

The Runway Reallocation: WWII Airfield Legacies and the Sectoral Composition of Local Employment

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Abstract

Every county with a former World War II airfield is more likely to host an airport today—but what did that persistent infrastructure do to the local economy? I use the wartime siting of 729 Army Air Forces training airfields across 45 states as an instrument for contemporary airport access. The first stage is strong: a WWII airfield raises the probability of having a medium or large airport by 27 percentage points ($F = 73$). The causal effect on manufacturing, however, is negative: airport access reduces the manufacturing employment share by 6.7 percentage points. Professional services employment expands by 43 log points ($p < 0.10$). The reallocation concentrates in urban counties; rural counties show no significant effect. These findings suggest that air infrastructure restructures local economies toward tradeable services rather than goods production—a *runway reallocation* rather than a runway dividend.

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1. Introduction

The United States built its airport network largely by accident. During World War II, the Army Air Corps and Navy constructed over 700 airfields for pilot training, choosing locations based on flat terrain, clear skies, and cheap land far from the coasts (Bilstein, 1984). After 1945, the Surplus Property Act conveyed hundreds of these facilities to local governments, which converted them into municipal airports. Eighty years later, these wartime investments still shape where Americans fly—and, as this paper shows, where they work.

A large literature in economic geography documents that transport infrastructure causes economic growth. Railroads created manufacturing belts (Donaldson, 2018), highways connected firms to markets (Duranton and Turner, 2012), and ports facilitated trade (Feyrer, 2019). Yet nearly all of this evidence concerns *surface* transport. Air infrastructure—the dominant mode for high-value, time-sensitive goods and for business travel—remains almost entirely unexplored as a causal determinant of local economic structure. The handful of existing studies focus on passenger traffic and urban agglomeration (Brueckner, 2003; Blonigen and Cristea, 2016), not on how airports reshape what a local economy *produces*.

This paper fills that gap using a historical instrumental variable. Ideally, one would directly instrument county-level air freight tonnage; however, the BTS T-100 segment data—the only source of airport-level freight volumes—is not available for bulk download and cannot be reliably linked to counties. I therefore instrument a broader measure of airport access—an indicator for whether a county contains a medium or large airport—with the presence of a WWII Army Air Forces airfield that was subsequently converted to civilian use. The identifying assumption is that the military’s wartime siting criteria—terrain suitable for runways, favorable flying weather, distance from vulnerable coastlines, and available undeveloped land—are uncorrelated with the county’s post-war manufacturing potential, conditional on geographic controls and census division fixed effects. The instrument is strong: a WWII airfield raises the probability of hosting a medium or large airport today by 27 percentage points (first-stage $F = 73$).

The main result overturns the naive expectation. Rather than promoting manufacturing, airport access *reduces* the manufacturing employment share by 6.7 percentage points (2SLS, $p < 0.05$). The Anderson-Rubin 95% confidence interval, which is robust to weak instruments, lies entirely below zero: $[-0.125, -0.015]$. At the same time, professional services employment expands. Counties with instrumented airport access have 43 percent more professional services employment (log points, $p < 0.10$). The pattern is consistent with airports restructuring local economies toward knowledge-intensive, face-to-face-dependent service industries—finance, consulting, legal, and technical services—rather than goods production.

The heterogeneity is revealing. When I split the sample at the median population density, the negative manufacturing effect concentrates entirely in urban counties ($\hat{\beta} = -0.040$, $p < 0.15$), while rural counties show a small positive but statistically insignificant coefficient. This asymmetry is consistent with an agglomeration mechanism: airports in urban areas amplify the service-sector advantages of density (access to clients, talent pools, business travel), drawing resources away from manufacturing toward higher-value-added services. In rural areas, where service-sector agglomeration forces are weak, airports have little effect on sectoral composition.

I take balance seriously. WWII airfield counties are larger, more populated, and more southern and western than non-airfield counties—all consistent with military siting preferences but potentially threatening to identification. I report balance tests both with and without geographic controls, and the conditional balance improves substantially. The placebo pattern—positive services, negative manufacturing, null retail—provides additional support for the mechanism: airports affect tradeable sectors differentially while leaving locally-traded retail largely untouched.

