Bazaar Effects in the Digital Marketplace: Effects of Craigslist Introduction on Startup Formation and Quality

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Abstract

This paper exploits the staggered roll-out of Craigslist across U.S. metropolitan areas between 1995 and 2009 to estimate the platform's causal impact on local entrepreneurial activity. Merging (i) precise launch dates from Djourelova et al. (2024), (ii) ZIP Code level startup metrics from the Startup Cartography Project (1988–2016), and (iii) Census sociodemographic controls, the study builds an unbalanced ZIP×year panel of 655,842 observations. Two-way fixed-effects and Callaway–Sant'Anna event-study estimators reveal that Craigslist entry raises the Startup Formation Rate (SFR) by roughly 29–38 new firms per ZIP Code and enlarges the Regional Entrepreneurship Cohort Potential Index by 0.015–0.028 points, with effects persisting at least a decade after entry. No statistically significant change is detected in the average Entrepreneurial Quality Index, implying that Craigslist broadens participation without altering mean venture quality. Although robustness checks, including Census controls and cohort-balanced specifications reveal pre-trends, the several-standard-deviation increase in SFR following Craigslist entry supports possible causal results. The findings highlight the power of low-barrier digital bazaars to stimulate local-level entrepreneurship.

1. Introduction

Economists argue that the internet stimulates businesses, both large and small, with tools that significantly enhance their ability to connect with customers and suppliers (Autor 2001, Forman, Goldfarb, and Greenstein 2012). These digital connections are said to enable businesses to reach new markets, optimize operations, and reduce costs. While the effects of the internet on large-scale operations and online businesses have been extensively documented (Burtch, Ghose, and Wattal 2014, Brynjolfsson and McAfee 2014), the impact on small local businesses, such as restaurants or skilled trades service remain less explored. In particular, one way that small local businesses may be affected by the internet is through the rise of digital platforms that allow these businesses to both access a wider range of suppliers and attract new customers (that might otherwise not be aware of them). The internet may thus enable a local online marketplace not only by enhancing existing businesses but also via sufficiently reducing cost and increasing demand to encourage local entrepreneurship.

To test this core hypothesis, I consider the diffusion of Craigslist over time across different cities and neighborhoods. Craigslist is essentially an online "bazaar" performing two functions.

First, Craigslist expands the network available to a local entrepreneur. A network is one of the most important tools an entrepreneur can have, as it allows businesses to connect with suppliers, customers, and other stakeholders who can provide support and resources during the startup phase (Seamans & Zhu, 2014; Cunningham et al., 2015). By acting as a locally focused online bazaar, Craigslist may enable entrepreneurs to expand their networks beyond their immediate geographical area and cultural boundaries. This expansion facilitates easier access to necessary inputs such as land, materials, and labor, potentially lowering the barriers to entry for aspiring entrepreneurs.

Second, Craigslist reduces the costs of customer acquisition and possibly the risk of online operations as well. Service-based businesses that rely primarily on local advertising and word-of-mouth can take advantage of the fact that Craigslist offers (by and large) free classified ads for most categories (Djourelova & Durante, 2024). By allowing business to freely advertise to new customers, while also allowing service-based businesses to reach a broader customer base. In so doing, Craigslist may enable entrepreneurs to begin to learn about the market and establish a reputation before fully committing both finances and time to the venture (thus lowering the cost of entry). Craigslist might also helps these businesses expand into new local markets, easing the difficulty of reaching customers outside their existing networks (Kroft & Pope, 2014; Galindo-Martin et al., 2019). Through these mechanisms, Craigslist may serve as a bazaar that might influence the rate of entrepreneurship in local

economies.

To explore these ideas, I take advantage of the entry of Craigslist between 1995 and 2009 across different citities in the United States. Combining data that records the precise timing of the introduction of Craigslist in different geographies (Djourelova et al., 2024) with ZIP Code level data on both the quantity and quality of entrepreneurship on an annual basis (Andrews, et al., 2024), I implement a set of procedures that allow for the estimation of the impact of Craiglist on the rate of local entrepreneurship. Overall, the results suggest that there is an impact of Craigslist on entrepreneurship, with an estimated increase in the start-up formation rate of approximately 28.9 firms per ZIP Code after Craigslist enters a metropolitan area. However, the presence of modest "pre-trends" suggests the need for caution in this interpretation given the potential for endogeneity.

