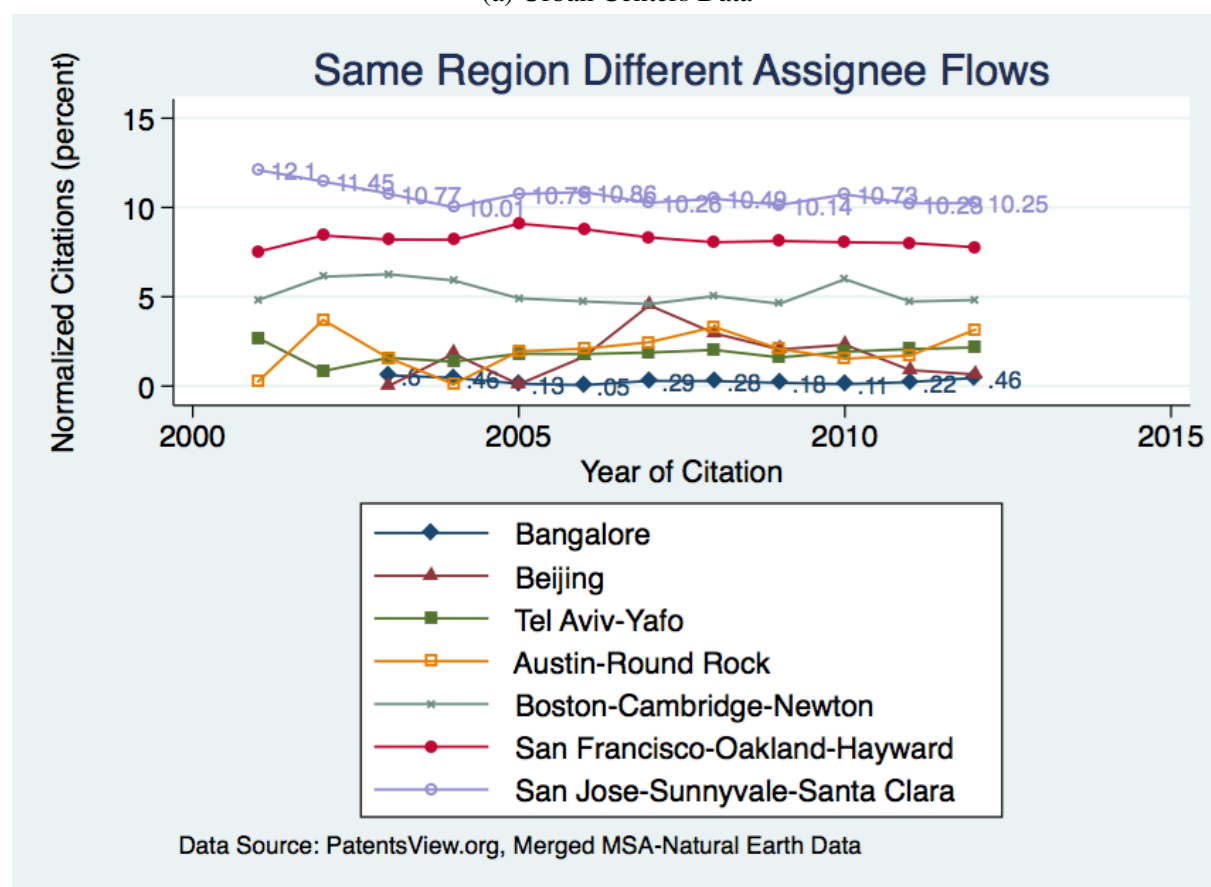
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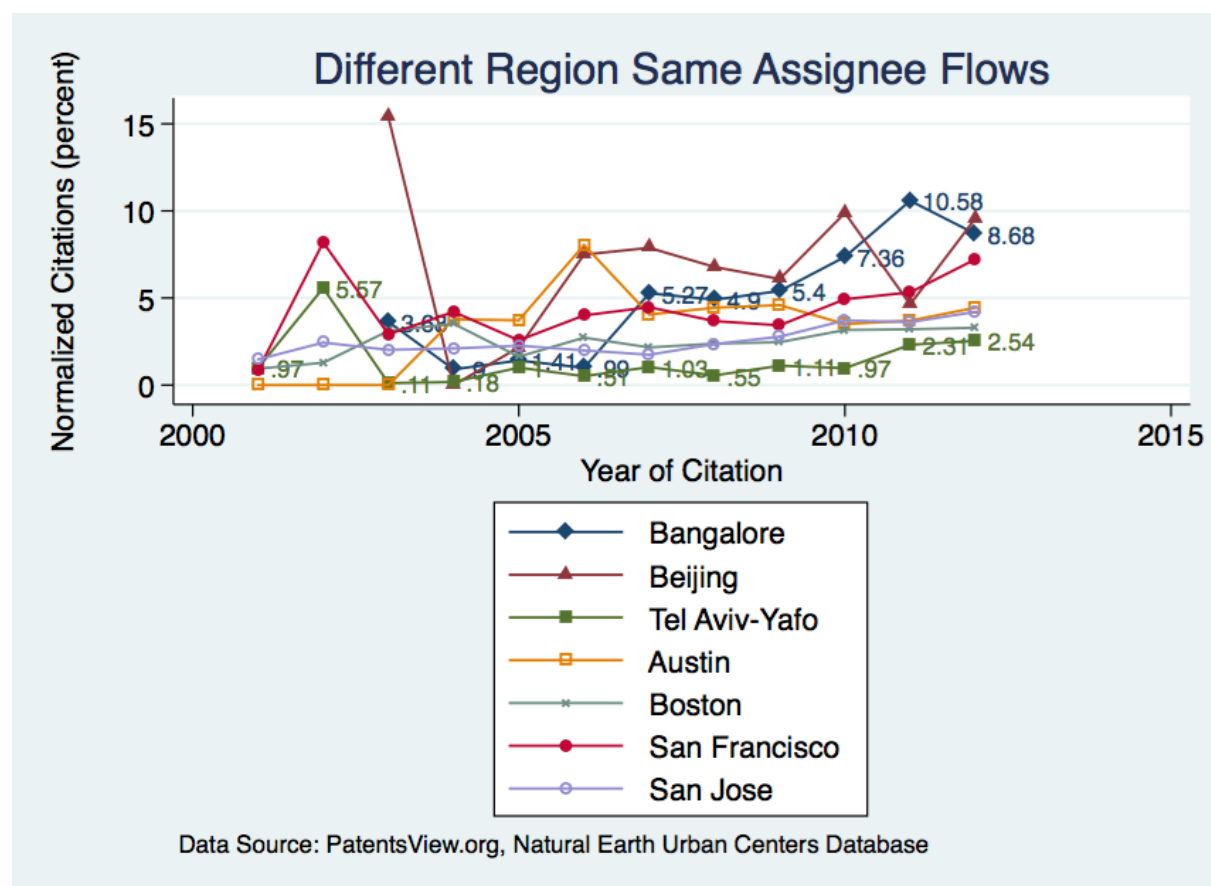
