Prompt Inquiry
a project of the Ishmael Policy Institute

WORKING PAPER NO. 2026-03 LEGACY MARKETS AND INVESTING

The City Experiment

Do the companies headquartered in a city rise and fall together? And does being near firms in your own industry make a company perform better?

RESEARCH QUESTION

Do the companies headquartered in a city rise and fall together, and does being near firms in the same industry make a company's stock perform better?

Prompted and verified by **Patrick Ishmael**, Founding Prompter, for Prompt Inquiry, a project of the Ishmael Policy Institute. Drafted with AI assistance (Claude and Mia) under the prompter's direction.

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ABOUT THIS PAPER

Research brief

RESEARCH QUESTION

Do the companies headquartered in a city rise and fall together, and does being near firms in the same industry make a company's stock perform better?

METHOD AND SOURCES

The workbook's Page_Figures tab maps each figure to its source tab; "What this does not show" states the limits. Sources are listed in full, with links where available, at the end of the study.

STARTING VIEW

Patrick's hypothesis was that companies in the same place are tied together by a local business community (shared talent, lenders, advisers and executives), so a company's city may signal where to invest, or not to. (From the study's "Where this came from" note.)

OPENING PROMPT

Not recorded. This is a legacy study, made before the charter required the opening prompt; see the note under Disclosures.

AI TOOLS AND VERIFICATION

Primary agents. Claude (Claude by Anthropic): research, analysis, figures and drafting; **Mia** (Muse by Meta): research brief, coordination and checks.

Contributing agents. None on record for this study.

Verification: the prompter is responsible for verifying the evidence this study rests on. Its sources and data are published so any reader can check the findings.

WHERE THIS CAME FROM

This began with Patrick's own research comparing companies by headquarters city, built on his hypothesis that companies in the same place are tied together by a local business community (shared talent, lenders, advisers and executives). Claude's analysis was then run independently on a larger, point-in-time universe, and its numbers came out close to his findings. Patrick asked for further tests, including against the strongest objections. His idea is broader than "buy a city fund": the city a company sits in may be a useful signal about where to invest, or not to invest.

What you are reading was prompted and verified by Patrick Ishmael and drafted with AI assistance (Claude). It is not investment advice. Every figure comes from the workbook linked below; its Page_Figures tab maps each claim to the tab that holds it.

The question

Every public company has a headquarters, and companies in the same city share more than an address: the same pool of workers, the same banks, law firms and accountants, the same business networks. Patrick's hypothesis is that this local business community ties a city's companies together, so that where a company is based may say something about how its stock will do. If it does, an investor could use a company's city as a signal of where to invest, or where not to.

The page tests that idea several ways. It groups U.S. public companies by headquarters city, 35 city areas from 2012 to 2026, and asks whether each city's companies, bought together, beat the market, measured two ways: counting every company equally, and weighting bigger companies more. Any 35 groups of stocks will produce some winners by luck, so each city is compared with random groups of companies of the same size. The page then asks whether cities that do well keep doing well, whether a city's stocks rise and fall together, and whether being near firms in your own industry helps a company's stock.

The short version

3 of 35 cities

A city's companies, bought together, did not beat the market

We tested 35 cities. Only 3 beat the market by both of our measures, and 18 trailed it both ways. Random groups would give about 7 ahead and 15 behind. A city that did well in one period was no more likely to do well in the next.

1 standout

The exception is the Bay Area

Silicon Valley companies beat the market by a wide margin, more than random groups of the same size almost ever do, and not just because of a few famous names. Other tech hubs, such as Boston and New York, did not do it.

Calm repeats

Some cities are reliably steadier

Returns did not repeat from one period to the next, but the size of the swings did. Minneapolis and Chicago companies were consistently calmer than the market, and more than their mix of industries explains.

Small but real

Companies in the same county tend to rise and fall together

This holds even when they are in unrelated industries. The effect is slight, and it stops at the county line: it nearly vanishes between counties in the same metro area.

No general payoff

Being near firms in your own industry did not, on average, lift a stock

There are exceptions, mainly in Silicon Valley tech, and a caution: stock prices may already reflect that advantage, so returns are not the final word.

What has been written before

> IN PLAIN TERMS
>
> Economists have long argued that firms benefit from being near each other, and finance researchers have shown that stocks in the same city move together. Our study differs in what it measures and how strictly it tests it.

This question touches two large literatures. Neither is new, and the project borrows from both.

AGGLOMERATION AND CLUSTERS

The economic case for firms locating near each other goes back to Marshall (1890): shared labor pools, specialized suppliers and knowledge spillovers. Porter's work on clusters (1998) made the idea a management staple. Empirical work finds real effects in some settings. Greenstone, Hornbeck and Moretti (2010) show that incumbent plants' productivity rose after a large new plant opened nearby. Henderson (2003) finds scale externalities within industries for high-tech but not for capital-goods plants. Glaeser, Kallal, Scheinkman and Shleifer (1992) found that cities grew more with a diverse industrial base than with specialization. Studies of cluster size and firm performance include Folta, Cooper and Baik (2006) and Kukalis (2010). Engelberg, Ozoguz and Wang (2018) examine information spillovers inside industry clusters and market efficiency.

GEOGRAPHY AND STOCK RETURNS

Pirinsky and Wang (2006) showed that stocks of companies headquartered in the same metropolitan area move together beyond what industry and fundamentals explain. Hong, Kubik and Stein (2008) tied local stock prices to local investor demand. García and Norli (2012) found that firms operating in only a few states earn higher stock returns (about 70 basis points a month) than geographically dispersed firms, measuring operating footprint from the states named in annual reports. Tuzel and Zhang (2017) argued that local economic conditions create local risk factors priced in returns. Parsons, Sabbatucci and Titman (2020) documented lead-lag return effects between firms headquartered in the same place but in different sectors.

How this project is different

- **It tests a portfolio you could actually hold.** Baskets are rebuilt each year using only information available at the time (point-in-time), include small companies down to a $250 million floor, and are compared with random baskets of the same size.
- **It uses a harder placebo.** Real cities are compared with random groups in which each firm keeps one fixed random label for the whole period. This turned out to matter, because the first, simpler null was too forgiving to the data.
- **It goes below the metro area.** The county, not the metro, is where cross-industry co-movement lives here: strong inside a county, near zero between counties in the same metro.
- **It separates two explanations.** Because dispersed firms show the same-city link and local-operating firms (banks, utilities, REITs) do not, the pattern fits a headquarters-community story better than a regional-economy story.
- **It tests volatility, not only returns,** and finds that risk is the part that persists.
- **It asks the agglomeration question in returns,** not productivity, and says plainly what that can and cannot show.

Journal, year and the findings described for each paper were checked against publisher or indexing records. The Marshall link is the 1891 printing of the 1890 first edition.