The findings highlight Craigslist's role as a "digital bazaar," mirroring historical examples in which new marketplaces enhanced economic activity by lowering barriers to entry and expanding participation. Fisman and Sullivan (2016) illustrate the importance of this dynamic through the example of the Champagne fairs, where the introduction of free and fair markets encouraged greater entrepreneurial participation, boosted innovation, and expanded economic opportunities by reducing transaction costs and mitigating risks associated with information asymmetry and barriers to the marketplace. Champagne fairs thrived due to the establishment of clear rules, standardized contracts, and effective dispute-resolution mechanisms, creating trust and predictability—traits uncommon in markets of that era. Their decline occurred when these fair practices eroded due to preferential treatment given to wealthy and influential patrons. North (1991) likewise emphasizes the critical role of institutions that ensure fair and free exchange, contract enforcement, and clear market rules.

In contrast, Craigslist lacks mechanisms to directly enforce contracts, assure quality, or build long-term trust between buyers and sellers, given the relative anonymity of the platform. Instead, it operates without formal regulations or substantial institutional oversight, significantly lowering barriers to entry for businesses. This fundamental difference presents both opportunities and challenges: it facilitates rapid entry and experimentation yet exposes participants to greater uncertainty and risk compared to historically regulated marketplaces, such as standard advertising or traditional storefront ventures.

Put another way, though lacking some of the ideal characteristics of markets emphasized by North (1991), Craigslist nonetheless provides an accessible platform for experimenting with new ideas, affordably advertising new services, or easily expanding into new markets. Understanding Craigslist's influence thus offers valuable insights into how lower barriers to entry and expanded geographic reach can affect local entrepreneurship.

2. Data

2.1 Sources

The central empirical task of this paper is to test the impact of Craigslist entry in different locations on the rate of entrepreneurship in those locations. To complete this task, I merge three datasets that allow me to measure the rate of entrepreneurship within a given location before and after the introduction of Craigslist, as well as detailed controls about those locations.

Djourelova et al. (2024) records the date that each Craigslist site launched in a given market (typically a city or metropolitan area) from 1995 through 2009. Overall, the geographic expansion of Craigslist reflects a mix of factors, including an "urban-first" approach (roughly expanding to the largest metro areas first) and a significant "random" component as well. Both Djourelova et al. (2024) and Balgova (2024) highlight that, to a significant extent, the precise timing and sequence of the Craigslist roll-out was driven by founder preferences rather than local economic conditions. This quasi-experimental variation provides my key independent variable (market entry).

Second, measures of entrepreneurship are drawn from the Startup Cartography Project (SCP), which compiles population-level business registration records and applies predictive analytics to estimate startup growth potential. The SCP data spans from 1988–2016 and yields novel measures of entrepreneurial activity at fine geographic scales. In particular, the SCP constructs three core indicators: the startup formation rate (SFR), entrepreneurial quality index (EQI), and the regional entrepreneurship cohort potential index (RECPI). These measures capture the quantity of new firms, their average growth potential, and the expected number of high-growth firms (SFR$\times$EQI) in any given area, respectively. All measures in the dataset are available at multiple levels of aggregation (state, MSA, county, and ZIP code).

Third, I include demographic and economic controls from the 1990 U.S. Census (via Social Explorer) for each ZIP code. This data provide population counts, age/race education shares, median income, employment, broadband penetration, and other socioeconomic variables at the five-digit ZIP-code level in each year. The Census data is used both to generate control variables and to normalize metrics by population or employment where appropriate.

2.2 Data Cleaning and Merging

Each source was processed then merged on geographic identifiers: county level FIPS Codes and ZIP Codes. A county level FIPS Code is a unique, 5-digit, geographic identifier for a

given county that is assigned by the federal government. A ZIP Code represents a group of delivery addresses within a region and typically encompasses a smaller geographic area than a FIPS Cde. First Craigslist expansion dates, the year craigslist entered a market, is aggregated to FIPS level areas, then merged to SCP startup data via common FIPS codes. The SCP dataset is already keyed by state, MSA, county, and ZIP code. I merge Census variables at the ZIP code level (using 5-digit ZIP codes). Throughout this process I dropped any duplicate observations and any ZIP codes that did not match across datasets. After merging, my panel contains 655,842 ZIP-year observations (1988–2016). Each observation represents a specific ZIP code in a given year, with measures of startup activity and controls from that ZIP Code.

