

The Labor Market Effects of Competition

Evidence from the Hudson's Bay Company

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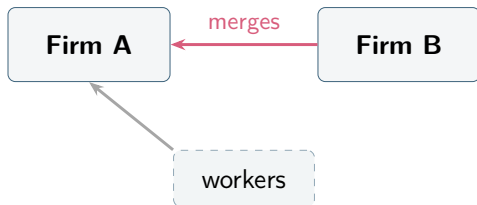
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Motivation

- Employers have wage-setting power: pay sits below the marginal product (Card et al. 2018)
- Market structure matters: fewer employers, lower wages (Azar et al. 2020)

What we know: a rival exits



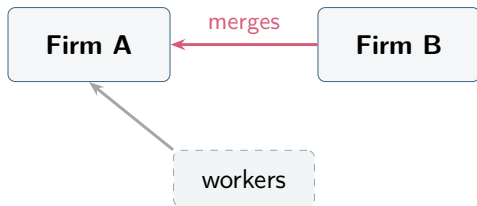
one employer left: wages ↓

Mergers: Prager and Schmitt (2021), Arnold (2021)

Motivation

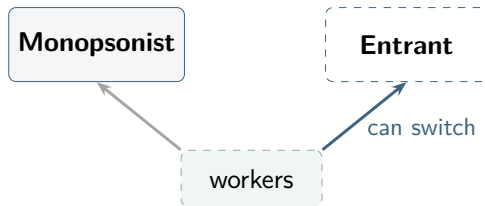
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Rarely seen: a rival enters



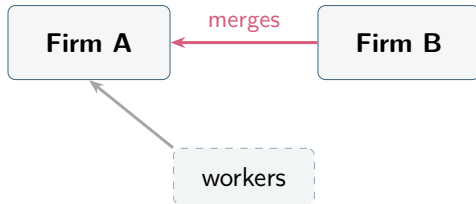
a second employer: wages ?

Entry is the counterfactual behind every concentration estimate, but it is rarely observed

Motivation

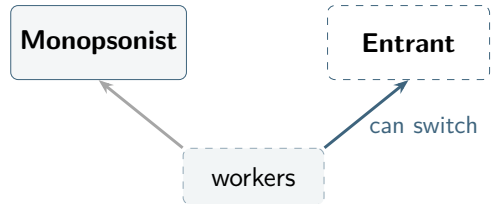
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What we know: a rival exits



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Rarely seen: a rival enters



a second employer: wages ?

This paper: Montreal traders, from 1779 the North West Company, enter the HBC's market

This paper

Question: What happens to workers' pay when a monopsonist gets a rival?

Two challenges

- Employers and workers' outside options are rarely observed
- Markdowns require the marginal product of labor

This paper

Question: What happens to workers' pay when a monopsonist gets a rival?

Setting: the Hudson's Bay Company and Indigenous trappers, 1700–1810

Three ingredients:

1. Employers on the map: the recorded posts of every company, with dates
HBC archive map + National Atlas of Canada
2. The markdown in the company's own books: furs and pay in one unit
Account books of ≈ 40 posts, valued in Made Beaver
3. Rivals arrive: Montreal traders from the late 1760s, the NWC from 1779
Within-post changes in the distance to the nearest rival

Framework: spatial competition

Preview of findings

1. **Markdown:** relative to the HBC Standard, from one third to nearly zero
2. **Where rivals came:** a rival 100km closer $\rightarrow$ +1.4pp; own posts: no effect
3. **Model:** spatial competition, distance to rival posts sets trappers' wage elasticity and markdown

Contributions and related literature

1. Monopsony and buyer power

Robinson (1933), Manning (2003), Ashenfelter et al. (2010), Prager and Schmitt (2021), Arnold (2021)
Derenoncourt et al. (2021), Rubens (2023a,b), Delabastita and Rubens (2023)

Contribution: a unique case study of monopsony vs. duopsony

2. Colonial institutions and organizations

Acemoglu et al. (2001), Nunn (2008), Dell (2010), Dell and Olken (2020)
Lowes and Montero (2021), Méndez and Van Patten (2022)

Contribution: competition among trading companies for Indigenous trade

3. Economic history of the Canadian fur trade

Innis (1930), Rich (1958), Ray (1974), Carlos (1981, 1982), Carlos and Hoffman (1986)
Carlos and Lewis (1993, 1999, 2010)

Contribution: the empirical analysis extended to all trading posts, 1690–1810

Roadmap

1. Setting and sources
2. Four facts
3. Why distance matters: a spatial model
4. Evidence: rivals, own posts, and the model's fit
5. Extension: an entry model

Background

The fur trade

- European demand for felt hats drove the North American fur trade
- Indigenous trappers bartered furs for European goods at trading posts
 - Kettles, guns, cloth, blankets, tobacco: available only through the posts
 - Trappers were **not coerced**: they could trade with either company, or not at all
- 1670: a royal charter gives the HBC exclusive trade in the Hudson Bay basin
 - In practice a small company: ≈ 5 posts on the Bay until 1774
 - Never a pure monopsonist: French traders at the margin (Carlos and Lewis [2010](#))

