The Cost of COVID – Recent Drops in Market Liquidity May Foreshadow Major Drops in US Commercial Real Estate Markets

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Real or Surreal? PDP Symposium, Preliminary results - subject to revision

Introduction

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- PDP publishes 2 products, of which 1 is the "Liquidity Metric" for major US pvt commercial real estate markets
- Here we quantify "Liquidity Metric" based on gap between buyer and seller reservation prices (Van Dijk, Geltner, and van de Minne, 2020)
- Market liquidity is defined as the ease of selling a property at fair value
- Due to buyer and seller behavior liquidity metric leads price movements
- A white paper with an extra in depth-analysis of a regular update in wake of C19-crisis (recent update with data up to June 2020):
 - Construct the method at a monthly scale for 8 MSAs and by 4 property type sectors
 - Compare recent drops with Global Financial Crisis (GFC)
 - Look at price implications based on historical lead-lag relationship
- Based on private commercial real estate data only (RCA)

Poll questions

- What do you think that will happen to prices in the short to medium-run in commercial real estate in major US cities related to COVID-19 and the inevitable economic downturn (GFC average drop in 7 major cities about 30%)?
 - (a) Increase or flatten
 - (b) Decrease mildly (<10%)
 - (c) Decrease moderately (10-20%)
 - (d) Decrease substantially (20-30%)
 - (e) Decrease extremely (>30%)
- How long do you think it will take for prices to bounce back (GFC took about 2.5 years)?
 - (a) I didn't expect a price decrease in the first place
 - (b) Within 1 year
 - (c) Within 1 2.5 years
 - (d) More than 2.5 years
 - (e) Never

Stylized theory











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Empirical results

Indices: New York



Comparison with GFC for different MSAs



Indices: West Office



Comparison with GFC for industry subtypes



- Calculate historical Price-to-Liquidity ratio (PL-ratio) which is the elasticity of price growth to the Liquidity Metric based on GFC relationship and panel regression models (4 models in total)
- Back-of-the-envelope calculation to infer price effects of recent liquidity drops
- This requires (at least) 3 assumptions:
 - Historical price-liquidity relationship is indicative for current elasticity
 - We have seen the full drop in market liquidity related to C19 in Jan Jun 2020
 - There are no feedback effects

Liquidity implied price implications



O Average predicted price drop and error bounds based on different models

Conclusions

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- We document substantial drops in market liquidity in major US commercial real estate markets in first half of 2020
- Drops are happening much quicker than during the GFC
- Drops are almost as big as the total GFC drop
- Retail and Office markets are hit hardest
- Prices are still stable/increase in 2020Q2 (except for West Coast cities)
- Simple framework to infer effects on prices based on historical lead-lag relationship
- Price drops of 20%-35% are predicted
- Special report update expected in August (http://pricedynamicsplatform.mit.edu/ and SSRN)

References

- Van Dijk, D., D. Geltner, and A. van de Minne (2020). The dynamics of liquidity in commercial property markets: Revisiting supply and demand indexes in real estate. *The Journal of Real Estate Finance and Economics Forthcoming*.
- Van Dijk, D., A. Kinsella Thompson, and D. Geltner (2020). Recent drops in market liquidity may foreshadow major drops in US commerical real estate markets. *Available at SSRN 3604606*.

Extra Figure: Regional drops in industry types



Extra Indices: Atlanta



Extra Indices: Boston



Extra Indices: Chicago



Extra Indices: Los Angeles



Extra Indices: San Francisco



Extra Indices: Seattle



Extra Indices: Washington D.C.