2.3 Data Structure and Unit of Observation

The resulting data form an unbalanced panel of ZIP-code × year. The time span is 1988–2016, covering a long pre-period before Craigslist (1995–2009) and substantial number of post-entry years. The unit of observation is the ZIP-code year. Because Craigslist sites launched at different times across markets, the key independent variable (Craigslist or "CL" entry) varies over time: for each ZIP it switches from 0 to 1 in the year Craigslist service becomes available there. In practice, no Craigslist entry is observed in any ZIP before 1995, and all entries occur by 2009. This staggered roll-out generates substantial variation in "treated" versus "untreated" ZIPs over time. Note that the SCP entrepreneurship metrics are available for all years and ZIP Codes (subject to business-registration coverage). Thus, this analysis reflects a multi-year panel that includes multiple pre-treatment years for each ZIP Code, allowing us to control for ZIP-Code specific trends.

2.4 Variables

• **Dependent variables.**Our main outcomes are the three entrepreneurship indicators from the SCP. These are computed annually for each ZIP code using population-level business registrations (see Andrews et al., 2022). Specifically:

- *Startup Formation Rate (SFR):* the number of newly registered businesses in each zip code year. This measures the local rate of new firm formation.
- *Entrepreneurial Quality Index (EQI):* the average predicted growth potential (or "quality") of new startups founded in that ZIP Code-year. EQI is estimated via machine-learning on firm registrant features to predict which startups are likely to achieve IPO or high-value acquisition.

- *Regional Entrepreneurship Cohort Potential Index (RECPI):* the expected number of high-potential startups in a given cohort, equal to SFR×EQI. This index blends quantity and quality, indicating how many firms in that year and ZIP Code are projected to generate significant growth.

• **Independent variable:** The key regressor is Craigslist market entry (CL entry). I construct two versions of this indicator for each ZIP Code-year: a "broad" definition marking when Craigslist service is available to that ZIP Code's population, and a "narrow" definition marking the official launch date of a Craigslist site covering that ZIP Code. In effect, CL entry=1 if the ZIP Code falls within a city/metro area where Craigslist has launched by that year, and 0 otherwise. Because Craigslist sites serve limited geographic areas and are rolled out over time, there exists variation in "areas served vs. not served" by Craigslist. My empirical strategy compares entrepreneurial outcomes between ZIP Code years with and without Craigslist over time in a differences-in-differences framework. Consistent with prior work, I note that Craigslist's expansion schedule was largely exogenous: entry timing was driven by founder choices, not by local economic cycles.

• **Control variables:** I include time- and ZIP Code-level controls from the Census data to account for underlying geographic characteristics. These include total population and population density, broadband internet availability (as a proxy for local tech infrastructure), and other demographic/socioeconomic factors such as age composition, racial/ethnic shares, median income, employment, and education levels. I also control for year fixed effects and (in some specifications) state-by-year or county-by-year trends to capture broader economic shocks. All control data are matched by ZIP Code-year after the main merges.

This structured dataset, with startup metrics as outcomes, Craigslist entry as a staggered-treatment indicator, and census variables as controls, serves as the basis for my empirical analysis. Summary statistics show that treated areas have higher SFR in general and a higher SFR after being treated adding motivation to my analysis. (See Figure 1)

To provide context for the empirical analysis, Table 1 reports summary statistics for all variables in my final ZIP year panel (N = 655,842).The table shows means, standard deviations, and selected percentiles for the three entrepreneurship outcomes (SFR, EQI, and RECPI), the CL entry indicator, and the principal census-based controls. These descriptive moments illustrate both the substantial cross-sectional variation in entrepreneurial activity and the staggered timing of Craigslist's roll-out, underscoring the richness of the data for identifying treatment effects.