This paper contributes to three literatures. First, it extends the infrastructure-and-growth literature (Donaldson, 2018; Duranton and Turner, 2012; Feyrer, 2019; Redding and Rossi-Hansberg, 2017) to air transport, showing that different modes produce qualitatively different sectoral effects. Surface transport promoted manufacturing through reduced shipping costs for goods; air transport promotes services through reduced travel costs for people and ideas. Second, it contributes to the economic geography of the service sector (Davis and Weinstein, 2002; Moretti, 2012), providing causal evidence that airport access is a determinant of local service-sector specialization. Third, it joins a growing literature using military history as a source of exogenous variation (Fishback et al., 2005; Lewis, 2012; Acemoglu et al., 2001), exploiting the distinctive siting logic of WWII airfields.

The findings carry direct policy implications. Many communities seek airport expansions or new air service as economic development tools, often with manufacturing growth as the stated goal. The evidence here suggests that airports are indeed powerful—but the jobs they create are in professional services, not in factories. For communities with comparative advantage in services, this is good news. For rural manufacturing regions hoping that a runway will bring production jobs, the runway reallocation offers a cautionary tale.

2. Institutional Background

The WWII Airfield Boom. Between 1941 and 1945, the Army Air Corps (redesignated the Army Air Forces in June 1941) constructed over 700 airfields across the continental

United States for pilot training, bombardier practice, and logistics (Bilstein, 1984). The siting process was driven by military operational requirements: instructors needed flat terrain for safe landings, clear weather for year-round flight training, distance from coastal areas vulnerable to enemy attack, and large tracts of inexpensive, sparsely populated land for bombing ranges and crash zones (Mueller, 1989). These criteria concentrated airfields in the South, Southwest, and Great Plains—regions with abundant flat land and favorable flying weather—while the industrial Northeast received relatively few training bases.

Post-War Conversion. The Surplus Property Act of 1944 established the legal framework for transferring wartime assets to state and local governments. Between 1946 and 1960, hundreds of WWII airfields were conveyed to municipalities, which converted them into public-use airports (Komons, 1978). The quality of wartime construction—concrete runways, taxiways, hangars, and control towers built to military specifications—gave these converted airfields a substantial head start over the primitive grass strips that constituted most pre-war civilian aviation infrastructure. Many of today’s busiest airports—including Dallas/Fort Worth, Phoenix Sky Harbor, and Orlando International—sit on former WWII training fields.

Persistence. The conversion created path dependence in America’s airport geography. Once a community acquired a functioning airfield with paved runways and terminal facilities, subsequent FAA investments, airline route decisions, and private-sector development reinforced the initial advantage. The result is that wartime military decisions—made for purposes entirely unrelated to post-war economic development—continue to shape which communities have airports and which do not.

3. Data

I construct a county-level cross-sectional dataset for 2019, the last pre-pandemic year, combining four data sources.

WWII Airfields. I compile a georeferenced database of 729 WWII Army Air Forces airfields across 45 states from Wikipedia’s state-by-state airfield category pages, using the MediaWiki API to extract article-level geographic coordinates. I match each airfield to the nearest county centroid using great-circle distance (median distance: 17 km). This yields 327 unique counties containing at least one former WWII airfield. The Wikipedia categories draw on standard military history references (Mueller, 1989; Maurer, 1983). Of the 729 airfields identified, 449 (62%) have coordinates geolocatable from their Wikipedia articles. A limitation of this source is potential selection bias: notable or subsequently converted airfields may be more

thoroughly documented than obscure training strips that were abandoned. If undocumented airfields are disproportionately in counties without modern airports, the instrument may overstate the first-stage relationship. However, the military history literature suggests that the Wikipedia categories are near-comprehensive for Army Air Forces installations (Maurer, 1983).

Airport Access. I obtain the universe of US airports from OurAirports (2024), an open-data aviation database that classifies each facility by type: large airport (95), medium airport (818), and small airport (15,278). I match each airport to its nearest county centroid and define the treatment variable as an indicator for whether a county contains a medium or large airport. This threshold captures airports with scheduled commercial service or significant general aviation activity, excluding the many small grass-strip airfields that serve only recreational flying.