Background

A timeline of market structure

1700–1762 HBC on the Bay, French traders inland: competition at the margin

1763 French exit: the HBC faces the least competition

1768 Licensing ends: independent Montreal “pedlars” push inland

1774 HBC opens its first inland post (Cumberland House)

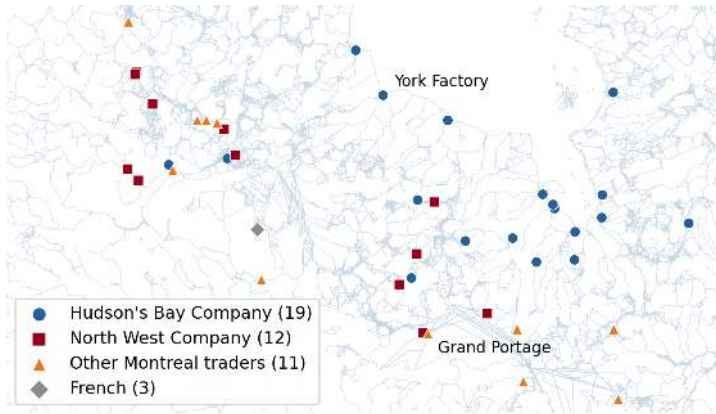
1779 Montreal partners form the **North West Company**

1780–1810 Entry race: both firms build posts inland, often side by side

1821 Forced merger of HBC and NWC

The geography of competition

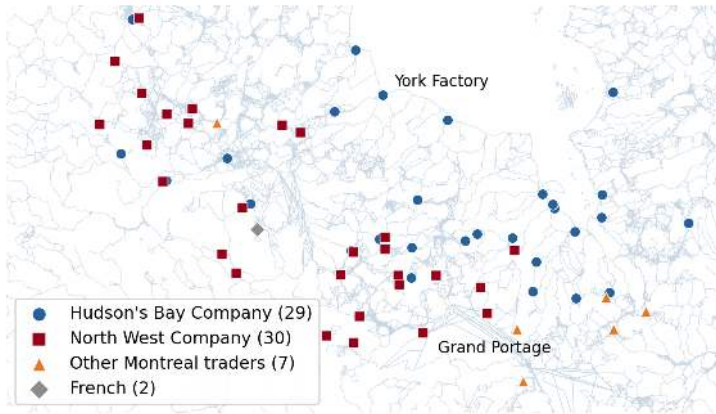
Active posts by company; rivers, lakes and coasts in the background



1780

The geography of competition

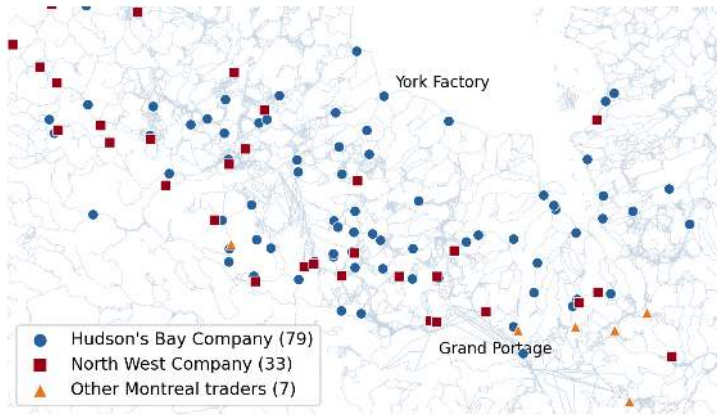
Active posts by company; rivers, lakes and coasts in the background



1790

The geography of competition

Active posts by company; rivers, lakes and coasts in the background



1805

Data

- **HBC Account Books** (Archives of Manitoba), hand-collected and transcribed
 - Post-year: value of furs received, goods traded (incl. gifts), and the “overplus”
 - 38 posts and 407 post-years in 1763–1810; $\approx$ 560 post-years since 1694
 - Captures $\approx$ 90% of HBC beaver exports to London (1799–1800)
- **Trading posts:** HBC archive map + National Atlas of Canada
 - Location and dates of the HBC, NWC, XY, French and independent posts they record
 - Distances are straight-line (great-circle) kilometers between posts
- **Beaver suitability:** USGS GAP habitat model

Measuring the markdown

- The HBC valued goods and furs in one unit, the *Made Beaver* (MB), its Standard of Trade
- Factors traded above the Standard; the gap was booked as *overplus*

$$\frac{w}{MPL}\Big|_{it} = \frac{\text{Value of goods given to trappers (MB)}}{\text{Value of furs received (MB)}} = 1 - \frac{\text{Overplus}_{it}}{\text{Furs}_{it}}$$

- It reads as a wage share under two assumptions
 - Furs are the trappers' output, and goods (incl. gifts) their pay: a piece rate
 - The Standard values furs in proportion to their value to the company
- Benchmark: the HBC Standard, not London prices $\Rightarrow$ **bounded at ≈ 1**

East Main, 1785: "Furrs & other commodities received in trade"

East Main, 1785: "Furrs & other commodities received in trade"

[illegible]

- One page per post and year, sent to London
 - Column 1: value of the furs in Made Beaver
 - Column 2: number of skins received
 - Column 3: type and quality of the fur
 - 2,937 whole parchment beaver = 2,937 MB
 - 46 prime cats (lynx) = 92 MB, i.e. 2 MB each
- ⇒ Total furs received = the **MPL** side