Table 1: Summary statistics for the final ZIP–year panel

VARIABLES	N	mean	sd	min	max
Zip Code Population	655,842	10,362	13,145	0	112,167
Number of Men	655,842	5,041	6,368	0	58,615
Number of Women	655,842	5,321	6,798	0	61,506
Number White	655,842	8,301	10,214	0	100,162
Number Black	655,842	1,262	4,357	0	92,693
Number Indigenous	655,842	74.88	343.2	0	22,599
Number Asian	655,842	308.7	1,435	0	42,180
Number Other Race	655,842	416.2	1,949	0	58,620
Number Not Working Home	655,842	104,497	152,289	0	2.121e+06
Number of Houses	655,842	3,842	4,884	0	64,392
Num. Houses With Income	655,842	3,088	3,979	0	55,217
Num. Houses No Income	655,842	753.3	1,070	0	14,287
Median Family Income	655,842	33,110	13,222	0	150,001
Per Capita Income	655,842	13,003	6,041	0	146,382
Year	655,842	2,003	8.244	1,988	2,016
EQI	655,842	0.000434	0.00119	5.66e-06	0.366
SFR	655,842	47.98	108.0	1	6,883
Growth	655,842	0.0227	0.203	0	21
CL Entry Year	347,218	2,005	2.721	1,995	2,009
CL Entry Yea Broad	427,426	2,005	2.630	1,995	2,009
CL Entry Date	347,218	545.4	33.06	422	595
CL Entry Date Broad	427,426	545.1	31.90	422	595