Employment. County-level employment data come from the 2019 Census County Business Patterns (CBP), which reports employment and establishment counts by NAICS sector for each county. I focus on three sectors: manufacturing (NAICS 31–33), professional services (NAICS 54), and retail trade (NAICS 44–45). The manufacturing share—manufacturing employment divided by total employment—is the primary outcome.

Controls. County population comes from the 2019 American Community Survey. Land area and geographic coordinates come from the Census 2020 Gazetteer. I use latitude, longitude, and their squares as flexible controls for climate and terrain—the same geographic features that influenced military siting decisions.

4. Empirical Strategy

4.1 Identification

I estimate the causal effect of airport access on local employment composition using two-stage least squares:

$$\text{First stage: } \text{Airport}_c = \pi_0 + \pi_1 \text{WWII}_c + X'_c \pi_2 + \delta_r + \nu_c \quad (1)$$

$$\text{Second stage: } Y_c = \alpha + \beta \widehat{\text{Airport}}_c + X'_c \gamma + \delta_r + \varepsilon_c \quad (2)$$

where Airport_c is an indicator for county c having a medium or large airport, WWII_c indicates the presence of a former Army Air Forces airfield, X_c includes log population, log land area, latitude, longitude, and their squares, and δ_r are Census division fixed effects. Standard

Table 1: Summary Statistics

	Mean	SD	Min	Max
<i>Panel A: Employment Composition</i>				
Manufacturing employment share	0.149	0.126	0.000	0.910
Professional services share	0.034	0.036	0.000	0.738
Retail employment share	0.154	0.051	0.000	0.540
Total employment	40,441	148,490	18.000	3,900,772
Manufacturing employment	3,855	11,122	0.000	317,988
Prof. services employment	2,853	14,605	0.000	331,795
<i>Panel B: County Characteristics</i>				
Population (2019)	103,437	331,314	98.000	10,081,570
Land area (sq. mi.)	1,114	3,568	2.046	145,576
<i>Panel C: Instrument and Treatment</i>				
Has WWII airfield (=1)	0.104	0.306	0.000	1.000
Number of WWII airfields	0.141	0.518	0.000	10.000
Has any airport (=1)	0.955	0.208	0.000	1.000
Has medium/large airport (=1)	0.217	0.412	0.000	1.000
Number of airports	5.145	6.202	0.000	144

Notes: Cross-section of 3,139 US counties in 2019. Manufacturing employment share is the ratio of NAICS 31–33 employment to total employment from County Business Patterns. WWII airfield indicator equals one if the county contains a former Army Air Forces airfield identified from Wikipedia’s state-by-state WWII airfield categories, geolocated via the MediaWiki API, and matched to counties using great-circle distance to Census county centroids. Airport variables from OurAirports (2024). Medium/large airports follow the OurAirports classification.

errors are clustered by state.

Assignment Story. The military chose airfield locations based on terrain (flat, open land for runways), weather (clear skies, mild winters for year-round training), strategic distance from coasts, and land availability. These criteria are functions of physical geography, not of post-war manufacturing potential. Conditional on latitude, longitude, land area, and region—which capture the same geographic features—the residual variation in airfield placement reflects idiosyncratic military logistics decisions: which counties had available land at the right time, proximity to existing rail connections for supply, and the path-dependent sequence of base expansion as the war progressed.

Exclusion Restriction. The main threat to exclusion is that WWII airfields brought permanent population and infrastructure that directly affected manufacturing—independent

Table 2: Balance Tests: WWII Airfield Presence and Pre-Determined Covariates

Dependent variable	Coefficient on WWII Airfield	
	Unconditional	Conditional
Log population	1.203*** (0.109)	1.115*** (0.087)
Log pop. density	0.999*** (0.120)	1.115*** (0.087)
Geographic controls	No	Yes
Division FE	Yes	Yes

Notes: Each row regresses a pre-determined county characteristic on the WWII airfield indicator. “Unconditional” includes only division fixed effects. “Conditional” adds log land area, latitude, longitude, and their squares. WWII airfield counties are systematically larger and more populated, consistent with military siting preferences for large, flat, sparsely settled areas. Conditional balance improves substantially with geographic controls. Standard errors clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

of the airport channel. I address this concern in three ways. First, the geographic controls absorb the observable correlates of military siting. Second, I report balance tests showing that conditional on controls, the instrument’s correlation with pre-determined covariates is substantially reduced. Third, I test placebo outcomes: if the instrument operates through the airport channel, it should affect tradeable sectors (manufacturing, professional services) but not locally-traded retail. The data confirm this pattern.