All 35 cities at a glance

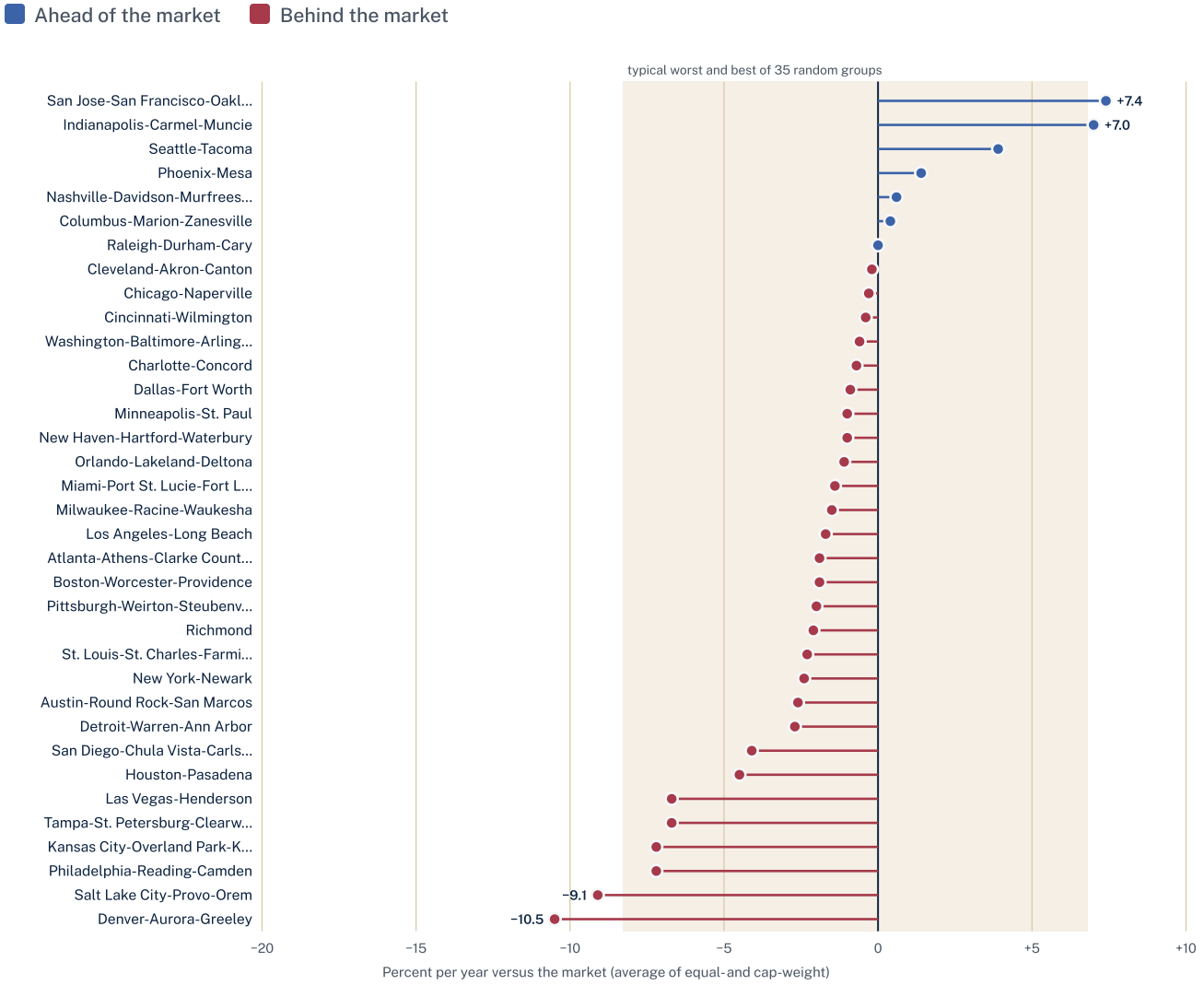
IN PLAIN TERMS

Most cities sit within a few % a year of the market, a few sit well behind it, and the Bay Area and Indianapolis sit ahead. Switch the view to see equal-weight (every company counts the same) or cap-weight (bigger companies count more).

FIGURE 1

Every city area against the market, 2012–2026

Percent per year ahead of (blue) or behind (red) the whole-universe benchmark. Hover or tab to a row for details.



▼ View as table

CITY AREA	EQUAL-WEIGHT	CAP-WEIGHT	COMBINED	% OF YEARS BEHIND
San Jose-San Francisco-Oakl...	+5.6	+9.2	+7.4	20%
Indianapolis-Carmel-Muncie	+4.5	+9.5	+7.0	20%
Seattle-Tacoma	−0.7	+8.5	+3.9	40%
Phoenix-Mesa	+4.0	−1.1	+1.4	47%
Nashville-Davidson-Murfrees...	+1.0	+0.2	+0.6	47%
Columbus-Marion-Zanesville	+3.0	−2.1	+0.4	53%
Raleigh-Durham-Cary	+1.3	−1.3	0.0	53%
Cleveland-Akron-Canton	−0.4	0.0	−0.2	60%
Chicago-Naperville	+0.8	−1.3	−0.3	60%
Cincinnati-Wilmington	+2.7	−3.5	−0.4	47%

CITY AREA	EQUAL-WEIGHT	CAP-WEIGHT	COMBINED	% OF YEARS BEHIND
Washington-Baltimore-Arling…	−1.2	−0.1	−0.6	60%
Charlotte-Concord	−1.6	+0.2	−0.7	47%
Dallas-Fort Worth	0.0	−1.9	−0.9	47%
Minneapolis-St. Paul	+1.3	−3.3	−1.0	53%
New Haven-Hartford-Waterbury	−3.3	+1.3	−1.0	47%
Orlando-Lakeland-Deltona	−0.3	−2.0	−1.1	47%
Miami-Port St. Lucie-Fort L…	−2.5	−0.3	−1.4	60%
Milwaukee-Racine-Waukesha	+1.4	−4.4	−1.5	53%
Los Angeles-Long Beach	−0.2	−3.3	−1.7	60%
Atlanta-Athens-Clarke Count…	+0.8	−4.6	−1.9	40%
Boston-Worcester-Providence	−1.8	−2.0	−1.9	53%
Pittsburgh-Weirton-Steubenv…	+0.2	−4.3	−2.0	53%
Richmond	−0.5	−3.7	−2.1	67%
St. Louis-St. Charles-Farmi…	−1.2	−3.3	−2.3	67%
New York-Newark	−1.0	−3.8	−2.4	73%
Austin-Round Rock-San Marcos	−3.7	−1.6	−2.6	47%
Detroit-Warren-Ann Arbor	−1.6	−3.9	−2.7	67%
San Diego-Chula Vista-Carls…	−2.7	−5.5	−4.1	53%
Houston-Pasadena	−3.4	−5.7	−4.5	73%
Las Vegas-Henderson	−3.7	−9.7	−6.7	67%
Tampa-St. Petersburg-Clearw…	−4.6	−8.7	−6.7	87%
Kansas City-Overland Park-K…	−3.8	−10.7	−7.2	60%
Philadelphia-Reading-Camden	−1.2	−13.3	−7.2	73%
Salt Lake City-Provo-Orem	−4.6	−13.6	−9.1	80%
Denver-Aurora-Greeley	−6.4	−14.7	−10.5	80%

How to read it: the shaded band shows how far ahead or behind the best and worst of 35 random groups of companies typically land. Real cities mostly fall inside it.

IS THAT SPREAD JUST LUCK?

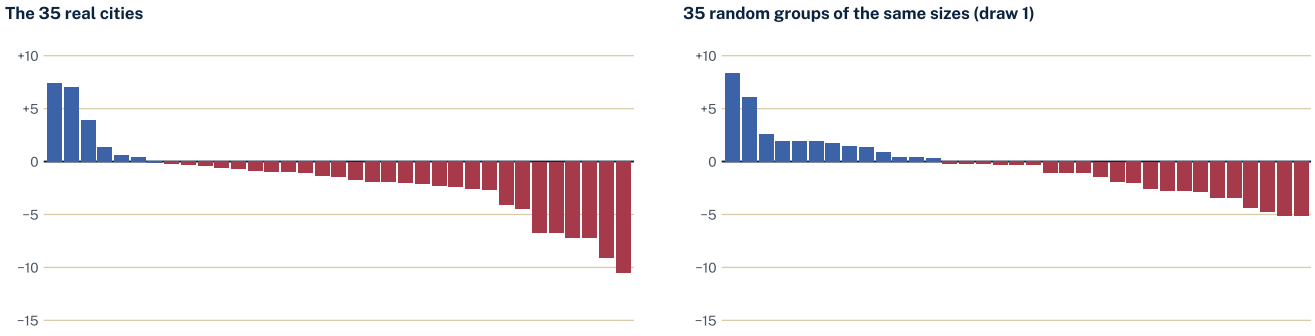
IN PLAIN TERMS

Random groups of companies also produce a spread of winners and losers. Compare the real cities with random draws and judge for yourself whether the real pattern stands out.

FIGURE 2

Real cities versus random groups of companies

Each bar is one group's combined excess return, sorted high to low. Press the button to draw a new random set.



How to read it: the random groups keep each company's label fixed over the whole period and match the real cities' sizes. Random sets often show a similar spread.

The Bay Area exception

> IN PLAIN TERMS
>
> Silicon Valley companies beat the market by roughly 5 to 9% a year from 2012 to 2026. The edge is not just Apple, Nvidia and a few others, and it is concentrated in Santa Clara County. No other city did this.