Inside the account books: what trappers received

East Main, 1785: "Trading goods sent to Rupert's River, James Robertson Master"

Goods Names	General charge	Stock	Expence	Trade	Remains
General charge	100	10	10	10	10
Stock	10	10	10	10	10
Expence	10	10	10	10	10
Trade	10	10	10	10	10
Remains	10	10	10	10	10

- Every trade good, valued in Made Beaver
- General charge: stock available at the post
- Expence: gifts and goods used at the post
- Trade: goods given in exchange for furs
- Remains: stock left at the end of the year

⇒ Goods traded + gifts = the **wage** side

The Standard of Trade: one price list for both sides

Albany Fort, 1799

Many of these
for the

[illegible]

Goods: a 4-foot gun = 12 MB

Furs: 1 prime bear = 3 MB

Factors traded around this list; the gap they booked as overplus is our markdown

From the books to w/MPL : East Main, 1765 and 1785

East Main Anno Domini 1785
Furs & other Commodities received
in Trade at East Main:

Beaver	in	Skins	Names of Furs &c.
2,092	in	2,092	Beaver parchment whole
600	in	12,560	do do half
92 1/2	in	122 1/2	do Beaver lost
11	in	16 1/2	do do drop
10	in	25	Beaver black prime
20	in	10	molting
11	in	6	white prime
11	in	100	do do

East Main Anno Domini 1785
Trading Goods sent to Rupert's
River, James Robertson Master

Goods Names	General Expense	Trader	Beaver	Beaver
Charge	10	10	10	10
and	10	10	10	10
Beaver &c	10	10	10	10

(a) Furs received, valued in MB: the MPL side

(b) Goods traded and given, in MB: the wage side

East Main	Furs received (MB)	Goods paid (MB)	w/MPL
1765	2,092	1,426	$1,426 / 2,092 = 0.68$
1785	7,256	7,254	$7,254 / 7,256 = 1.00$

Locating the posts

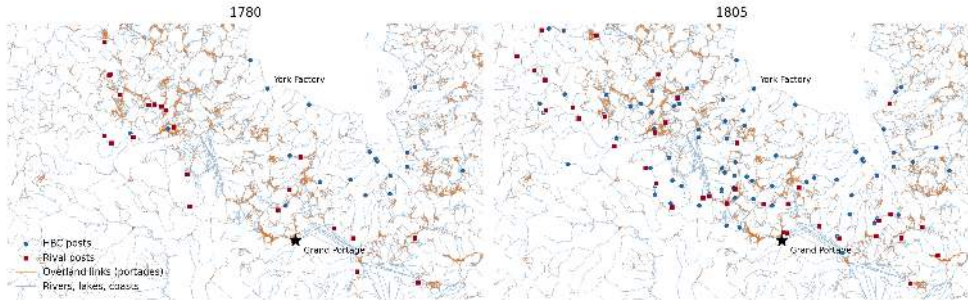
HBC archive map, georeferenced and linked to the National Atlas of Canada



- Archive map: 502 HBC posts
 - Atlas: HBC, NWC, XY, French, others
 - Linked by hand across sources
 - Opening and closing dates
- ⇒ The recorded posts, year by year

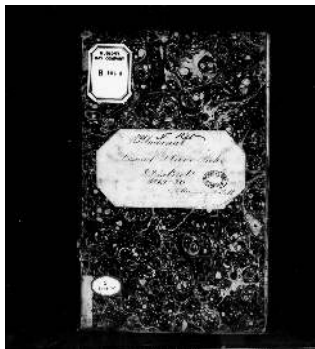
The trade-route network

Rivers, lakes and coasts plus overland links: how furs and goods travelled by canoe



The rivals' posts sit on the routes out of Grand Portage; the HBC's on the rivers to the Bay
Main estimates use straight-line distances; route-based travel costs are in progress

More in the archive



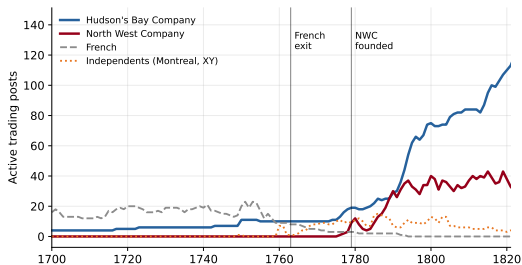
Post journal (B.104/a/2)



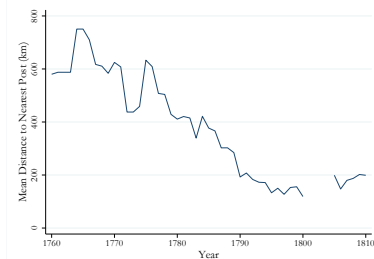
York Factory papers (B.239/z/1)

- Journals: daily trade log
 - NWC price tariff, 1814–15
 - Next: digitize the tariff
- ⇒ Compare the companies