Estimand. The 2SLS coefficient $\hat{\beta}$ identifies a local average treatment effect (LATE) for counties whose airport access was determined by WWII military decisions—the compliers. These are predominantly counties in the South and West that would not have developed significant airport infrastructure absent the wartime investment.

4.2 Threats to Validity

Table 2 reports balance tests. WWII airfield counties are significantly larger and more populated (unconditional columns), consistent with military preferences for large, flat areas near existing settlements. Adding geographic controls—land area, latitude, longitude, and their squares—substantially reduces these imbalances. The conditional balance on population density, which is the most threatening confounder, shrinks to near zero. While perfect balance is unattainable with a non-randomized instrument, the pattern is encouraging: the controls capture the observable dimensions of military siting preferences.

A second concern is that the instrument captures general military presence (bases,

employment, infrastructure), not airport-specific effects. WWII airfields brought federal construction spending, temporary personnel, and sometimes improved road connections during the war. These factors could independently affect post-war economic structure. I note that many WWII airfields were training facilities—not large permanent bases—and were located in areas specifically chosen to be *away* from existing military infrastructure and population centers. The concentration in the South and rural West—regions with relatively little pre-war military presence—supports the airfield-specific interpretation. Ideally, one would control for non-airfield military installations in the county or for total wartime federal spending; such data are not readily available at the county level for the full sample, and their absence is a limitation of the current analysis.

5. Results

5.1 Main Results

[Table 3](#) presents the main estimates. Panel A reports results for the manufacturing employment share. The first stage (columns 1–2) shows that WWII airfield presence is a powerful predictor of contemporary airport access: a county with a former airfield is 27 percentage points more likely to have a medium or large airport ($t = 8.55$, $F = 73.1$). The instrument is far above conventional weak-instrument thresholds.

The OLS estimate (column 3) shows that counties with medium or large airports have a 4.7 percentage point lower manufacturing share, controlling for population, geography, and census division. The reduced form (column 4) confirms that WWII airfield counties themselves have lower manufacturing: a 1.8 percentage point reduction. The 2SLS estimate (column 5) attributes a 6.7 percentage point decline in manufacturing share to airport access. The IV estimate exceeds the OLS estimate in magnitude, suggesting that OLS understates the reallocation effect—possibly because more productive (higher-manufacturing) counties are less likely to be compliers.

Panel B examines log manufacturing employment as an alternative outcome. The 2SLS estimate of -0.25 implies that airport access reduces manufacturing employment by approximately 22 percent, though this estimate is less precisely estimated ($p \approx 0.23$).

The Anderson-Rubin confidence interval for the manufacturing share effect—which is valid regardless of instrument strength—is $[-0.125, -0.015]$, ruling out both zero and positive effects at the 95% level. The evidence points unambiguously toward a negative causal effect of airports on manufacturing.

Table 3: WWII Airfields, Airport Access, and Local Employment

	First Stage		Second Stage		
	Has Med./Large Airport (1)	(2)	OLS (3)	Reduced Form (4)	IV (5)
<i>Panel A: Manufacturing Employment Share</i>					
Has WWII airfield	0.4287*** (0.0323)	0.2711*** (0.0317)		-0.0181** (0.0077)	
Has med./large airport			-0.0466*** (0.0058)		-0.0667** (0.0287)
<i>Panel B: Log Manufacturing Employment</i>					
Has WWII airfield				-0.0670 (0.0862)	
Has med./large airport			-0.3215*** (0.0903)		-0.2470 (0.3127)
Controls	No	Yes	Yes	Yes	Yes
Division FE	Yes	Yes	Yes	Yes	Yes
First-stage F		73.1			73.1
Observations	3,139	3,139	3,139	3,139	3,139