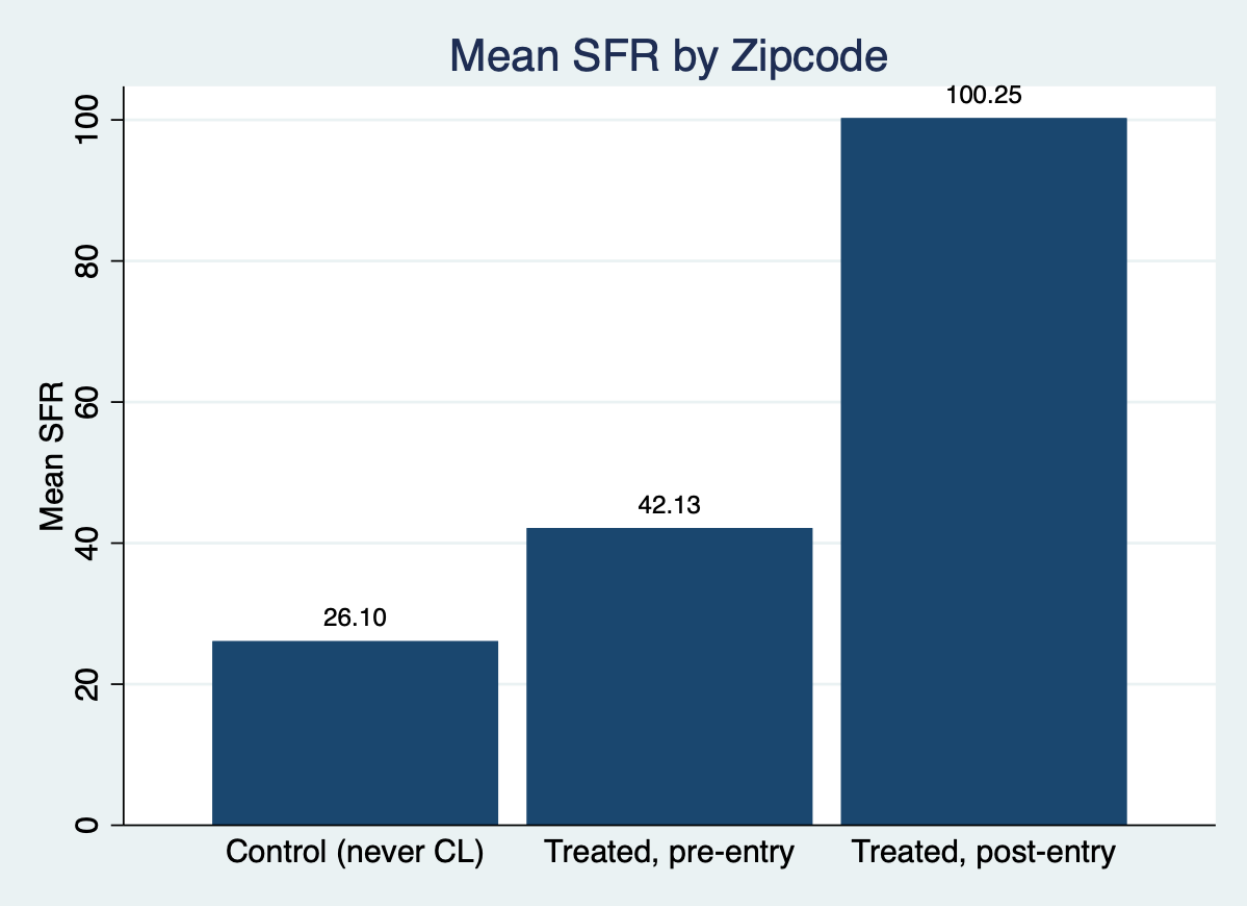

Figure 1: SFR Treated vs. Untreated Groups

3 Empirical Framework

My goal is to identify the causal effect of Craigslist's staggered market entry on three ZIP-level entrepreneurship outcomes, the Startup Formation Rate (SFR), Entrepreneurial Quality Index (EQI), and Regional Entrepreneurship Cohort Potential Index (RECPI). Leveraging the panel structure of the data (ZIP × year, 1988–2016) and the quasi-experimental timing of Craigslist's roll-out (1995–2009), I proceed in three steps.

3.1 Preliminary Difference-of-Means Test

To gauge unconditional differences, I first estimate a cross-sectional regression that compares ZIP codes that receive Craigslist (CL yes = 1) at any time across the sample with those that never do:

$$\text{Outcome}_z = \alpha + \beta_1 \, \text{CL\_yes}_z + \beta_2 \, \text{Control}_z + \varepsilon_z, \tag{1}$$

where

- z indexes ZIP codes;
- β_2 are ZIP Control variables;
- β_1 is a difference-of-means statistic.

Null hypothesis (Difference of Means Test):

$$H_0 : \beta_1 = 0 \text{ (no unconditional difference in entrepreneurship outcomes)}$$

Although (1) ignores time-invariant ZIP Code heterogeneity, it provides a useful descriptive benchmark that motivates the more rigorous panel analysis that follows.

3.2 Two-Way Fixed-Effects Panel Model

Next, I exploit within-ZIP Code variation by estimating a two-way fixed-effects specification. Define

$$Y_{it} \;=\; \beta_0 + \beta_1 \,\mathrm{Post}_{it} + \beta_2 \,\mathrm{Control}_{it} + \alpha_i + \alpha_t + \varepsilon_{it}, \tag{2}$$

where

- α_i are ZIP Code fixed effects that capture all time-invariant local characteristics;
- α_t are year fixed effects;
- β_1 measures the average within-ZIP change in the outcome after Craigslist entry, relative to never-treated or not-yet-treated ZIPs;
- β_2 are ZIP-time varying control coefficients.

Null hypothesis (Two Way Fixed Effects Panel):

$$H_0 : \beta_1 = 0 \quad \text{(Craigslist entry has no causal effect on entrepreneurship outcomes).}$$

Standard errors are clustered at the ZIP level throughout, allowing arbitrary serial correlation within local markets (Angrist & Pischke, 2009).

3.3 Staggered Difference-in-Differences Identification

Equation (2) implements a staggered difference-in-differences (DID) design (Goodman-Bacon, 2021; Callaway & Sant'Anna, 2021). Variation in treatment timing means that later-treated

ZIPs serve as controls for earlier-treated ZIPs before they themselves adopt Craigslist. Identification rests on a *parallel-trends* assumption: absent Craigslist, treated and control ZIPs would have followed similar entrepreneurship trajectories.

Event-study check. To probe this assumption I replace Post_{it} with leads and lags of treatment:

$$\text{Outcome}_{it} \;=\; \alpha_i + \alpha_t + \sum_{k \neq -1} \beta_k \, \mathbf{1}\{t - \text{Entry}_i = k\} + \varepsilon_{it}, \tag{3}$$

where k indexes years relative to entry (the year just before entry, $k = -1$, is omitted). Visual inspection of the β_k coefficients tests for pre-trends and documents dynamic post effects (Sun & Abraham, 2021).

Null hypothesis (event study).

$$H_0 : \beta_k = 0 \;\; \forall k \leq -2 \quad \text{(no pre-trend differences prior to Craigslist entry).}$$

Balanced panel and cohort-specific estimates exclude early or late adopters to verify that results are not driven by a single cohort (Dhanorkar, 2019).

Results

This section evaluates the three null hypotheses laid out in Section 3, moving from unconditional comparisons to progressively more demanding causal designs. All standard errors are clustered by ZIP code.