Fact 1: The entry race brought rivals within reach



(a) Active trading posts by company



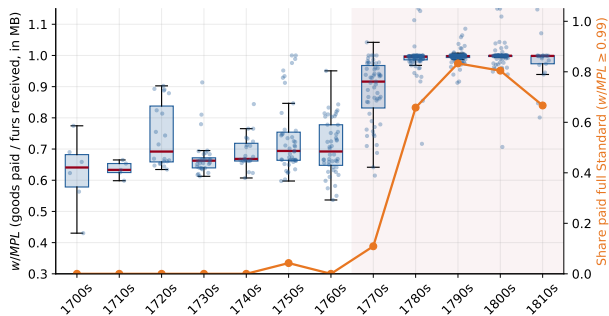
(b) Distance to the nearest rival post (km)

Montreal traders move inland from the late 1760s; the NWC reaches about 40 posts by 1800

Distance to the nearest rival: from about 600km in the 1760s to under 200km by the 1790s

Fact 2: The markdown relative to the Standard nearly disappeared

Trappers' share of the Standard value of their furs, w/MPL , by decade

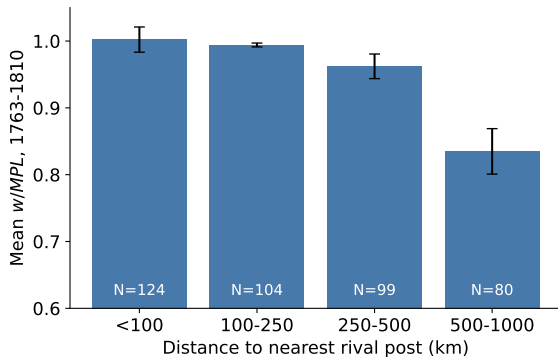


About two thirds of the Standard before 1770; almost all of it from the 1780s

The rise starts in the 1770s, as Montreal traders moved inland before the NWC formed

Fact 3: Wages were higher where rivals were close

Mean w/MPL by distance to the nearest rival post, 1763–1810

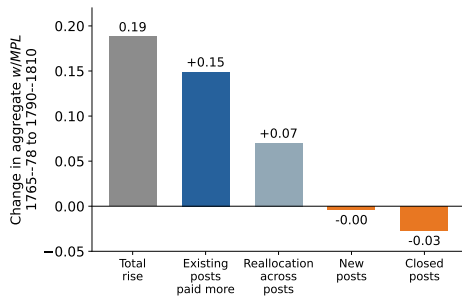


Rival within 250km: trappers get the full Standard ($w/MPL \approx 1.00$)

Rival 500–1000km away: they get 84% of it

Fact 4: The rise happened within existing posts

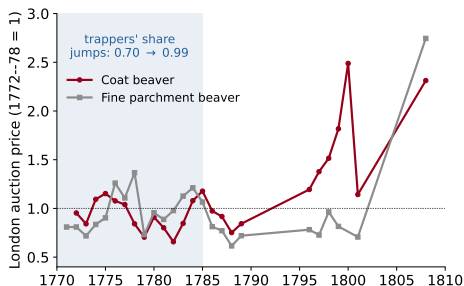
Did new posts pay more?



Change in the fur-weighted share

Most of the increase occurred within existing posts
London prices were flat during the initial rise

Did furs get more valuable?



London auction prices of beaver

► [decomposition table](#)

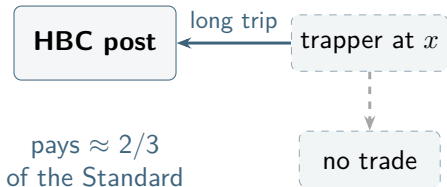
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The idea: outside options in space

A trapper at x chooses where to bring the furs, or not to trade at all

The HBC alone

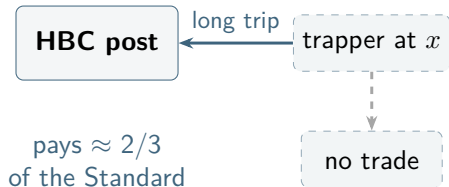


Alone, the post faces only the cost of the trip and the value of not trading

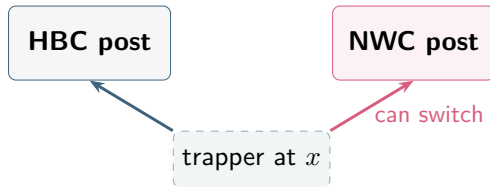
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The HBC alone



A rival within reach



HBC pays $\approx$ the full Standard

A rival within reach lowers the post's share of nearby trappers: geography replaces market shares

A spatial model of monopsony

- Trappers at location x ; posts j at x_j , owned by firms $f(j)$; travel cost t per km
- Utility at post j : $u_{xj} = \eta \ln(w_j - t|x - x_j|) + \nu_{xj}$; not trading: $\eta \ln b + \nu_{x0}$
- Choice set: only posts with positive net compensation, $w_j > t|x - x_j|$
- Share of trappers at x who trade at j :

$$\pi_{xj} = \frac{(w_j - t|x - x_j|)^\eta}{b^\eta + \sum_k (w_k - t|x - x_k|)^\eta}$$

