

## Development Charges and Housing Affordability: A False Dichotomy?

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#### **Presentation Outline**

- Introduction and Popular Narrative
- Fiscal Challenge of Growth to Municipalities
- Economic Function of Development Charges
- What is Housing Affordability?
- Impact of Development Charges on Housing Affordability
- Summary and Conclusions



#### Introduction and Popular Narrative

- Municipalities in Ontario rely heavily on development charges to recover growthrelated capital costs.
- Development charges are one-time fees levied on development facilitating growth and giving rise to the need to expand municipal service capacity.
- According to AMO and MFOA, development charges are essential to ensuring that "growth pays for growth."



#### Introduction and Popular Narrative

- More Homes, More Choice: Ontario's Housing Action Supply Plan (2019) sees development charges as <u>deleterious</u> to housing affordability.
- Popular narrative: Development charges increase housing prices by <u>reducing</u> housing supply and therefore housing affordability.
- Although popular, that narrative is <u>invalid</u> because it disregards the connection between development charges and municipal services, property taxes and user fees.



Municipal services are subject to <u>capital indivisibilities</u> for three reasons:

- <u>Engineering Reality</u>: Bridges, road lanes, traffic signals, ice arenas, snowploughs, etc. provide all-or-nothing capacity.
- <u>Legal Constraints</u>: Water and sewage systems, landfills, etc. are subject to regulations requiring advance expansion.
- <u>Cost Factors</u>: Cost efficiency requires highly infrequent expansion or replacement of major municipal assets such as water treatment plants and trunk sewers.



- By contrast, growth occurs <u>gradually</u> over time (i.e., growth is highly divisible relative to growth-related capital works).
- Therefore, to maintain municipal service levels cost-efficiently, extension of services to growth necessarily entails creation of excess capacity.
- Municipal capital costs relating to growth, years or decades into the future, are thus incurred <u>upfront</u>.



- As a necessary condition of full cost recovery, efficient property taxes and user fees are based on <u>full utilization</u> of capacity.
- However, growth occurs <u>gradually</u> and generates municipal revenue <u>only upon materialization</u>.
- Therefore, efficient property taxes and user fees fail to fully recover growth-related capital costs.
- This is an irrefutable mathematical result and is easily proven.



- If municipalities have recourse only to property taxes and user fees to recover growth-related capital costs, they would have to levy <u>inefficiently high</u> property taxes and user fees.
- Accordingly, growth-related capital costs are then <u>invariably</u> <u>shifted</u> to established ratepayers in the form of <u>excessive</u> property taxes and user fees.
- As a result, established ratepayers call for <u>lower</u> service levels and <u>greater</u> restrictions on development.
- This fiscal distortion is the "externality of excess capacity."



Why do the excessive property taxes and user fees driving the externality of excess capacity arise?

- 1. Efficiency requires the <u>upfront</u> creation of excess capacity.
- 2. Indivisible capital costs are driven by capacity <u>rather than</u> population.
- 3. Population is always below capacity, meaning that costs divided by population always exceed costs divided by capacity.



# Economic Function of Development Charges

- Properly formulated development charges recover from growth the portion of growth-related capital costs that is necessarily <u>unrecoverable</u> by efficient property taxes and user fees.
- Accordingly, development charges work in <u>conjunction</u> with, but are <u>not replaceable</u> by, property taxes and user fees.
- Ontario's Development Charges Act is, however, inconsistent with the foregoing conception.



### What is Housing Affordability?

- Opposition to development charges is fueled by the <u>belief</u> that such charges reduce housing supply and thereby increase housing prices.
- It is in this sense that development charges are thought to diminish <u>housing affordability</u>.
- The central problem with that approach is the <u>invalid premise</u> that housing affordability is measurable <u>only</u> by the price of housing.



### What is Housing Affordability?

- Housing is <u>affixed to land</u>, and municipal services are <u>tied to location</u>.
- So housing in a municipality is <u>necessarily</u> consumed <u>jointly</u> with municipal services.
- In a municipal context, therefore, housing affordability refers to the affordability of housing-municipality <u>packages</u>.
- Accordingly, housing affordability cannot be captured by housing prices <u>alone</u>.



#### What is Housing Affordability?

- In a municipal context, housing affordability refers to the economic well-being of households derived from joint consumption of housing and municipal services.
- Economic well-being (i.e., welfare) is measured by consumer surplus, which is the difference between what households are willing to pay and what they actually pay for consumption.
- That means housing affordability depends not only on housing prices but <u>also</u> municipal services and levies.