Bay Area companies beat the whole-universe benchmark by about 5.6% a year equal-weighted and 9.2 cap-weighted, from 2012 to 2026. That is better than essentially every random group of the same size we drew (the 100th percentile). Three checks matter:

- **Not only a few stars.** Removing the top five contributors (Apple, Nvidia, Meta and the two Google share classes) leaves +5.1 equal-weighted and +5.9 cap-weighted. The median Bay Area stock earned 9.2% a year versus 8.0% for the universe.
- **Not simply "tech".** Bay Area tech beats tech elsewhere; Boston tech (−1.0 equal-weighted) and New York tech (−5.7) do not.
- **Concentrated.** At the county level the edge is Santa Clara County (+12.1 equal-weighted, +12.5 cap-weighted), and the Bay Area's edge over other tech is larger in 2019-2026 than in 2012-2018.

The honest limits: it is one place, chosen after looking at 35, and delisted non-S&P companies lack prices. A stress test shows the equal-weighted edge would vanish only if about 10% to 17% of firms were missing and had collapsed, against roughly 5% missing in both the Bay Area and the whole universe.

The cities that lag

> IN PLAIN TERMS
> Eighteen of the 35 cities trailed the market under both of our measures, and six trailed by 5% a year or more. That is a bit worse than chance would produce, not dramatically so, and the laggards did not stay laggards.

An investor can use a city as a warning as well as a recommendation, so the weak side matters as much as the strong side. We compared the real cities with random groups of companies of the same sizes (each company keeping one random label for the whole period), repeated 150 times.

COUNT (OF 35 AREAS)	REAL CITIES	RANDOM GROUPS, AVERAGE	RANDOM GROUPS, TYPICAL RANGE
Behind the market both ways	18	15.2	11 to 19
Ahead of the market both ways	3	7.3	4 to 10
Behind by 5+% a year (combined)	6	2.7	reached in about 7% of runs
Ahead by 5+% a year (combined)	2	1.3	n/a
Worst city (% a year)	Denver, −10.5	−8.3	as bad or worse in 23% of runs
Spread between cities (standard deviation)	3.8	3.2	as wide in 13% of runs

What this says:

- **Most cities trail the market, and that is normal.** A few large winners pull the market average up, so most baskets trail it. Random groups trail in both ways about 15 times out of 35, close to the real 18.
- **The weak tail is somewhat heavier than chance, but not conclusively.** Random groups produced six or more cities that far behind in only about 7% of runs. The distribution of results across cities is a little lumpier than random, mostly on the downside, and not by enough to rule out luck.

- **The worst cities were Denver (−10.5% a year), Salt Lake City (−9.1), Philadelphia (−7.2), Kansas City (−7.2), Las Vegas (−6.7) and Tampa (−6.7).** Denver is notable on its own, ranking below every random group of its size. But picking the worst of 35 cities exaggerates how bad it is, and chance alone often produces a worst city that bad.
- **Lagging did not repeat across the two halves of the period.** A city's rank in 2012-2018 told us essentially nothing about its rank in 2019-2026 (rank correlation 0.05). Cities did switch between ahead and behind more often than random groups do (31% kept the same sign in both halves, against 53%), but the order of cities carried almost no information from one half to the next.

WHAT IF "LAGGARD" JUST MEANS BELOW AVERAGE?

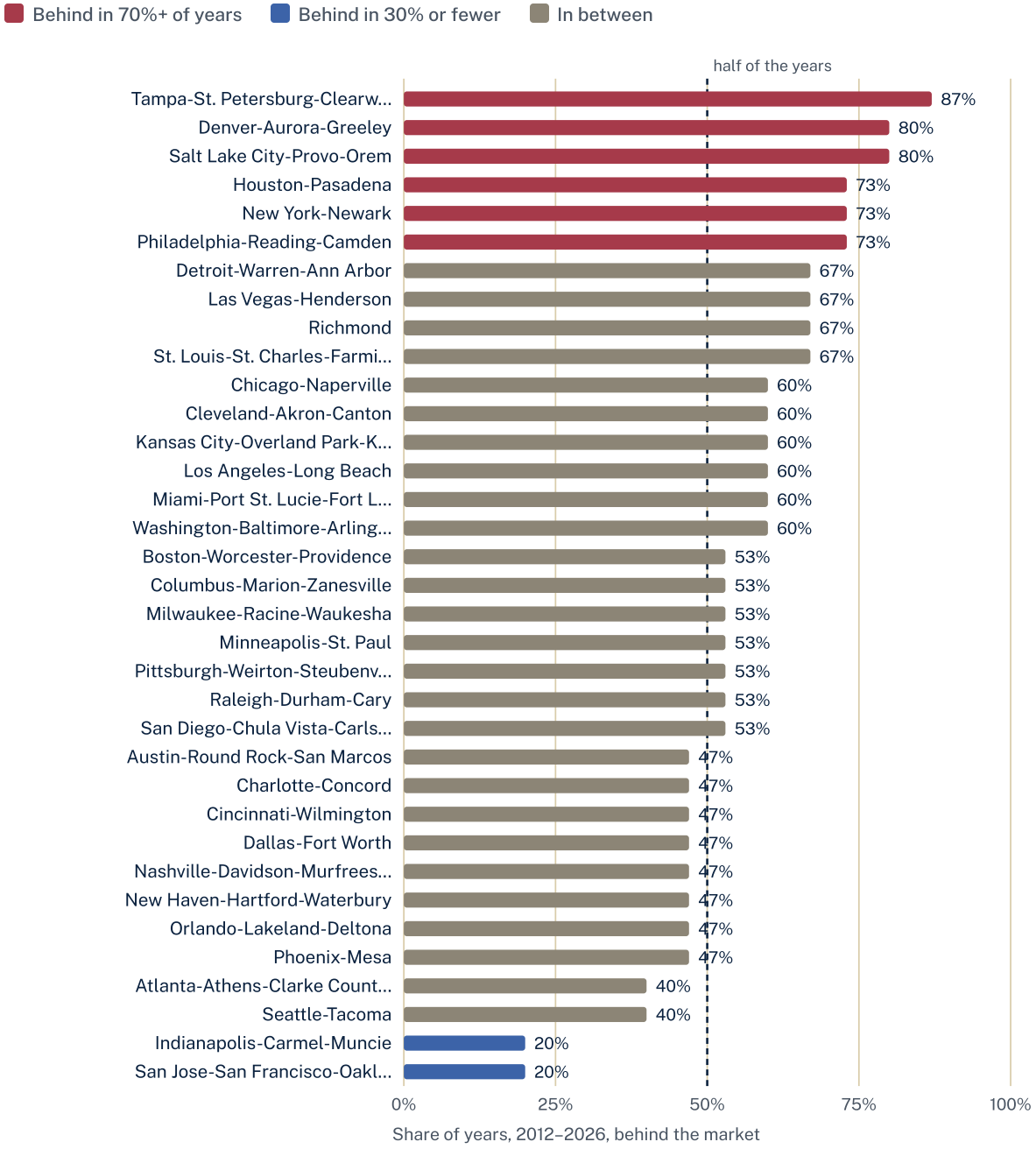
> IN PLAIN TERMS
> Using the looser definition, being behind the market in one year made a city slightly more likely to be behind the next year, and a few cities were behind most years. That pattern is stronger than random groups usually produce (they matched it only 3% of the time), and it did not carry across the two halves of the period.

TEST (BELOW-AVERAGE = BEHIND THE MARKET THAT YEAR)	REAL CITIES	RANDOM GROUPS
Chance of being behind next year, if behind this year	61.5%	55.8% average (random groups matched this only 3% of the time)
Chance of being behind next year, if ahead this year	51.4%	51.2%
Cities behind in at least 70% of years	6	4.0 average (19% of runs match)
Cities with a clearly negative average (t below −2)	4	2.7 average (26% of runs match)
Cities with the same sign (ahead or behind) in both halves	31%	53% average

FIGURE 3

How often each city trailed the market

Share of years, 2012–2026, in which each city area's combined return was below the benchmark.