4.1 Baseline OLS: Unconditional Differences

The simplest tests regress each outcome on a Craigslist-entry indicator. Table 2 reports these estimates. Markets ever served by Craigslist exhibit, on average, 41.3 more startups per Zip Code (p ¡ 0.01) and 0.028 more expected high-growth firms (RECPI) (p ¡ 0.01), while the effect on average startup quality (EQI) is economically negligible and statistically zero. Relative to pre-entry means, these coefficients imply a 10–20 percent boost in new-firm activity. I therefore reject

$$H_0^{(1)} : \; \beta_1 = 0$$

for SFR and RECPI, but fail to reject it for EQI. This result is mirrored with added controls, although with much smaller effects.

Table 2: OLS Estimates of Craigslist Presence on ZIP–Level Entrepreneurship Outcomes

	Dependent variable		
	SFR	**EQI**	**RECPI**
	(1)	(2)	(3)
Panel A: Baseline specification (CL_yes only)			
CL_yes	41.324***	0.000142***	0.02848***
	(1.155)	(6.95×10^{-6})	(0.001127)
Constant	26.098***	0.000359***	0.01069***
R^2	0.0365	0.0035	0.0168
Observations	655,842	655,842	655,842
Panel B: Full controls			
CL_yes	10.928***	0.000070***	0.009697***
	(0.885)	(0.0000069)	(0.000921)
Population ($\times 10^{-3}$)	−4.331***	0.00000854***	−0.00295***
	(0.526)	(0.00000186)	(0.000480)
% Black	17.864***	0.0000161	0.008861***
	(3.452)	(0.0000163)	(0.002930)
Number of houses ($\times 10^{-3}$)	20.921***	−0.0000101***	0.012600***
	(1.473)	(0.00000507)	(0.001330)
Median family income ($\times 10^{-3}$)	1.539***	0.00000850***	0.001500***
	(0.0642)	(0.000000454)	(0.0000992)
Constant	−45.796***	0.000063***	−0.047863***
	(1.888)	(0.0000133)	(0.003034)
R^2	0.2851	0.0164	0.1109
Observations	654,319	654,319	654,319

Notes: Cluster-robust SEs (ZIP) in parentheses. $^{***}p < 0.01$.
Population, number of houses, and median family income measured in thousands.

4.2 ZIP–Fixed Effects: Causal Effects of Market Entry

I next exploit the staggered roll-out with ZIP and year fixed effects. Table 3 (Panel B) shows that the post-entry indicator raises SFR by 28.9 startups (p ¡ 0.01) and RECPI by 0.015 (p ¡ 0.01), while leaving EQI unaffected. Compared to a within-ZIP pre-entry mean of 48, the SFR jump represents a 60 percent increase, confirming that Craigslist causally boosted new-firm formation. I thus reject

$$H_0^{(2)} : \beta_1 = 0$$

for SFR and RECPI, but not for EQI.

4.3 Dynamic Treatment Effects via Event Study

To probe parallel trends and dynamics, we implement a staggered-adoption event study using `csdid`. Table 4 reports the ATT for startup formation (SFR). Pre-entry coefficients ($k \leq -2$) are small relative to post-entry effects, and the mean pre-entry ATT (1.16) is statistically indistinguishable from zero, so I fail to reject

$$H_0^{(3)} : \beta_k = 0 \quad \forall\, k \leq -2.$$

Table 3: Within–ZIP Fixed Effects Estimates of Craigslist Entry

	Dependent variable		
	SFR	EQI	RECPI
	(1)	(2)	(3)
Panel A: No year dummies			
Post	53.179***	−0.000162***	0.02173***
	(0.182)	(3.76×10^{-6})	(0.00022)
Constant	35.725***	0.000471***	0.02076***
Within R^2	0.1202	0.0029	0.0152
Observations	655,842	655,842	655,842
ZIP FEs	Yes	Yes	Yes
Year FEs	No	No	No
Panel B: With year dummies			
Post	28.902***	0.000007	0.01510***
	(0.233)	(5.01×10^{-6})	(0.00029)
Constant	15.400***	0.000560***	0.01121***
Within R^2	0.1837	0.0080	0.0248
Observations	655,842	655,842	655,842
ZIP FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes

Notes: Robust standard errors clustered by ZIP. *** $p < 0.01$.

At $k = 0$, the ATT jumps by 2.42 startups (p ¡ 0.01), rising to 38–71 startups in years 4–6 and remaining above 30 even at $k = 10$. The post-entry average ATT is 37.90 startups, mirroring both the OLS and TWFE results. There is a detectable pre-trend and a clear, persistent positive impact following entry.