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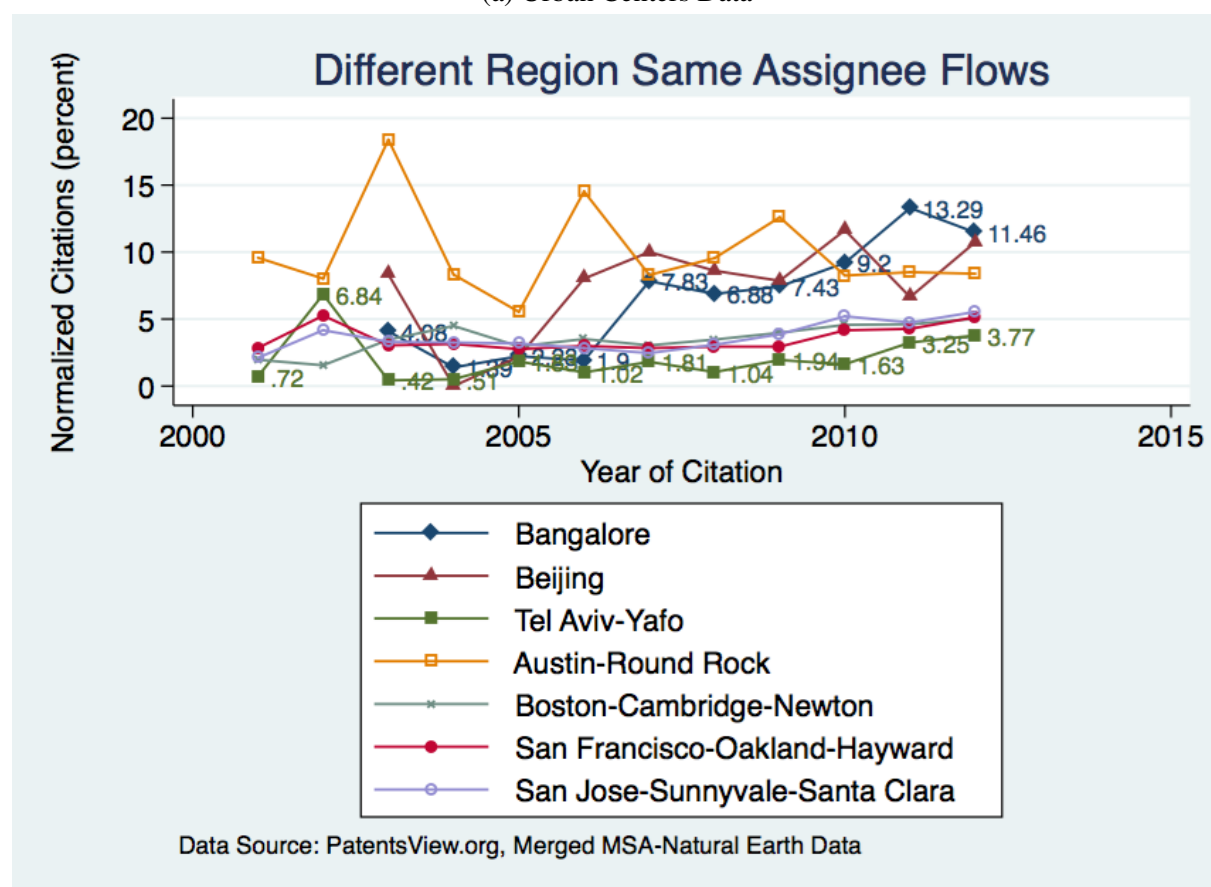
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