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CITY AREA	% OF YEARS BEHIND	AVERAGE EXCESS (% A YEAR)
Tampa-St. Petersburg-Clearw...	87%	−6.7
Denver-Aurora-Greeley	80%	−10.5
Salt Lake City-Provo-Orem	80%	−9.1
Houston-Pasadena	73%	−4.5
New York-Newark	73%	−2.4

CITY AREA	% OF YEARS BEHIND	AVERAGE EXCESS (% A YEAR)
Philadelphia-Reading-Camden	73%	−7.2
Detroit-Warren-Ann Arbor	67%	−2.7
Las Vegas-Henderson	67%	−6.7
Richmond	67%	−2.1
St. Louis-St. Charles-Farmi…	67%	−2.3
Chicago-Naperville	60%	−0.3
Cleveland-Akron-Canton	60%	−0.2
Kansas City-Overland Park-K…	60%	−7.2
Los Angeles-Long Beach	60%	−1.7
Miami-Port St. Lucie-Fort L…	60%	−1.4
Washington-Baltimore-Arling…	60%	−0.6
Boston-Worcester-Providence	53%	−1.9
Columbus-Marion-Zanesville	53%	+0.4
Milwaukee-Racine-Waukesha	53%	−1.5
Minneapolis-St. Paul	53%	−1.0
Pittsburgh-Weirton-Steubenv…	53%	−2.0
Raleigh-Durham-Cary	53%	0.0
San Diego-Chula Vista-Carls…	53%	−4.1
Austin-Round Rock-San Marcos	47%	−2.6
Charlotte-Concord	47%	−0.7
Cincinnati-Wilmington	47%	−0.4
Dallas-Fort Worth	47%	−0.9
Nashville-Davidson-Murfrees…	47%	+0.6
New Haven-Hartford-Waterbury	47%	−1.0
Orlando-Lakeland-Deltona	47%	−1.1
Phoenix-Mesa	47%	+1.4
Atlanta-Athens-Clarke Count…	40%	−1.9
Seattle-Tacoma	40%	+3.9
Indianapolis-Carmel-Muncie	20%	+7.0
San Jose-San Francisco-Oakl…	20%	+7.4

Red marks cities behind in 70% or more of years; blue marks cities behind in 30% or fewer. The Bay Area and Indianapolis are rarely behind.

- **Some persistence from year to year.** A city that lagged was somewhat more likely to lag again, a small step beyond chance.
- **Most often behind:** Tampa (behind in 87% of years), Denver and Salt Lake City (80%), then Philadelphia, New York and Houston (73%). The Bay Area

and Indianapolis were behind in only 20% of years.

- **No stable laggard label.** Cities that were behind in 2012-2018 were, more often than chance, ahead in 2019-2026. That reversal could reflect the market's later shift toward mega-cap technology, which favors the Bay Area and Seattle, and with only two halves it may be noise.

So the looser definition does not rescue a "bad city culture" signal, but it does fit your intuition that the Bay Area is rarely behind and that some cities are behind more often than not. Whether that reflects corporate culture or just industry mix and the technology boom is what a fundamentals test could answer.

The takeaway is that the clearest signals are the Bay Area on the upside and some unusually weak cities on the downside, but with 35 cities and noisy data, we cannot say that city-level corporate culture reliably predicts performance. What would settle it is repeating the test with more years, and checking whether lagging cities show weak sales and profits, not just weak stock returns.

Risk is the part that persists

> IN PLAIN TERMS
> A city's stocks did not repeat their returns from one period to the next, but they did repeat how bumpy the ride was. Minneapolis and Chicago were reliably calmer than the market.

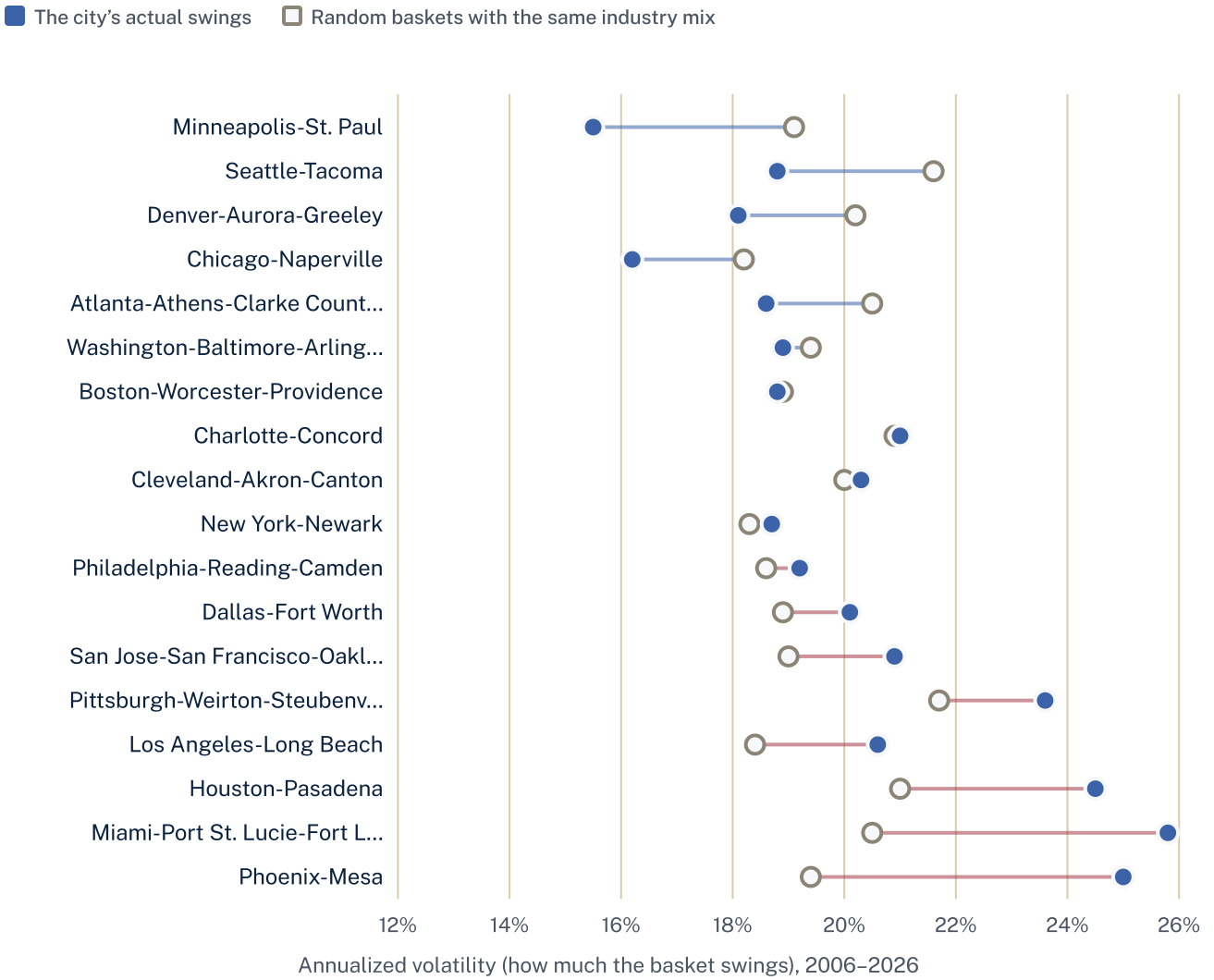
Return rankings did not carry from one period to the next. Volatility rankings did: cities ranked by how much they swung in one period came out in nearly the same order in the next (a rank correlation of 0.88, where 1.0 is identical). Minneapolis-St. Paul (annualized volatility 15.5% versus 19.1% for industry-matched random baskets) and Chicago (16.2% versus 18.2%) are calmer than their industry mix explains, as are Seattle (18.8% versus 21.6%) and Denver (18.1% versus 20.2%) (Figure 4). A 40/30/30 mix of the Bay Area, Chicago-

Minneapolis and defensive industries cut the 2007-09 drawdown from about −51% for the equal-weighted market to about −44%. That mix was chosen in-sample, so treat it as an illustration, not a forecast.

FIGURE 4

Calmer than their industry mix explains

Each city's actual volatility (filled dot) next to random baskets with the same industry mix (open dot). Shorter swings mean a calmer ride. Volatility is measured over 2006–2026, a longer span than Figures 1–3.