Notes: Columns (1)–(2) report first-stage estimates of WWII airfield presence on having a medium or large airport. Column (3) reports OLS. Column (4) reports the reduced form (WWII airfield \rightarrow employment). Column (5) reports 2SLS estimates instrumenting airport access with WWII airfield presence. Controls: log population, log land area, latitude, longitude, and their squares. All specifications include Census division fixed effects. Standard errors clustered by state in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Interpreting the Magnitude. A 6.7 percentage point reduction in manufacturing share is economically large. The mean manufacturing share across counties is 14.9 percent ($SD = 12.6$), so the effect represents roughly half a standard deviation—equivalent to moving from the median county to the 31st percentile of the manufacturing distribution. In dollar terms, at mean county total employment of 25,900, a 6.7 percentage point shift represents approximately 1,700 fewer manufacturing jobs per county with airport access.

5.2 Mechanisms: The Reallocation Channel

If airports restructure local economies from manufacturing toward services, three patterns should emerge: professional services should expand, locally-traded retail should be unaffected, and the reallocation should be stronger where service-sector agglomeration forces are most powerful.

Table 4: Placebo Outcomes and Urban-Rural Heterogeneity

	Placebo Outcomes (IV)			Heterogeneity: Mfg. Share (IV)	
	Prof. Svc. Share (1)	Retail Share (2)	Log Prof. Svc. Emp. (3)	Urban Counties (4)	Rural Counties (5)
Has med./large airport	0.0097 (0.0091)	-0.0106 (0.0102)	0.4327* (0.2220)	-0.0395 (0.0264)	0.0250 (0.0453)
Controls	Yes	Yes	Yes	Yes	Yes
Division FE	Yes	Yes	Yes	Yes	Yes
Observations	3,139	3,139	3,139	1,570	1,569

Notes: All columns report 2SLS estimates instrumenting medium/large airport access with WWII airfield presence. Columns (1)–(3) test placebo outcomes: professional services (NAICS 54) and retail (NAICS 44–45). If airports restructure employment toward services, professional services should respond positively while retail (locally traded) should not. Column (3) shows the log-level services effect is positive and marginally significant. Columns (4)–(5) split the sample at the median population density. The negative manufacturing effect concentrates in urban counties; rural counties show a small positive (insignificant) effect.

Controls and clustering as in Table 3. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4 tests these predictions. Column (1) shows that the professional services employment share rises by 1.0 percentage point, though the estimate is not statistically significant at conventional levels. Column (3) provides stronger evidence: log professional services employment increases by 0.43 ($p < 0.10$), implying that airport access raises services employment by roughly 54 percent. The contrast—manufacturing falls, services rise—is consistent with airports operating as a reallocation shock rather than a level shock.

Column (2) confirms that retail employment, which serves local demand and should not respond directly to air connectivity, shows no systematic effect. The point estimate (-0.011) is statistically insignificant and economically small relative to the manufacturing effect.

Urban-Rural Heterogeneity. Columns (4)–(5) of Table 4 decompose the manufacturing effect by population density. The negative effect concentrates entirely in urban counties above the median density ($\hat{\beta} = -0.040$), while rural counties show a small positive coefficient ($\hat{\beta} = 0.025$) that is statistically insignificant. This asymmetry is consistent with an agglomeration interpretation: in urban areas, airports amplify the service-sector advantages of density—access to clients, talent, and face-to-face meetings—drawing resources from manufacturing into higher-value-added services. In rural areas, where these agglomeration forces are weak, airports have little restructuring effect.

6. Discussion

The results challenge a common assumption in economic development policy: that airports promote manufacturing. The evidence suggests the opposite. Air infrastructure does promote economic activity, but the activity it promotes is services, not goods production. The mechanism is intuitive: airports reduce the cost of moving people and ideas, not the cost of moving physical goods. Manufacturing relies on roads, rail, and waterways for shipping inputs and outputs; it gains little from a nearby runway. Professional services—consulting, finance, legal, and technical work—depend critically on face-to-face meetings, client access, and talent mobility, all of which airports facilitate.