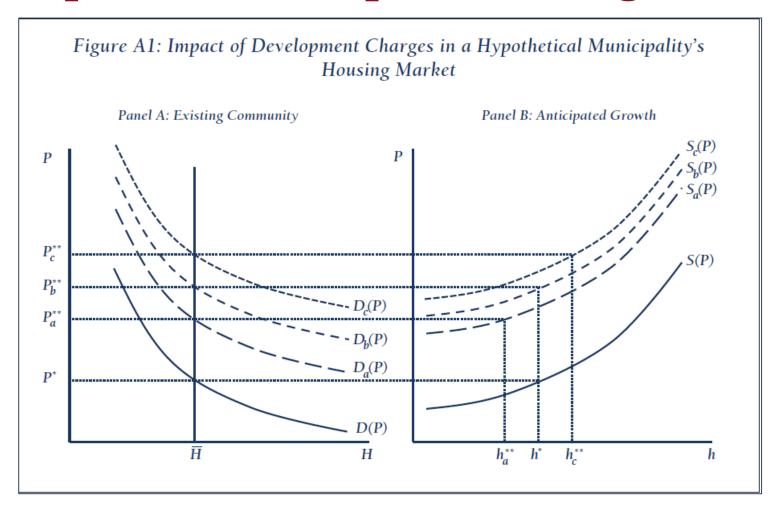
- Housing affordability is, in a municipal context, affected by development charges through three channels:
  - housing production costs;
  - property taxes and user fees;
  - municipal service levels.
- The latter two constitute the <u>municipal environment</u>.
- By focusing only on the first channel, critics <u>invalidly</u> <u>conclude</u> that development charges reduce housing affordability.



Consider a stock-flow model of a municipality's housing market:

- Existing stock of housing is fixed due to its durability and immobility.
- Price is determined by intersection of the existing stock of housing with households' demand (i.e., willingness to pay) for housing.
- Flow of new housing (i.e., housing production) is determined by intersection of price with developers' supply of housing.











Stage 1 of adjustment (demand side):

- Development charges raise municipal service levels and reduce property taxes and user fees.
- Housing demand shifts up, and price increases by, the value of the improvement to the municipal environment.
- Welfare of established households increases by the above value as they already have homes in the municipality; welfare of incoming households remains unchanged as the above value is equal to the price increase.



Stage 2 of adjustment (supply side):

- Marginal cost of housing production increases by the rate of development charges, shifting housing supply up.
- Housing production changes depending on how the rate of development charges <u>compares</u> to the price increase.

Three possible cases regarding the shifting of development charges into housing prices:

- Under-shifting: Rate of development charges exceeds price increase, reducing housing production.
- Exact-shifting: Rate of development charges equals price increase, maintaining housing production.
- Over-shifting: Rate of development charges is exceeded by price increase, increasing housing production.



- Recall incoming households are <u>indifferent</u> about development charges before developers respond.
- Therefore, the change in incoming households' welfare depends only on the change in <u>housing production</u>.
- Accordingly, incoming households' welfare is affected only by the change in the <u>timing</u> of their joining the municipality.



- Regardless of which case arises, however, welfare of households taken collectively is <u>improved</u> by development charges.
- That is because development charges <u>resolve</u> <u>an externality</u> and hence restore (or maintain) economic efficiency in municipal services <u>and</u> the housing market, all else equal.
- Empirical evidence favours the over-shifting case, suggesting development charges improve welfare of even incoming households.



Two critical (and potentially counterintuitive) implications of these results:

- 1. Development charges raise housing prices, with housing production adjusting to its efficient level, <u>precisely because they make housing more affordable</u>.
- 2. Development charges improve welfare and thus housing affordability the more they are shifted into housing prices, all else being equal.



These implications <u>run counter</u> to the popular narrative that development charges:

- 1. Necessarily reduce housing production.
- 2. Harm households to the extent that they are incorporated into housing prices.

This outcome reveals the <u>invalid premises</u> underlying the popular narrative.



#### **Summary and Conclusions**

- Municipal services are subject to <u>capital indivisibilities</u>.
- If municipalities have recourse only to property taxes and user fees to recover growth-related capital costs, then <u>excessive</u> levies will result.
- Housing in a municipality is necessarily consumed jointly with municipal services.
- Introduction of properly formulated development charges <u>improves</u> the welfare of households collectively and thus housing affordability.