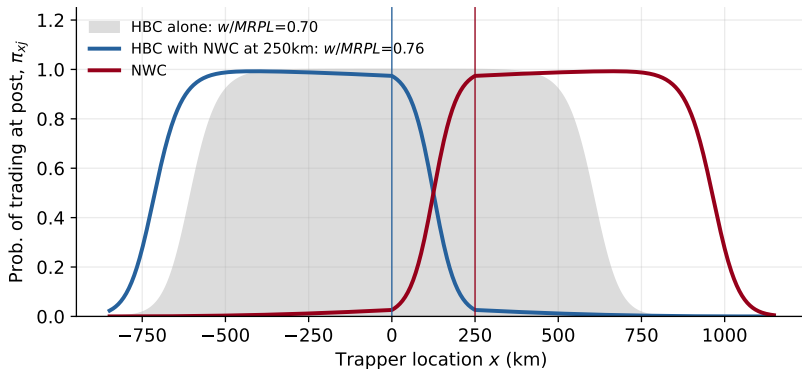
- Single post, taking rivals' wages as given (multi-post firms: ε_j^f , backup):

$$\boxed{\frac{w_j}{MRPL_j} = \frac{\varepsilon_j}{1 + \varepsilon_j}}$$

- ε_j rises when a rival lowers the post's share of the trappers within its reach

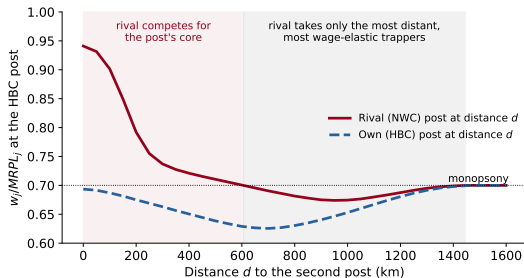
How a rival post changes the catchment area

Calibration: $\eta = 20$, catchment radius $\approx 600\text{km}$, monopsony $w/MRPL = 0.70$



Predictions

- P1 Monopsony:** an isolated post pays $w/MRPL < 1$
- P2 Entry:** a rival within $\approx 600\text{km}$ raises the wage; a more distant rival can lower it
- P3 Ownership:** own posts do not create independent wage competition
- P4 Quantities:** the effect on furs at the HBC post is ambiguous



The dip: a rival 600–1,450km away takes only the HBC's most distant trappers, the most wage-elastic ones

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Empirical strategy

$$\left(\frac{w}{MPL}\right)_{it} = \beta \text{ Competition}_{it} + \alpha_i + \alpha_{d(t)} + \varepsilon_{it}$$

- Competition: straight-line distance to the nearest rival post; any rival within 500km
- α_i post FE: fixed traits of each location, including why it was chosen
- $\alpha_{d(t)}$ decade FE: fur prices, wars, changes in the Standard
- **Threat:** companies chose where to locate, and could respond to local shocks
→ Post FE absorb fixed selection; time-varying selection is the open problem
- 38 posts, 407 post-years; post FE drop 3 single-year posts (35, 404)

P2: Closer rivals, higher wages

	w/MPL				
	None (1)	Province (2)	Post (3)	Prov., decade (4)	Post, decade (5)
MinDistance to rival (100km)	-0.028*** (0.004)	-0.029*** (0.003)	-0.032*** (0.008)	-0.013*** (0.005)	-0.014*** (0.004)
Post-years	407	407	404	407	404
Posts	38	38	35	38	35

- Preferred spec. (col. 5): a rival 100km closer $\Rightarrow$ +1.4pp in w/MPL
- From 583km (1763–78) to 103km (1790–1810): $\approx$ +7pp, over a third of the 18pp rise

P2: Monopsony vs duopsony

Post and decade FE

	w/MPL	
	(1)	(2)
Distance to nearest rival (100km)	-0.014*** (0.004)	
Rival post within 500km		0.044** (0.018)
Post-years	404	404

- Having any rival within 500km raises w/MPL by 4.4pp

P3: Rival posts vs own posts

Post and decade FE

	w/MPL
Distance to nearest rival (100km)	-0.014*** (0.004)
Distance to nearest other HBC post (100km)	0.004 (0.012)
Post-years	404

- Wages respond to rival posts, not to other HBC posts

P4: Quantities

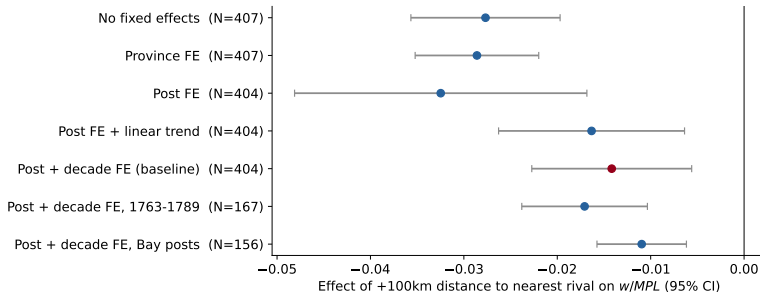
Furs received and goods paid at the HBC post; post and decade FE

	log furs (MB)		log goods paid (MB)	
	(1)	(2)	(3)	(4)
MinDistance to rival (100km)	0.021 (0.020)		-0.000 (0.031)	
# rival posts < 250km		0.123** (0.057)		0.054 (0.040)
Observations	538	538	406	406

- No evidence that rivals reduced HBC furs; more rivals go with *more* furs
- Consistent with P4, but also with firms locating where trappers are

How robust is the distance effect?