▼ View as table

CITY AREA	FIRMS	ACTUAL VOLATILITY	INDUSTRY-MATCHED	CALMER THAN % OF MATCHED BASKETS	BETA	MATCHED BETA
Minneapolis-St. Paul	13	15.5%	19.1%	97%	0.77	0.95
Seattle-Tacoma	12	18.8%	21.6%	90%	0.94	1.08
Denver-Aurora-Greeley	11	18.1%	20.2%	83%	0.87	1
Chicago-Naperville	29	16.2%	18.2%	94%	0.86	0.96
Atlanta-Athens-Clarke Count...	18	18.6%	20.5%	88%	0.95	1.06
Washington-Baltimore-Arling...	27	18.9%	19.4%	64%	1	1.03
Boston-Worcester-Providence	28	18.8%	18.9%	47%	0.96	0.98

CITY AREA	FIRMS	ACTUAL VOLATILITY	INDUSTRY-MATCHED	CALMER THAN % OF MATCHED BASKETS	BETA	MATCHED BETA
Charlotte-Concord	10	21%	20.9%	43%	1.08	1.04
Cleveland-Akron-Canton	12	20.3%	20%	40%	1.03	1.01
New York-Newark	83	18.7%	18.3%	30%	1.02	1
Philadelphia-Reading-Camden	18	19.2%	18.6%	33%	1.01	0.95
Dallas-Fort Worth	31	20.1%	18.9%	14%	1.06	1.01
San Jose-San Francisco-Oakl…	62	20.9%	19%	0%	1.04	1.01
Pittsburgh-Weirton-Steubenv…	10	23.6%	21.7%	22%	1.14	1
Los Angeles-Long Beach	19	20.6%	18.4%	8%	1.05	0.95
Houston-Pasadena	27	24.5%	21%	0%	1.06	0.95
Miami-Port St. Lucie-Fort L…	13	25.8%	20.5%	0%	1.33	1.03
Phoenix-Mesa	12	25%	19.4%	1%	1.17	0.95

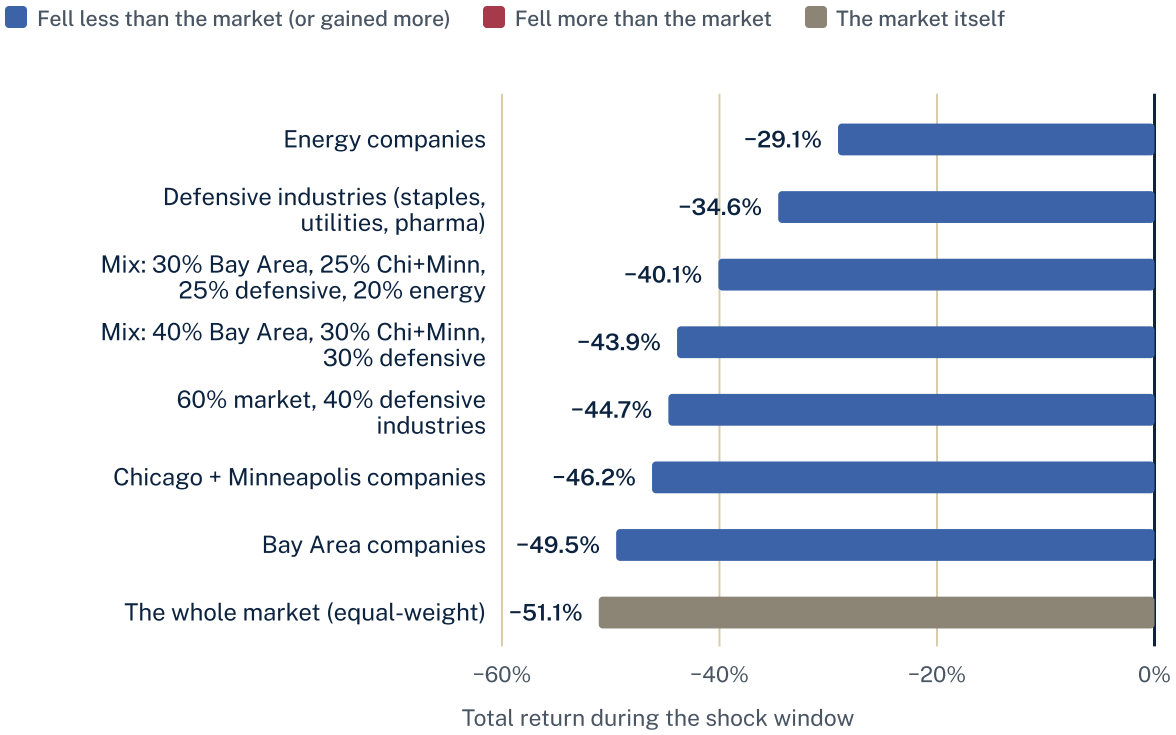
Minneapolis, Seattle, Chicago and Denver sit well to the left of their matched baskets, so industry mix does not explain their steadiness. Beta, the other column in the table view, tells the same story.

In shocks, *industry*, not geography, did most of the protecting: staples, utilities and pharma held up in recessions and tariff shocks, and energy helped in the 2007–09 financial crisis (−29.1% against −51.1% for the market) and in the 2022 supply and inflation shocks (Figure 5).

FIGURE 5

What different portfolios did in market shocks

Pick a shock to see how each portfolio fared. The shocks run from 2007 to 2025, some before the 2012–2026 window of Figures 1–3. Blue fell less than the market (or gained more); red fell more.



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PORTFOLIO	RETURN IN WINDOW	VS MARKET (%)
Energy companies	−29.1%	+22.0
Defensive industries (staples, utilities, pharma)	−34.6%	+16.5
Mix: 30% Bay Area, 25% Chi+Minn, 25% defensive, 20% energy	−40.1%	+11.0
Mix: 40% Bay Area, 30% Chi+Minn, 30% defensive	−43.9%	+7.2
60% market, 40% defensive industries	−44.7%	+6.4
Chicago + Minneapolis companies	−46.2%	+4.9
Bay Area companies	−49.5%	+1.6
The whole market (equal-weight)	−51.1%	—

Industry choices, not geography, did most of the protecting. The mixes are in-sample illustrations, not forecasts.

The county is the unit that matters

IN PLAIN TERMS

Companies headquartered in the same county, even in unrelated industries, move together a little more than companies elsewhere. The tie stops at the county line.

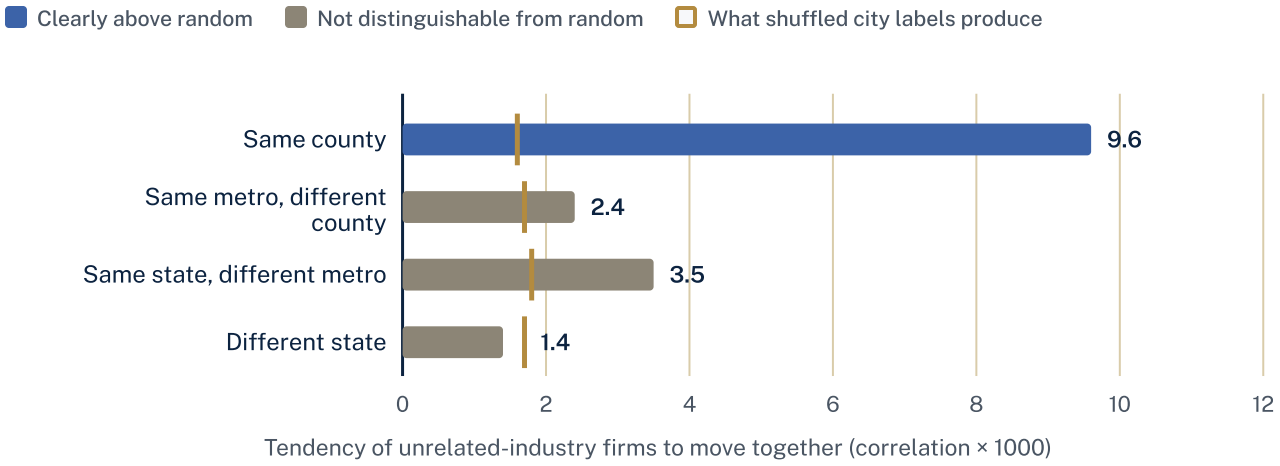
After removing each stock's industry movement, firms in the same city but different industries still move together slightly more than firms in different cities (permutation z = 2.3). The detail is sharper at the county level:

CROSS-INDUSTRY PAIR	OBSERVED RESIDUAL CORRELATION	SHUFFLED-LABEL AVERAGE	Z
Same county	0.0096	0.0016	3.6
Same metro, different county	0.0024	0.0017	0.3
Same state, different metro	0.0035	0.0018	0.8
Different state	0.0014	0.0017	−3.2

FIGURE 6

The tie stops at the county line

How closely firms in different industries move together, by how far apart their headquarters are. Brass ticks mark what random labels would produce.