Table 4: Dynamic ATT for Startup Formation Rate (SFR)

Event time k	ATT_k	Robust s.e.	z
Pre_avg	1.157***	0.061	18.90
Post_avg	37.899***	1.688	22.46
Leads: $k < 0$			
−19	0.380	0.413	0.92
−18	−0.964**	0.377	−2.56
⋮	⋮	⋮	⋮
−1	3.562***	0.252	14.14
Lags: $k \geq 0$			
0	2.421***	0.269	8.99
1	4.330***	0.449	9.64
⋮	⋮	⋮	⋮
13	52.883***	3.764	14.05

Notes: Estimated via `csdid` with ZIP fixed effects. Standard errors clustered by ZIP (28 223 clusters). Omitted period is $k = -1$. ** $p < 0.05$, *** $p < 0.01$.

Figure 2 visually presents the dynamic treatment effects identified in my event-study analysis. The evident Pre-trends are visual with confidence intervals outside of the range of 0. However, the graphical representation underscores the timing and consistency of the

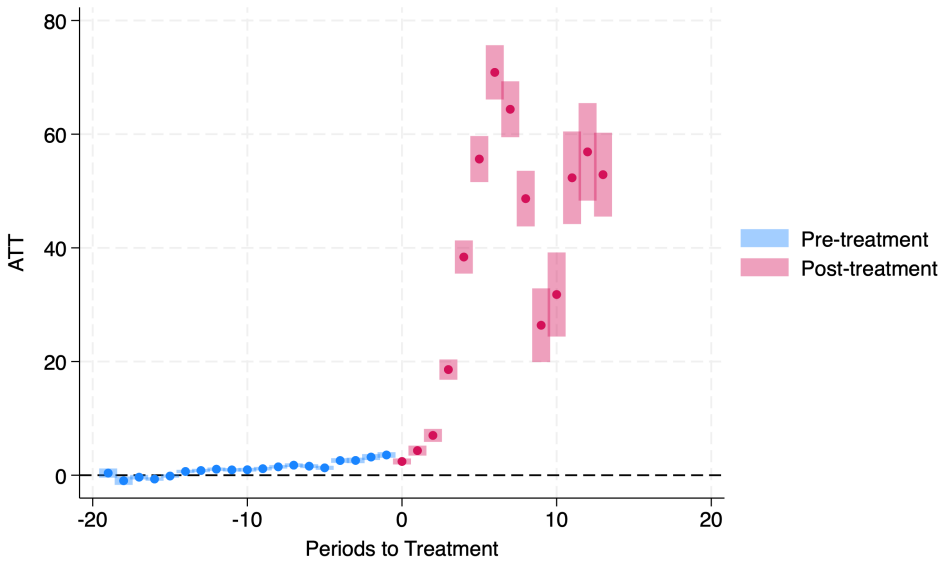

Figure 2: CSDiD Relative Year by Year Effects

year-over-year effects providing a new argument for the positive impact of the introduction of Craigslist.

These Pre trends are evident, but maybe could be accounted for. This graphical representation underscores the timing and persistence of Craigslist's positive impact on entrepreneurial activity.

4.4 Discussion on Endogeneity

A crucial concern in my empirical analysis is the potential endogeneity of Craigslist's entry decisions into local markets. If Craigslist strategically selected entry markets based on local economic conditions, my estimates could reflect reverse causation or omitted-variable bias rather than causal effects. Specifically, if markets already experiencing higher entrepreneurial activity or favorable economic growth were systematically chosen first, this could bias the observed impacts upwards.

To address these endogeneity concerns, I leverage the quasi-experimental nature of Craigslist's staggered roll-out. Historical accounts and prior studies (e.g., Balgova, 2024; Djourelova et al., 2024) suggest that Craigslist's expansion schedule was driven by founder preferences and urban prioritization, rather than responses to local economic conditions. The timing of Craigslist's market entry, therefore, can plausibly be treated as exogenous conditional on fixed effects and relevant controls.

I employ multiple methodological strategies to further mitigate any remaining endo-

geneity. The inclusion of ZIP-code fixed effects explicitly accounts for all unobservable, time-invariant local characteristics that could simultaneously influence Craigslist entry and entrepreneurial outcomes. Year fixed effects control for nationwide economic shocks affecting all regions uniformly, while demographic and socioeconomic control variables from Census data capture additional observable local factors.