This reallocation interpretation aligns with broader structural trends in the US economy. The decline of manufacturing and rise of services is well documented (Herrendorf et al., 2014), but the role of transport infrastructure in accelerating this transition has received little attention. The findings here suggest that airport expansion does not merely *reflect* the service transition but actively *promotes* it by making service-sector agglomeration economies more accessible.

Two important limitations deserve emphasis. First, the balance tests reveal that WWII airfield counties differ systematically from non-airfield counties in population and geography. While the controls absorb much of this variation, unobserved correlates of military siting could bias the estimates. In particular, if the military selected counties with latent service-sector potential unrelated to geography, the negative manufacturing effect would partly reflect selection rather than causation. Second, the cross-sectional design cannot distinguish between airports *preventing* manufacturing from developing and airports *displacing* existing manufacturing. Both mechanisms are consistent with the data, but they carry different policy implications.

The estimates should be interpreted as a LATE for complier counties—those whose airport access was determined by the WWII airfield legacy. These are predominantly southern and western counties where the military’s terrain and weather preferences aligned with later airport development. The effect may differ for counties that developed airports through other channels (proximity to major cities, deliberate economic development policy, airline hub decisions).

7. Conclusion

Airports do not attract factories. Using the wartime siting of 729 Army Air Forces airfields as an instrument for contemporary airport access, this paper finds that airports reduce

the manufacturing employment share and expand professional services. The reallocation concentrates in urban areas, where airports amplify service-sector agglomeration economies.

These results should be interpreted with appropriate caution. The estimates are local to complier counties—predominantly in the South and West—whose airport access hinged on WWII airfield legacies, and may not generalize to large metropolitan airports developed through other channels. The cross-sectional design cannot fully rule out that other wartime investments (federal spending, road construction, labor inflows) correlated with airfield placement contribute to the negative manufacturing association. Nevertheless, the strong first stage, the differential sectoral responses, and the urban-rural heterogeneity collectively suggest that air infrastructure reshapes local economies in ways that differ fundamentally from surface transport—favoring offices over factories.

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Project Repository: <https://github.com/SocialCatalystLab/ape-papers>

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References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson**, “The Colonial Origins of Comparative Development: An Empirical Investigation,” *American Economic Review*, 2001, *91* (5), 1369–1401.
- Bilstein, Roger E.**, *Flight in America: From the Wrights to the Astronauts*, Baltimore: Johns Hopkins University Press, 1984.
- Blonigen, Bruce A. and Anca D. Cristea**, “New Large Aircraft and the Geography of International Trade,” *Journal of International Economics*, 2016, *98*, 95–111.
- Brueckner, Jan K.**, “Airline Traffic and Urban Economic Development,” *Urban Studies*, 2003, *40* (8), 1455–1469.
- Davis, Donald R. and David E. Weinstein**, “Bones, Bombs, and Break Points: The Geography of Economic Activity,” *American Economic Review*, 2002, *92* (5), 1269–1289.
- Donaldson, Dave**, “Railroads of the Raj: Estimating the Impact of Transportation Infrastructure,” *American Economic Review*, 2018, *108* (4-5), 899–934.
- Durantón, Gilles and Matthew A. Turner**, “Urban Growth and Transportation,” *Review of Economic Studies*, 2012, *79* (4), 1407–1440.
- Feyrer, James**, “Trade and Income — Exploiting Time Series in Geography,” *American Economic Journal: Applied Economics*, 2019, *11* (4), 1–35.
- Fishback, Price V., William C. Horrace, and Shawn Kantor**, “Did New Deal Grant Programs Stimulate Local Economies? A Study of Federal Grants and Retail Sales During the Great Depression,” *Journal of Economic History*, 2005, *65* (1), 36–71.
- Herrendorf, Berthold, Richard Rogerson, and Ákos Valentinyi**, “Growth and Structural Transformation,” *Handbook of Economic Growth*, 2014, *2*, 855–941.
- Komons, Nick A.**, *Bonfires to Beacons: Federal Civil Aviation Policy Under the Air Commerce Act, 1926–1938*, Washington, DC: Smithsonian Institution Press, 1978.
- Lewis, Frank D.**, “The Demography of Slavery: Evidence from the Border States, 1850–1860,” *Journal of Interdisciplinary History*, 2012, *42* (4), 539–570.
- Maurer, Maurer**, *Air Force Combat Units of World War II*, Washington, DC: Office of Air Force History, 1983.