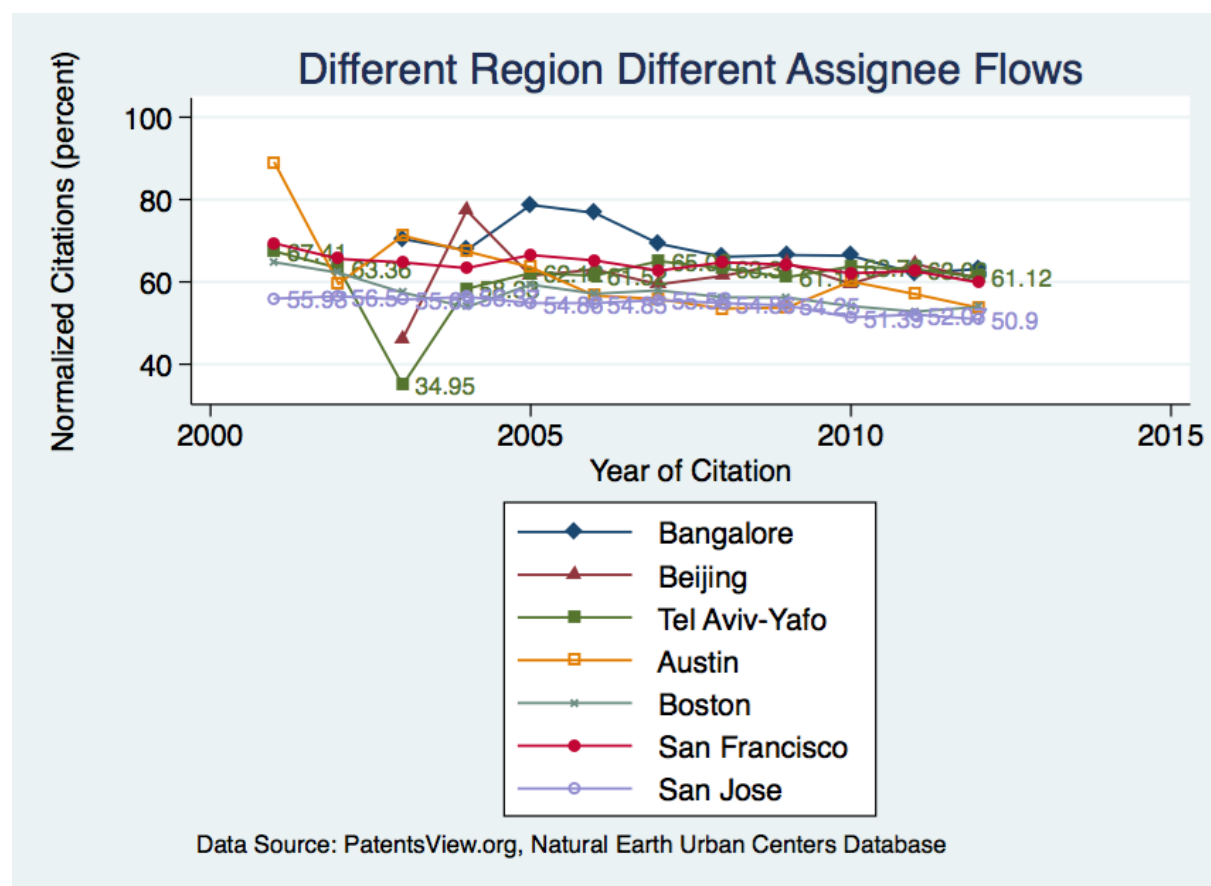
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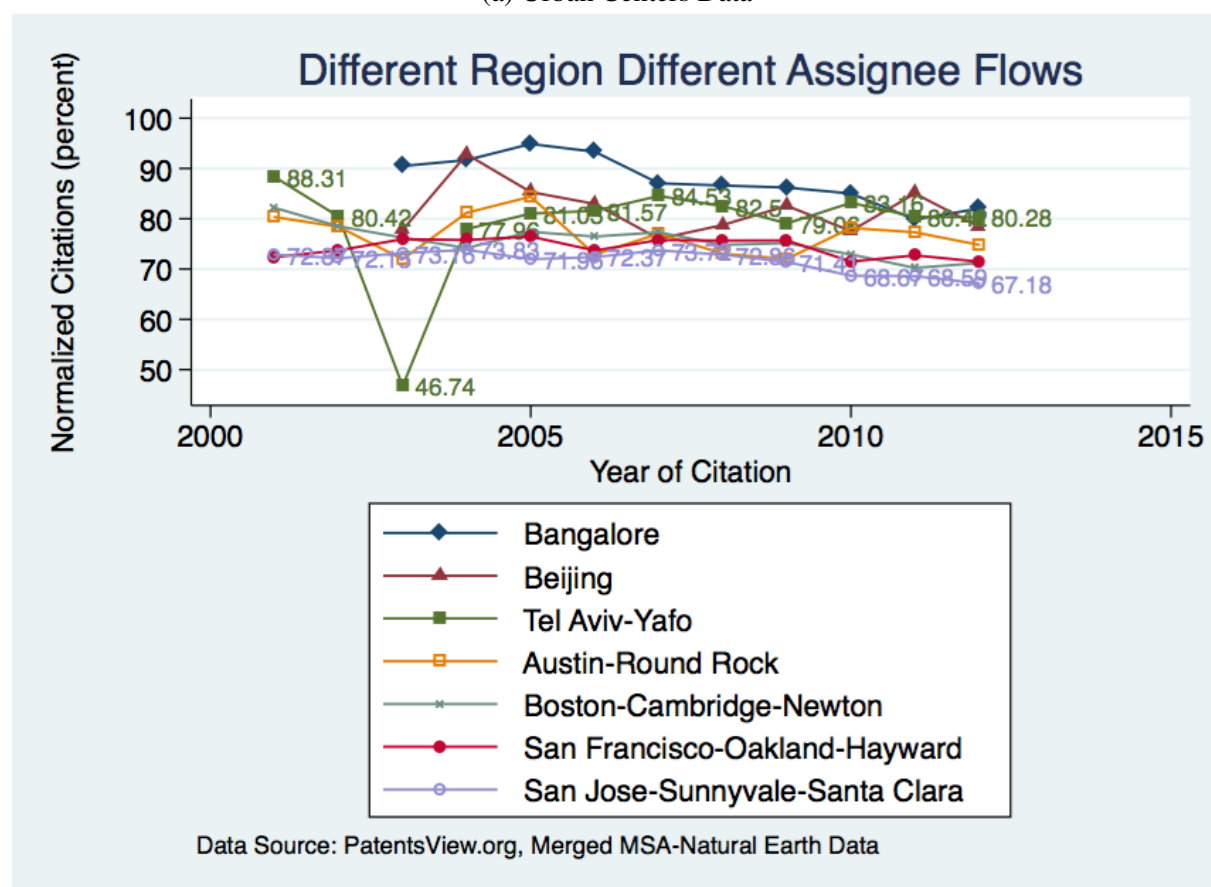
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(a) Urban Centers Data



(b) MSA-Urban Centers Data with Missing Regions Filled from location.tsv