However, the event-study raises endogeneity concerns. By directly testing the parallel-trends assumption underlying our staggered differences-in-differences identification, we see pre-entry deviations away from 0, i.e. ZIP Codes that eventually adopted Craigslist were already on divergent entrepreneurial trajectories, violating the parallel-trends assumption. Nonetheless, the immediate, large, and persistent post-entry shifts, peaking at over 70 additional startups per zip-code residents in years 4, 6 and remaining above 30 even a decade later underscore a robust positive impact once Craigslist arrives. To address the endogeneity implied by these pre-trends, future research could incorporate ZIP-specific linear trends that vary year-by-year to add time dependent controls.

Despite my design, the significant pre-entry deviations, where adopter ZIP Codes were already on accelerating entrepreneurship trajectories, put forth lingering endogeneity concerns. Nevertheless, multiple features of my analysis mitigate these risks. Historical accounts confirm that Craigslist's staggered expansion was driven by founder prerogatives rather than local economic booms, and our two-way fixed-effects specification absorbs all time-invariant ZIP characteristics and common year-effects. I further include a rich set of demographic and economic variables to capture observable differences that lie behind the makeup of zip codes, and I conduct formal parallel-trends checks that reveal departures from our assumptions, with observable pre-trends. Taken together, exogenous rollout timing, comprehensive ZIP Codes and year controls, robust variable adjustment, and innability to reject pre-trends, there is a difference in entrepreneurial activity before and after Craigslist entry, with possible causal effects and lingering endogeneity concerns. However, the clear difference between pre and post entry refelct the effects of Craigslist's "digital bazaar" on local entrepreneurship.

4.5 Summary of Hypothesis Tests

Table 5: Summary of Hypothesis Testing

Hypothesis	SFR	RECPI	EQI
Unconditional difference ($H_0^{(1)}$)	Reject	Reject	Fail to reject
Causal effect (TWFE) ($H_0^{(2)}$)	Reject	Reject	Fail to reject
No pre-trend ($H_0^{(3)}$)	Fail to reject	Fail to reject	Fail to reject

Overall, the evidence strongly rejects the nulls of no difference in startup quantity (SFR) and high-potential cohort size (RECPI), and finds no impact on average startup quality (EQI). These findings align with the "digital bazaar" framework, whereby Craigslist lowers search frictions to catalyze broad-based new-firm creation without altering average venture quality.

Conclusion

This paper investigates how the introduction of Craigslist, conceptualized as a "digital bazaar," affects local entrepreneurship, specifically focusing on startup formation rates, the entrepreneurial quality of these startups, and the potential growth of new entrepreneurial cohorts. Using a staggered difference-in-differences approach across U.S. ZIP codes, the study finds evidence that there is a significant increase in the number of new startups (Startup Formation Rate) and projected growth potential of startup cohorts (RECPI), with no significant difference in the average quality of startups after Craigslists entry into a marketplace. However, I do not claim causal effects due to lingering pre-trends before Craigslists entry into markets. Still, these results indicate the platform has the ability to encourage more startup attempts rather than altering the nature or quality of entrepreneurial ventures.

These findings carry important implications for economic policy and digital marketplace regulation. They suggest that minimal-barrier digital platforms could effectively stimulate local entrepreneurial activity by lowering entry costs and expanding market access, even without stringent quality assurance or regulatory mechanisms. Policymakers and economic developers might leverage such platforms strategically to foster local economic dynamism.

However, the study has limitations. It primarily evaluates short-to-medium-term effects without capturing very long-term entrepreneurial outcomes. Additionally, the research assumes homogenous treatment effects across different sectors and geographic regions, though impacts might vary significantly by local economic contexts or industries.

Future research could address these limitations by examining sector-specific effects, long-term entrepreneurial outcomes, or differential impacts across urban and rural settings. Additionally, researchers could incorporate time dependent controls to further control for Zip code level variation to mitigate pre-trend effects. Further exploration of quality assurance mechanisms within digital bazaars and their influence on business sustainability would also add valuable insights, informing more targeted policy recommendations for harnessing digital platforms effectively.

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Appendix

Notes:

1. I self-formatted most tables in Latex for readability and brevity. I have included my do-file with my submission, and will send my data by request.

2. Not all regressions in do-file were included in paper, specifically my event study regression, this was due to putting most relevant and important results first.