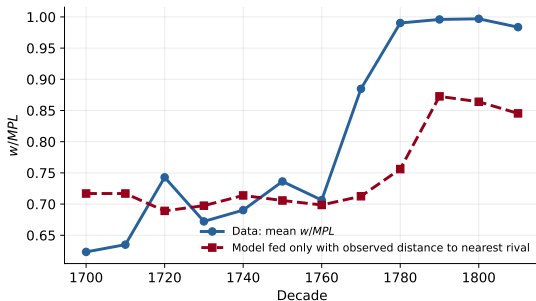
Coefficient on distance to nearest rival (100km) across specifications



Robust to province or post FE, post-specific trends, decade FE, the pre-1790 sample, and Bay posts only

How much does the model explain?

Calibrated model fed only with the observed distance to the nearest rival



- One parameter pinned by the pre-1763 level ($w/MRPL = 0.70$); η and t fixed
- The calibration accounts for part of the increase, but predicts a later and smaller rise

Extension (preliminary): an entry game

Static, incomplete information, two steps (Seim 2006); 293 polygons, 1770–1810

$$a_{ft} + b_f \text{suit}_m + c_f \text{dist}_{f,m} + \delta_f^{\text{own}} \sum_l w_{ml} P_{flt} + \delta_f^{\text{here}} P_{-f,mt} + \delta_f^{\text{nb}} \sum_l w_{ml} P_{-f,lt} + \epsilon_{fmt} \geq 0$$

- **Assumption:** depot distance (Bay, Grand Portage) shifts entry, not trading terms
- Depot access and own networks drive entry; competition terms are imprecise
- Predicted rival exposure is positively associated with the trappers' share

Next steps

1. **The full markdown:** value furs at London auction prices
→ Removes the cap at the Standard; measures the company's own margin
2. **Where posts went:** exploit pre-existing Indigenous trading routes
→ Routes shaped entry; they also shape travel costs, so they enter the model

Conclusions

- Before 1770, trappers received about two thirds of the Standard value of their furs
- As rivals arrived, the markdown relative to the Standard nearly disappeared
- Most of the rise occurred within existing posts
- Closer rivals were associated with higher shares; own posts were not
- The calibration accounts for part of the increase, but predicts a later and smaller rise

Thank you!

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Appendix

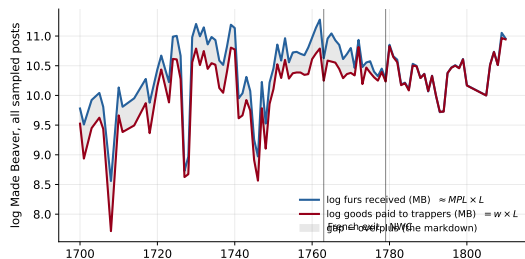
Backup: implied labor supply elasticities, $\varepsilon = \frac{w/MPL}{1-w/MPL}$

[◀ Back](#)

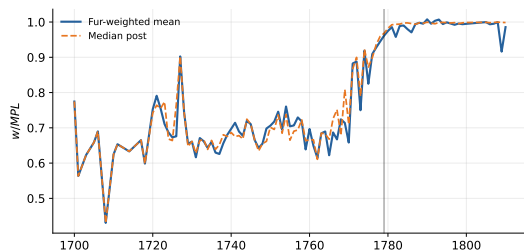
Period	Market structure	Post-years	Median dist. to rival (km)	Mean w/MPL	Median w/MPL	Implied ε
1700–1762	French competition at the margin	148	626	0.701	0.666	2.0
1763–1778	HBC alone on the Bay	82	583	0.815	0.814	4.4
1779–1810	Competition with the NWC	325	132	0.994	0.998	>100

- Under HBC dominance, trappers got 2/3 of the value of their furs: $\varepsilon \approx 2-4$
→ In the range of modern firm-level estimates (Sokolova and Sorensen [2021](#), Card et al. [2018](#))
- Only if w/MPL is a wage share and posts set wages as monopsonists

Backup: furs received and goods paid, all posts

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(a) Furs received and goods paid, all posts (log MB)



(b) w/MPL : fur-weighted mean and median post

The gap between furs and pay, the overplus, closes in the 1770s and 1780s

Backup: the terms of trade converged to one price

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Standard deviation of w/MPL across posts in the same year

Before 1780 each factor set the terms at their own post: spread of about 0.08

With competition, almost every post paid the company's Standard: spread of 0.02–0.03

Backup: decomposition of the rise

[< Back](#)

Dynamic Olley–Pakes decomposition (Melitz and Polanec 2015), 1765–78 to 1790–1810

Aggregate (fur-weighted) w/MPL , 1765–1778	0.801
Aggregate (fur-weighted) w/MPL , 1790–1810	0.989
Total change	0.188
Within surviving posts	0.149
Reallocation among surviving posts	0.070
Entry of new posts	-0.004
Exit of posts	-0.027