▼ View as table

PAIR TYPE	OBSERVED (×1000)	RANDOM LABELS (×1000)	Z
Same county	9.6	1.6	+3.6
Same metro, different county	2.4	1.7	+0.3
Same state, different metro	3.5	1.8	+0.8
Different state	1.4	1.7	−3.2

Only same-county firms stand clearly above chance.

How to read the table: the correlation columns measure how closely monthly returns move together after removing each stock's industry. "z" says how far the observed number is from what shuffled city labels produce; above about 2 is usually taken as meaningful, and near 0 means no signal.

The effect is small in absolute terms, and it did not translate into outperformance: a metro portfolio made of its core counties performed about like the whole metro. But it is the relationship Patrick's hypothesis predicts, and it is concentrated where a "local business community" would be.

HEADQUARTERS OR ECONOMY?

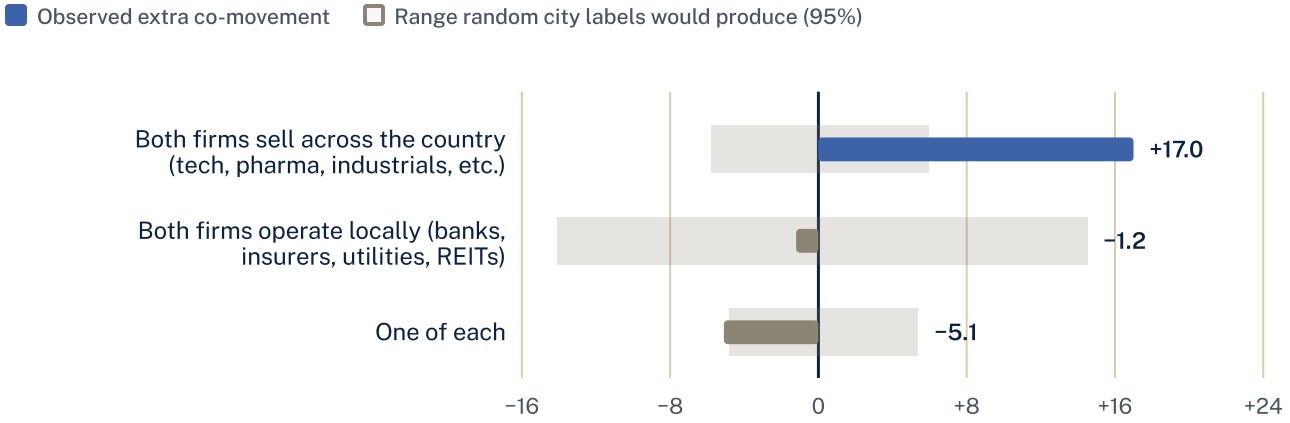
> **IN PLAIN TERMS**
> The tie shows up among companies that sell across the country, not among local banks and utilities. That points to shared executives, lenders and advisers, not the local economy.

A company's headquarters is not where its plants, stores and customers are. If shared local conditions drove the co-movement, firms that operate locally (banks, insurers, utilities, REITs) should show it most. They show none ($z = -0.2$). Dispersed firms (tech, pharma, industrials and others) show it clearly ($z = +5.7$). That favors the headquarters-community channel. The caveats are real: industry is a rough proxy for operating footprint, and the local-operating test has fewer pairs and less power.

FIGURE 7

The tie shows up in firms that sell across the country

Same-city firms in different industries, split by whether they operate locally. Grey bands show the range random city labels would produce.



▼ View as table

FIRM TYPE	OBSERVED (×1000)	RANDOM-LABEL 95% RANGE	Z	PAIRS
Both firms sell across the country (tech, pharma, industrials, etc.)	+17.0	−5.8 to +6.0	+5.7	1413
Both firms operate locally (banks, insurers, utilities, REITs)	−1.2	−14.1 to +14.5	−0.2	454
One of each	−5.1	−4.8 to +5.4	−2.1	1790

If the local economy were the cause, local-operating firms should show it most. They show none, though their band is wide. Pairs with one firm of each kind fall just below the random band (z = −2.1), the one result outside it.

Does sitting next to your industry help?

IN PLAIN TERMS

On average, a company with many same-industry neighbors did not earn better stock returns than one with few. The result has exceptions, and stock returns may be the wrong yardstick.

The textbook expectation is yes. In returns, the pooled answer is close to no. Regressing each firm's return (relative to its industry that year) on the number of same-industry headquarters neighbors gives about +0.6% a year per log-peer (a measure where each doubling of neighbors counts the same), with a 95% confidence range of roughly −0.4 to +1.7: the true effect is probably in that range, which includes zero. Among footloose industries, excluding the Bay Area, it is +0.05 (Figure 8). Houston energy firms trailed energy firms

elsewhere by about 4% a year, which fits Patrick's point that Houston's oil industry sits there for geographic reasons, not because proximity makes firms better.

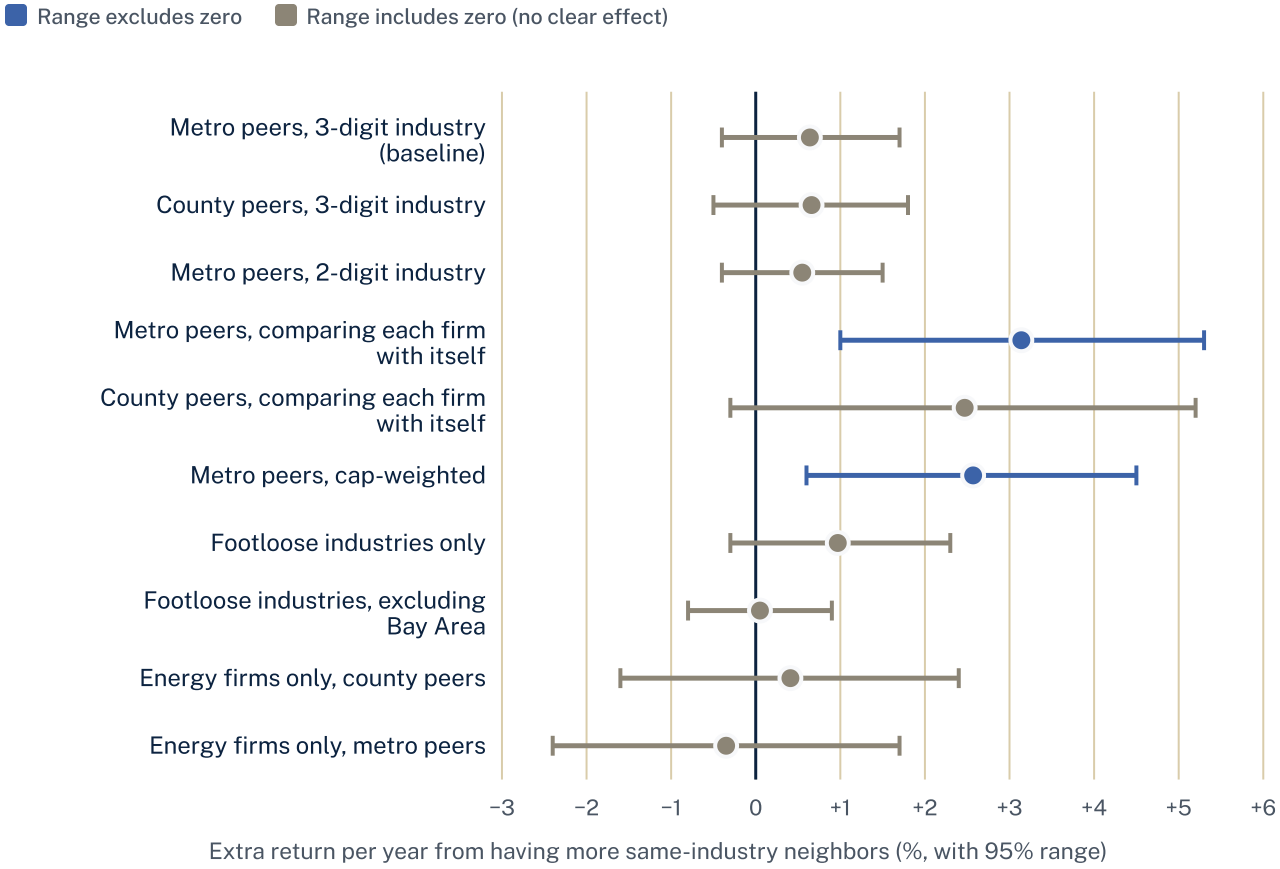
The result is less clean than that headline, and the page should say so:

