Supporting Postal Services through Location-Based Fees

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30th Conference on Postal and Delivery Economics

Florence School of Regulation
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Rimini, Italy
26 May 2022

Background

- I had proposed method for adjusting price with falling volumes
  - PC 2016
  - For PRC "Public Representative", PAEA 10th (my opinions only here)
- PRC proposed adjustment based on falling "density", volumes per "location"
- Implied cost coverage through location fees ≈ $100/year/location
- Compute; explore implications

Recap

- Brennan-Crew adjustment formula
  - $\frac{\Delta P}{P} = -\frac{\Delta q}{q}\frac{F}{C+Fe_D}$
  - Elasticity of average cost e_{AC}, for scale
  - Elasticity of demand e_D, for feedback
  - With constant MC, F = fixed cost, C = total cost
- US PRC decision
  - $\frac{\Delta P}{P} = -\frac{\Delta d}{d}\frac{F}{C}$
  - "d" = volume/locations, aka "delivery points"
  - (Ignore not adjusting for feedback)

Implication for fees

- PRC formula implies no change in average cost if "density" constant
- If C = cost, Q = volume, N = location
- => $C(Q, N) = QC_Q + NC_N$,
- If marginal costs of volume, location constant as M, V respectively,
- $C(Q, N) = MQ + VN$
- Recover all costs with marginal cost prices and location fee

What is *V*?

- Since locations get all kinds of mail, compute for market-dominant) services
  - Lower postages for each service = its MC
- *V* = "Institutional cost"/"delivery points"
- 2020 Institutional cost = $16.6B
  - $14.8B from services that contributed + $1.8B from those that were short
- 2020 delivery points = 161.4 million
- => *V* = $102.85/year = $8.57/month

So what's the problem? #1 : Numerator

- Dividing USPS fixed costs between market-dominant, competitive services
  - Institutional cost recovery result of pricing
  - BC perspective only maintaining solvency
- Location fee invites cross-subsidization complaints
- Responses
  - Set USPS competitive prices as market would (Brennan, 2020)
  - Price-cap fees without regard to "cost"

So what's the problem? #2 : Denominator

- What's a "delivery point"?
  - USPS: "A single mailbox or other place to which mail is delivered. A street address does not necessarily represent a single delivery point because a street address such as one for an apartment building may have several delivery points."
- Some delivery costs vary
  - Apartments, cluster boxes, urban home delivery, rural
  - Corporate, government, etc. "mail room"
- USPS claims mix doesn't change, only population
- Sorting costs same regardless of delivery point?

Implementation resistance #1: Equal fee per delivery point

- Those using cluster boxes, in apartments resent paying same fee as those with home delivery, rural customers?
- But we already have average cost pricing
- Similar urban/rural divide?

Implementation resistance #2: Equal fee regardless of volume?

- Current system: Those who get more mail (implicitly) pay more
- "Why should I pay the same fee? I hardly get mail!"
- Prior controversy: Telephones
  - Highly inefficient subsidy of fixed lines with long-distance surcharges
- Regulatory pricing "original sin"
  - Electricity, water

Implementation resistance #3: Dropping off the grid?

- What if some people decide mail isn't worth $100/year?
  - Bills, personal correspondence, catalogs come on-line
  - Kramer on *Seinfeld*: https://youtu.be/On3cQ0sPvSY
- USPS formula assumed everyone got mail
  - Implied "marginal cost" really average cost
- Network externalities, low MC => fee mandatory
  - Opposition to mandatory fee in principle
  - Reinforces cross-subsidy concern

Implementation issue #4: Price caps for delivery fees?

- MC cost recovery does not *necessarily* imply return to cost-of-service regulation
- Apply price-caps to location fees, as well so to (50% lower) market-dominant service postage
- Gives USPS incentive to reduce delivery-point costs
- Use expected efficiency to reduce fee

Concluding observations

- PRC approach implies efficient cost recovery through $100/year delivery point fee
  - Less than Amazon Prime, but no video!
- Numerator, denominator problematic
- Implementation resistance predictable
- Is the PRC's density approach credible?