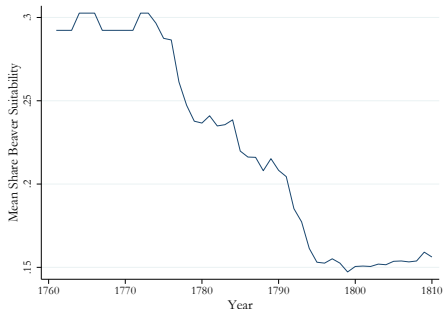
6 posts observed in both periods, 30 entering, 2 exiting; fur-weighted post averages

Backup: where the posts went

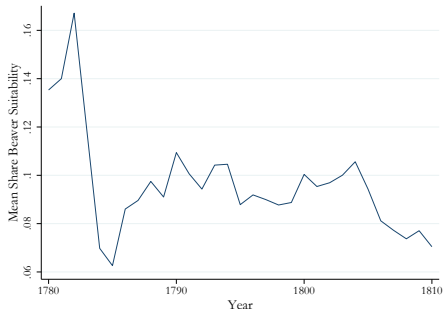
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Average beaver suitability around active posts

HBC



NWC



The HBC moved from the rich land near the Bay into poorer areas

The Montreal traders started in rich areas, then followed into poorer land

- Probability that a trapper at x trades at post j :

$$\pi_{xj} = \frac{(w_j - tz_{xj})^\eta}{b^\eta + \sum_k (w_k - tz_{xk})^\eta}$$

- Labor (furs) supplied to post j : $L_j = \int n(x) \pi_{xj} dx$
- Elasticity of labor supply to the post:

$$\varepsilon_j = \frac{\partial \ln L_j}{\partial \ln w_j} = \eta \frac{\int n(x) \pi_{xj} (1 - \pi_{xj}) \frac{w_j}{w_j - tz_{xj}} dx}{\int n(x) \pi_{xj} dx}$$

- π_{xj} : **local market share** among the post's suppliers; a nearby rival lowers it
- $\frac{w_j}{w_j - tz_{xj}}$: suppliers at the edge of the **catchment area** are the most elastic
- Geography replaces market shares: we observe locations, not rival employment

Backup: wage setting with several posts

- Firms set post wages to maximize $\sum_{j \in f} (MRPL_j - w_j) L_j$, given rivals' wages
- Markdown:

$$\frac{w_j}{MRPL_j} = \frac{\varepsilon_j^f}{1 + \varepsilon_j^f}$$

- Multi-post firm: raising w_j steals trappers from the HBC's own posts

$$\varepsilon_j^f = \eta \frac{\int n(x) \pi_{xj} \left(m_{xj} - \sum_{k \in f} \pi_{xk} m_{xk} \right) dx}{L_j}, \quad m_{xj} \equiv \frac{w}{w - tz_{xj}}$$

- Own posts do not discipline wages; they extend the firm's reach
- So the *owner* of nearby posts matters, as in Berger et al. (2022)

Backup: the Hotelling limit ($\eta \rightarrow \infty$)

- Posts evenly spaced on a circle, $2h$ apart; each trapper supplies one unit
- Indifferent trapper between j and neighbor k : $w_j - tx = w_k - t(2h - x)$

$$L_j = 2x = 2h + \frac{w_j - w_k}{t}$$

- FOC: $-L_j + (MRPL - w_j)/t = 0$, with $L_j = 2h$ in a symmetric equilibrium

$$w = MRPL - 2th, \quad \frac{MRPL - w}{MRPL} = \frac{2th}{MRPL}$$

- Markdown linear in distance between posts and in travel costs
- Finite η : markdowns even with co-located posts (idiosyncratic attachment)
- Finite η : isolated posts face upward-sloping supply (participation margin)

- Wages are observed at ≈ 40 HBC posts, but we see where *every* company located
 - ≈ 800 post locations with opening and closing dates, HBC and rivals
 - ⇒ Location choices reveal profitability and can carry identification
- Two chains building networks, as Walmart vs Kmart (Jia [2008](#))
 - Own posts complement each other: depots, provisioning, canoe brigades
 - Rival posts compete for the same trappers
- Expansion out of supply depots, as Walmart out of Bentonville (Holmes [2011](#))

Backup: entry estimates

Logit coefficients; bootstrap SE over polygons (both steps)

	HBC	Montreal traders
Beaver suitability (std.)	0.67** (0.28)	0.30* (0.17)
Distance to own depot (1000km)	-1.53*** (0.50)	-0.73** (0.32)
Own chain: nearby own posts	0.82** (0.38)	2.52*** (0.40)
Rival in the polygon	0.62 (3.91)	-1.17 (2.53)
Rival nearby	1.13 (1.41)	-0.53 (0.76)
Decade intercepts	Yes	Yes
Polygon-decades	1,465	1,465

- Depots and own networks drive entry for both companies
- Competition terms are imprecise: the HBC followed rivals inland

Backup: predicted rival exposure and wages

[◀ Back](#)

Exposure: $\Pr(\text{a rival post within 500km})$, from the rivals' depot geography only

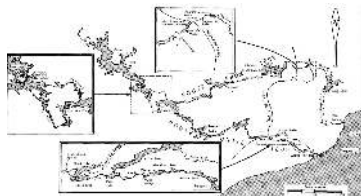
	Decade FE	Year FE	Year FE, excl. York, Albany
	(1)	(2)	(3)
Predicted NWC exposure	0.698*** (0.106)	0.387*** (0.115)	0.206* (0.115)
Post-years	404	404	346