- Comparing each firm with its own past (a "firm fixed effects" test) gives +3.1% per log-peer (t = 2.8). That could be real agglomeration or clusters growing after their firms succeed.
- Cap-weighted, the effect is +2.6 (t = 2.6), driven by large Bay Area tech names.
- Tech hardware is positive (t = 2.2); industrials and insurance are negative. With 16 industry groups, some of this is chance.
- Of 38 industry-county clusters with at least six firms, 3 beat the same industry elsewhere at t above 2 (about 1 expected) and none lagged that badly. The three are Stamford (Fairfield County), San Jose hardware and San Jose software.

FIGURE 8

Does having more same-industry neighbors raise a stock's return?

Estimated extra return per year (%), with 95% ranges. Ranges that include zero mean no clear effect.



▼ View as table

TEST	ESTIMATE	LOW	HIGH
Metro peers, 3-digit industry (baseline)	+0.64	−0.4	+1.7
County peers, 3-digit industry	+0.66	−0.5	+1.8
Metro peers, 2-digit industry	+0.55	−0.4	+1.5
Metro peers, comparing each firm with itself	+3.14	+1.0	+5.3
County peers, comparing each firm with itself	+2.47	−0.3	+5.2
Metro peers, cap-weighted	+2.57	+0.6	+4.5
Footloose industries only	+0.97	−0.3	+2.3
Footloose industries, excluding Bay Area	+0.05	−0.8	+0.9
Energy firms only, county peers	+0.41	−1.6	+2.4
Energy firms only, metro peers	−0.35	−2.4	+1.7

Only the within-firm and cap-weighted versions are clearly positive. Excluding the Bay Area, the effect is about zero.

The most defensible reading: no general return premium for HQ proximity to same-industry firms, with any effect concentrated in Silicon Valley technology. Even that is limited. Stock prices already reflect expected advantages, so returns detect only benefits the market did not anticipate. Whether proximity helps a firm's *sales, margins or productivity* is a different question, and the right test uses financial statements.

What the city funds would have done since 2006

> IN PLAIN TERMS
>
> If you had bought every company headquartered in a city each year and held them equally weighted, 21 of 56 regions would have beaten the S&P 500 (7.8× since December 2006). The leaders were Boise (33.0×), Tulsa (16.4×) and Buffalo (16.3×), ahead of the Bay Area (13.2×) and Dallas (9.7×); small regions with only a few companies can swing on one or two stocks. Seattle (5.7×), New York (4.6×) and Houston (4.5×) trailed. Counting only S&P 500 companies, 22 of 27 regions beat the index, led by Tempe, the Bay Area and Austin (Figure 9). Weighting by company size tells a similar story with a twist: since December 2011 the Bay Area (about 21× against 7.9× for the S&P 500) and Seattle (about 19×) stayed far ahead, while New York (about 4.9×) and Houston (about 3.3×) fell well behind. Size weighting favors the regions that host the market's largest winners, so both views are worth a look.

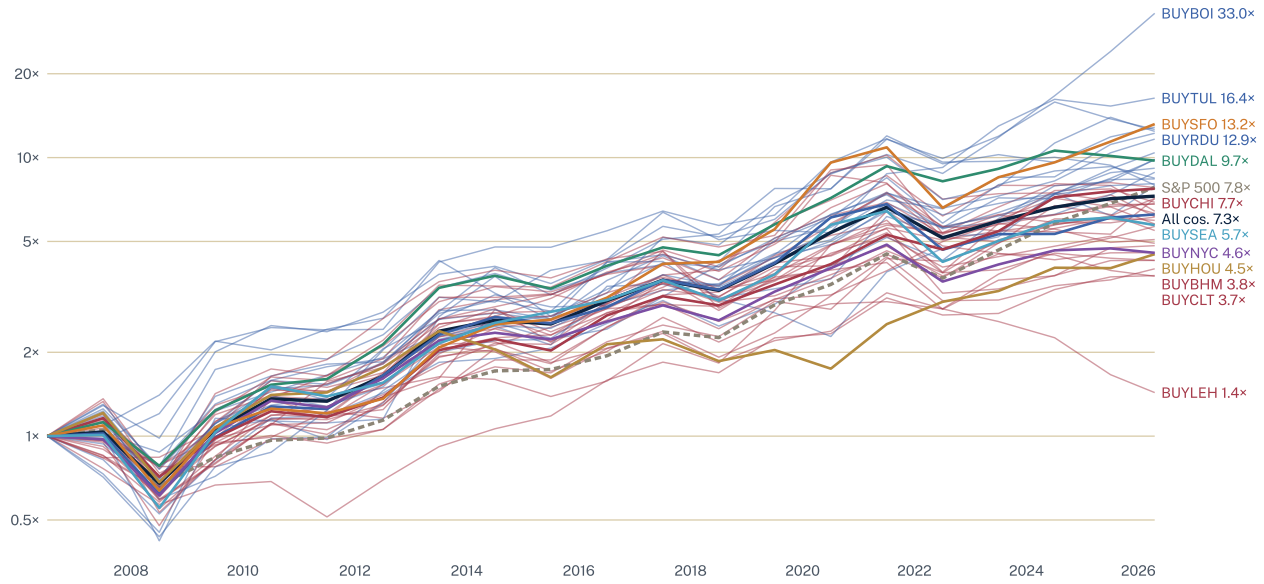
FIGURE 9

Growth of $1 in each city fund, December 2006 to October 2026

Each line is a hypothetical fund holding the companies headquartered in that region that year, equal-weighted and rebalanced annually. The chart opens on the 50 regions with the most market value; every region is available under Choose funds. Hover for values by year.

Thin line: finished ahead of the S&P 500 Thin line: finished behind it Bold: featured funds and benchmarks

▼ Choose funds (50 of 56 showing)



▼ View as table

FUND	GROWTH OF $1	PER YEAR	MARKET VALUE	COMPANIES
BUYBOI Boise	33.0×	19.3%	$350 billion	7
BUYTUL Tulsa	16.4×	15.2%	$146 billion	12
BUYBUF Buffalo	16.3×	15.2%	$60 billion	12
BUYSFO SF Bay Area	13.2×	13.9%	$26.0 trillion	362
BUYRDU Raleigh-Durham	12.9×	13.8%	$143 billion	31
BUYOMA Omaha	12.6×	13.7%	$866 billion	16
BUYORL Orlando	12.4×	13.6%	$91 billion	31
BUYTOL Toledo	12.2×	13.5%	$144 billion	6
BUYIND Indianapolis	11.7×	13.2%	$1.3 trillion	27
BUYMID Midland-Odessa	10.4×	12.6%	$80 billion	9
BUYCMH Columbus	9.9×	12.3%	$310 billion	32
BUYCLE Cleveland	9.8×	12.2%	$570 billion	39
BUYDAL Dallas-Fort Worth	9.7×	12.2%	$1.7 trillion	163
BUYLOU Louisville	9.2×	11.8%	$130 billion	14
BUYGSO Greensboro-Winston-Salem	8.9×	11.7%	$62 billion	10
BUYNAS Nashville	8.9×	11.7%	$227 billion	33
BUYPHX Phoenix	8.4×	11.4%	$638 billion	66