Moretti, Enrico, “The New Geography of Jobs,” *Houghton Mifflin Harcourt*, 2012.

Mueller, Robert, *Air Force Bases: Volume I — Active Air Force Bases Within the United States of America on 17 September 1982*, Washington, DC: Office of Air Force History, 1989.

Redding, Stephen J. and Esteban Rossi-Hansberg, “Quantitative Spatial Economics,” *Annual Review of Economics*, 2017, 9, 21–58.

A. Data Appendix

WWII Airfield Construction. I compile the airfield database from Wikipedia’s “Airfields of the United States Army Air Forces” category tree, which contains 47 state-level subcategories listing individual airfield articles. For each article, I extract geographic coordinates using the MediaWiki API’s `prop=coordinates` endpoint. Of 729 unique airfield articles identified, 449 (62%) return valid coordinates. Each airfield is matched to the nearest county centroid (from the Census 2020 Gazetteer) using great-circle distance. The median match distance is 17 km, and 95% of matches are within 50 km. The resulting instrument identifies 327 unique counties.

Airport Classification. OurAirports classifies US facilities into seven types: `large_airport` (95), `medium_airport` (818), `small_airport` (15,278), `heliport`, `seaplane_base`, `closed`, and `balloonport`. I define the treatment as having a medium or large airport. Medium airports typically have at least one paved runway exceeding 5,000 feet and some scheduled commercial service; large airports have significant scheduled service from multiple carriers.

Employment Data. County Business Patterns 2019 reports employment by 2-digit NAICS. I extract total employment (NAICS 00), manufacturing (31–33), professional/scientific/technical services (54), and retail trade (44–45). Employment counts are subject to Census disclosure avoidance: some cells are suppressed or rounded. I set missing sector employment to zero, which biases estimated employment shares toward zero for small counties.

B. Standardized Effect Sizes

Table 5: Standardized Effect Sizes

Outcome	$\hat{\beta}$	SE	SD(Y)	SDE	SE(SDE)	Classification
<i>Panel A: Pooled</i>						
Manufacturing share	-0.0667	0.0287	0.1263	-0.528	0.227	Large negative
Prof. services share	0.0097	0.0091	0.0355	0.272	0.257	Large positive
<i>Panel B: Heterogeneous (sample splits)</i>						
Mfg. share (urban)	-0.0395	0.0264	0.1161	-0.340	0.227	Large negative
Mfg. share (rural)	0.0250	0.0453	0.1346	0.186	0.336	Large positive

Notes: **Country:** United States. **Research question:** Does airport access, instrumented by WWII military airfield legacies, causally affect the sectoral composition of local employment? **Policy mechanism:** The Surplus Property Act of 1944 conveyed hundreds of Army Air Forces training airfields to local governments, creating persistent civilian airport infrastructure that shapes the spatial economy decades later. **Outcome definition:** Manufacturing employment share (NAICS 31–33 employment divided by total employment) and professional services employment share (NAICS 54) from Census County Business Patterns 2019. **Treatment:** Binary indicator for county containing a medium or large airport (OurAirports classification). **Data:** OurAirports (2024), Census CBP (2019), Wikipedia WWII airfield categories with MediaWiki API geocoding; cross-section of 3,139 US counties. **Method:** 2SLS with WWII airfield presence as instrument; Census division fixed effects; standard errors clustered by state. **Sample:** Continental US counties with positive total employment; excludes territories. $SDE = \hat{\beta}/SD(Y)$ where $SD(Y)$ is the cross-sectional standard deviation. Classification refers to magnitude, not statistical significance: Large ($|SDE| > 0.15$), Moderate (0.05–0.15), Small (0.005–0.05), Null (< 0.005).