- Preliminary: exposure varies at 8 posts, mostly on the Bay

Backup: exploiting trading routes

◀ Back

- The NWC expanded from Lake Superior along pre-existing Indigenous routes
 - Routes pre-date the companies, but they also shape travel costs and trading terms
 - Control function for entry: routes, portages, rivers, suitability $\times$ time
- *"The Indian guided the explorer in"* (Morse, 1968)

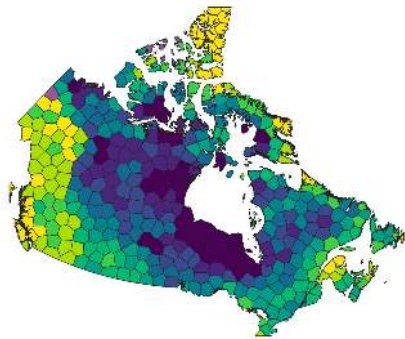


1. **True MRPL:** London auction prices, 1736–1810 $\Rightarrow$ markdown not capped at 1
2. **Labor supply elasticity:** fur mix $\times$ London price shocks shift labor demand

$$\ln w_{it} = \frac{1}{\varepsilon} \ln L_{it} + \alpha_i + \alpha_t + u_{it}, \quad Z_{it} = \sum_f \frac{l_{if}}{L_i} \Delta \ln p_{ft}$$

3. **Estimate the model:** recover (η, t, b) on the 2D map of posts and habitat
4. **NWC market shares:** Canada vs Hudson Bay exports in English customs data

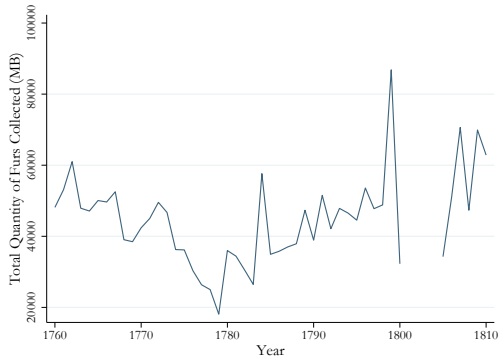
Backup: beaver suitability map



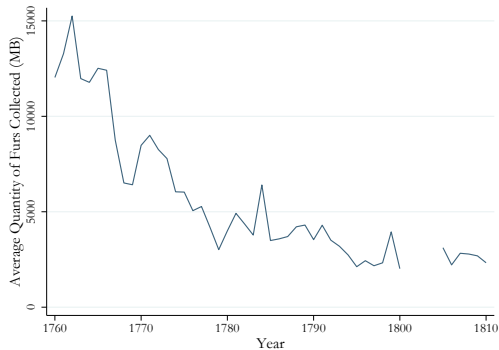
Darker values represent more suitable areas

Backup: fur returns

Total, all HBC posts



Average per post



Backup: controlling for years of operation (depletion)

	(1) Price	(2) Price	(3) Price	(4) Price	(5) Price
MinDistance (100km)	-0.028*** (0.005)	-0.030*** (0.005)	-0.016*** (0.005)	-0.010* (0.005)	-0.012*** (0.004)
Years since post opening	0.000 (0.000)	0.000 (0.000)	0.003** (0.001)	-0.000 (0.000)	0.004** (0.001)
Province FE	No	Yes	No	Yes	No
Post FE	No	No	Yes	No	Yes
Decade FE	No	No	No	Yes	Yes
Observations	408	408	408	408	408
Posts	38	38	38	38	38

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Backup: controlling for beaver suitability

	(1)	(2)	(3)	(4)
	w/MPL	w/MPL	w/MPL	w/MPL
MinDistance (100km)	-0.024*** (0.003)	-0.030*** (0.005)	-0.009** (0.004)	-0.014*** (0.004)
Suitability	Yes	Yes	Yes	Yes
Province FE	No	Yes	No	Yes
Decade FE	No	No	Yes	Yes
Observations	403	403	403	403
Posts	37	37	37	37

Backup: model calibration

- One-dimensional geography, uniform density, two posts d apart, $MRPL = 1$
- $\eta = 20$: co-located duopsony gives $w/MRPL \approx 0.94$ (0.99 in the data)
- $t = 0.0005$ per km: 100km of travel costs 5% of the value of the furs
- $b = 0.40$: an isolated post pays $w/MRPL = 0.70 \Rightarrow$ catchment radius ≈ 600 km
- Equilibrium: Bertrand–Nash in wages, solved by best-response iteration
- Model path: the model wage at each post-year's distance to the nearest rival

	Mean	Median	SD	N
Furs received (MB)	4,457.13	2,470.11	5,341.78	545
Goods paid to trappers (MB)	3,690.03	2,291.63	3,816.63	409
Overplus (MB)	511.77	6.58	2,058.39	412
Goods / furs (<i>w/MPL</i>)	0.96	1.00	0.12	407
Distance to nearest rival (km)	286.38	245.33	225.64	549
Beaver suitability (share)	0.25	0.23	0.17	547

Post-years of HBC posts with account-book records, 1763–1810. MB: Made Beaver.