FUND	GROWTH OF $1	PER YEAR	MARKET VALUE	COMPANIES
BUYWAS Washington-Baltimore	8.4×	11.3%	$1.9 trillion	172
BUYMSP Minneapolis-St. Paul	8.1×	11.1%	$937 billion	63
BUYNWA Northwest Arkansas	8.0×	11.1%	$907 billion	5
BUYQUA Quad Cities	7.9×	11.0%	$129 billion	4
S&P 500 (SPY)	7.8×	10.9%	—	—
BUYATL Atlanta	7.8×	10.9%	$1.4 trillion	100
BUYCHI Chicago	7.7×	10.9%	$2.0 trillion	135
BUYREN Reno	7.4×	10.7%	$31 billion	16
All companies, equal-weighted	7.3×	10.5%	—	—
BUYMKE Milwaukee	7.1×	10.4%	$186 billion	30
BUYSAT San Antonio	7.1×	10.4%	$72 billion	16
BUYMEM Memphis	6.9×	10.3%	$192 billion	9
BUYRIC Richmond	6.8×	10.2%	$236 billion	22
BUYLAX Los Angeles	6.8×	10.2%	$1.1 trillion	213
BUYKAL Kalamazoo	6.4×	9.9%	$134 billion	1
BUYLAS Las Vegas	6.3×	9.8%	$113 billion	31
BUYCIN Cincinnati	6.3×	9.7%	$881 billion	25
BUYBOS Boston	6.3×	9.7%	$1.9 trillion	254
BUYMIA Miami	6.1×	9.6%	$1.1 trillion	139
BUYDET Detroit	6.1×	9.6%	$304 billion	42
BUYSDG San Diego	6.0×	9.4%	$539 billion	104
BUYSLC Salt Lake City	5.8×	9.3%	$91 billion	50
BUYSTL St. Louis	5.8×	9.2%	$195 billion	24
BUYSEA Seattle	5.7×	9.2%	$7.0 trillion	53
BUYPIT Pittsburgh	5.7×	9.2%	$425 billion	33
BUYROC Rochester	5.5×	9.0%	$50 billion	17
BUYJAX Jacksonville	5.5×	9.0%	$152 billion	18
BUYTPA Tampa Bay	5.1×	8.6%	$114 billion	33
BUYPHL Philadelphia	4.9×	8.4%	$682 billion	126
BUYHAV Hartford-New Haven	4.8×	8.3%	$397 billion	35
BUYALB Albany	4.7×	8.1%	$23 billion	12
BUYHAM Hampton Roads	4.6×	8.0%	$83 billion	11
BUYNYC New York	4.6×	8.0%	$7.6 trillion	585
BUYHOU Houston	4.5×	7.9%	$2.1 trillion	159
BUYPOR Portland	4.3×	7.6%	$90 billion	21
BUYAUS Austin	4.3×	7.6%	$2.4 trillion	52
BUYDEN Denver	4.0×	7.2%	$400 billion	99
BUYBHM Birmingham	3.8×	6.9%	$79 billion	7
BUYCLT Charlotte	3.7×	6.9%	$991 billion	56

FUND	GROWTH OF $1	PER YEAR	MARKET VALUE	COMPANIES
BUYKCI Kansas City	3.3×	6.2%	$55 billion	16
BUYLEH Lehigh Valley	1.4×	1.8%	$82 billion	7

How to read it: the dashed line is the S&P 500 and the dark line is every listed company together. A line above them beat the market; the gaps between cities matter more than the exact levels. Fund tickers are placeholders: BUY plus a three-letter city code for the equal-weighted fund (BUYNYC) and BUY plus two letters and W for the market-cap-weighted one (BUYNYW). No such funds exist.

What this chart does not fix. The company list is today's listings plus former S&P 500 members, so firms that failed or were delisted outside the S&P 500 are missing, which flatters every line (small companies most). The "all listed companies" view covers 56 regions: the 46 averaging at least 8 companies, plus ten regions with fewer companies but large market value, such as Northwest Arkansas (Walmart), Boise (Micron) and Kalamazoo (Stryker). It starts with about 1,700 firms in 2007 and grows to about 4,000, applies no size floor, and caps yearly returns at +500% and −95%, so it will not match the 2012–2026 study above. The smallest regions rest on very few companies, so one stock can move them; the table under the chart lists each region's company count and market value.

The market-cap-weighted funds start in December 2011, because the SEC share counts that the weights need are too sparse before then. Each company is weighted by its market value at the start of the year. Share counts cover about 89% of listed companies in 2012 and 96% in 2026; companies without them are left out of the weighted funds (for example Constellation Brands, Tyson and Erie Indemnity), and gaps for S&P 500 companies were filled from the nearest reported year, adjusted for splits. Market values above $25 billion for companies that were never in the S&P 500 were dropped as data errors unless checked by hand. Giants dominate: a region with one very large company is mostly that company. In the S&P 500 view, 95% of company-years have share data, and Dublin has no market-cap fund because its foreign filers lack the share counts. The S&P 500 view uses point-in-time membership and

headquarters back to 2006, but roughly half the companies that left the index have no price history; a few small cities rest on two to seven companies, so one stock moves them. Year-end values only.

What this does not show

> IN PLAIN TERMS
> The study has real limits, and several could change the conclusions.

- Headquarters is not operations. Dispersed firms still have local executives, but their plants and customers are elsewhere; the study measures the headquarters community.
- Industry codes are coarse (2- to 3-digit SIC), and the smaller baskets (most of those in Figure 4 hold 10 to 31 firms) are noisy.
- Companies that were delisted and never in the S&P 500 lack prices, so survivorship bias is possible. Headquarters are treated as fixed except for 18 curated moves, and each metro is the 2023 federal combined statistical area (CSA) containing the headquarters county, the wider definition, so the Bay Area is one area, not two. The workbook also reports the 32 metropolitan statistical areas as a check; the county-level tests use counties, not metros.
- Shock windows were chosen by hand, and the portfolio mixes are in-sample.
- "No significant effect" is not "no effect": the intervals above are wide enough to hide modest benefits.

Open questions

> IN PLAIN TERMS
> The next steps are tests of business results (sales and profits) and of where companies actually operate.

- A fundamentals test: do firms with more same-industry neighbors grow sales or earn higher margins and returns on assets? This needs SEC financial-statement data.
- A direct operating-footprint measure from annual-report state counts, replacing the industry proxy.
- Whether county co-movement persists after finer industry controls, and whether it leads or lags across counties.

Selected references: Marshall (1890; link is the 1891 printing); Glaeser, Kallal, Scheinkman & Shleifer (1992), *Journal of Political Economy*; Porter (1998), *Harvard Business Review*; Henderson (2003), *Journal of Urban Economics* 53(1); Pirinsky & Wang (2006), *Journal of Finance*; Folta, Cooper & Baik (2006), *Journal of Business Venturing*; Hong, Kubik & Stein (2008), *Journal of Financial Economics*; Greenstone, Hornbeck & Moretti (2010), *Journal of Political Economy*; Kukalis (2010), *Journal of Management*; García & Norli (2012), *Journal of Financial Economics* 106(3); Tuzel & Zhang (2017), *Journal of Finance*; Engelberg, Ozoguz & Wang (2018), *Journal of Financial and Quantitative Analysis*; Parsons, Sabbatucci & Titman (2020), *Review of Financial Studies* 33(10).

SOURCES

Sources

Built from the research workbook's own source record (its Method_Notes and Page_Figures tabs) and the literature this study cites.

Data

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What has been written before

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DISCLOSURES

Disclosures and citation

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Question from Patrick Ishmael, a finance nerd.

ABOUT THE PROMPTER

Patrick Ishmael is the founder of the Ishmael Policy Institute and Prompt Inquiry's Founding Prompter and Editor. He has spent most of his career in and around Missouri public policy. He worked on political campaigns, and from May 2011 to January 2024 he worked at the Show-Me Institute, a Missouri public policy organization, where he wrote on state and local government and testified before Missouri legislative committees. Today he is a financial advisor and a Missouri attorney. He holds honors degrees in finance and political science from Saint Louis University and a law degree from Saint Louis University School of Law. Several of the questions he revisits here began as his own student work there.

This bio is the prompter's disclosure. It is the same on every study he leads.

Legacy study. First published as a Special Project on The Ishmael Record (patrickishmael.com), October 16, 2026, before this charter was adopted. It is republished as it was made, except that its notes on who did the work now match this site's byline. Against the current publishing standard it lacks the opening prompt, because that requirement did not exist when it was made. It has not been reconstructed after the fact. Patrick Ishmael verified it for republication. Its versioning begins at 1.0, and any later change is recorded in the change log.

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