FEDERAL RESERVE BANK of NEW YORK

Thoughts on the Future of the Appraisal Industry
Collateral Risk Network, April 8, 2015
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These views are my own and not necessarily the view of the Federal Reserve Bank of NY or the Federal Reserve System

Summary points:

- Collateral valuation is critical to mortgage lending
- There is a distribution of values not a specific value for a property
    - Not clear point in the distribution should be reflected by an appraisal
    - Appraisals are relative not fundamental valuations
    - Should the appraiser know the contract price?
- Appraisal industry is at risk from "disruptive" forces
    - Key question:
        - When is an "expert" needed and how does the expert add value?
    - Proactive strategy is needed to deal with disruptive forces

- Collateral valuation is critical for residential real estate loans
  - Many collateralized loans have both initial and variation margin
    - If the collateral value declines, borrower will have a margin call requiring the borrower to add in additional equity
    - If borrower fails to make the margin call, lender can foreclose on loan
    - Combination maintains the borrower's equity over time limiting both the probability of default and loss given default
  - Mortgages <u>only</u> have initial margin – downpayment
    - Increases risk that a borrower can become "underwater"
    - Puts even more importance on the appraisal underlying the initial LTV
      - Holding house prices constant, the initial equity cushion is only slowly increased (if at all) through debt amortization

- Collateral valuation is critical for residential real estate loans – con't
  - Distribution of possible values for any property
    - What point in the distribution should be the appraised value?
  - Valuation exercise more difficult in a low transaction environment (or where there is a high fraction of distressed sales)
    - How should the appraiser reflect his/her uncertainty over the appraised value?
    - The holder of the credit risk would likely lower the appraised value (and hence the origination LTV) to account for the greater uncertainty

- Should appraisals prevent speculative house price bubbles?
    - Similar question asked of Rating Agencies and their valuation of PLS.
    - Also criticism after S&L crisis [House Committee on Gov't Operations, 1986]
- Three evaluation approaches: cost, income and sales
    - All three are a <u>relative</u> not a <u>fundamental</u> valuation exercise
    - Does <u>not</u> indicate if current market prices are aligned with fundamentals
        - Sales comparison approach (dominant method) clearly is a relative valuation
            - Under current market and lending conditions what would a "comparable" house sell for?
        - Cost approach is also difficult to use to judge fundamental value
            - Replacement cost can be estimated using a "through the cycle" costing of labor and materials
            - Land price is where any speculative mispricing will show up – difficult to determine the "fundamental" land value.

- Descriptive statistics on appraisals
  - How closely aligned should appraisals be with contract prices in an "ideal" setting?
    - Buyers and appraisers are carrying out a similar valuation exercise
      - Real estate agents discuss "comparables" with their clients as part of the pricing and bidding discussions
      - One distinction is that the buyer is aware of the "match quality" between their preferences and the house.
    - Different sellers will set the contract price at different points in the value distribution for their property
      - How patient or anxious are they to sell the property?
      - Are they selling for a nominal gain or loss?
    - Expect to see a strong correlation between contract prices and appraisals
      - Appraisal values higher and lower than the contract price
      - No reason to expect bunching at the contract price.

- In contrast, data show a <u>very sizeable</u> bunching of appraisals at the contract price with relatively more appraisals above then below the contract price
  - Cho and Megbolugbe (1996) study of 1993 Fannie Mae loan acquisition file – **30%** appraisals equaled the contract price, 65% above and 5% below
  - Suggests that pressure is exerted on appraiser to "hit the price" in order for the sale to go through.
    - Buyer may/may not want an objective appraisal -- independent valuation check vs ability to purchase house
    - Sellers, real estate agents and lenders who do <u>not</u> retain the credit risk have a financial incentive to complete the sales transaction.
- Should appraisals be done w/o knowledge of the contract price?

- Impact of the Home Valuation Code of Conduct
  - Does it help to mitigate the upward bias in appraisals?
  - Recent study: Ding & Nakamura (2014)
    - Have data on appraised values and contract prices for approved and denied mortgages
    - Study the impact of HVCC by comparing pre- and post-enactment as well as across mortgages covered and not covered (above and below the conforming loan limit)
  - Findings:
    - The chance of an appraised value below the contract price increased by 17%
      - Associated increased in likelihood that mortgage was not approved.
    - The chance of an appraised value 5% or greater than the contract price decreased by 15%

- Future of appraisal industry
  - Internet/technology, big data and inexpensive computing power have been "disruptive" in many industries
    - Travel agents
      - Used to book a high percentage of all airline travel
      - Now specialize in managing discounts for large businesses and specialized trip planning
      - Core business of booking travel migrated to the internet
    - Blockbuster Video
      - Dominant position in the video renting business
      - Replaced by Netflix streaming service
    - Taxi
      - Medallions in NYC have exceeded $1 million
      - Uber has resulted in a decline in value by at least 20 percent

- The appraisal industry is not immune from these disruptive forces
  - Automated valuation models are becoming more sophisticated over time
    - AVMs have a high up-front cost but nearly zero marginal cost
  - Potential advantages of AVMs
    - Very low cost and quick turnaround for a valuation relative to an appraisal
    - AVMs are not influenced by the contract price
  - Important question: as AVMs continue to evolve, what is the comparative advantage to having an "expert" appraise the property?
    - Are some types of properties/neighborhoods inherently more difficult to value w AVM?
      - If so, then AVMs may replace appraisals in some cases, but not others. More targeted use of experts.
    - Can AVM be used instead of an appraisal if borrower is putting significant equity into the purchase?
      - 8-12% of GSE loans in 2009/2010 approved w. AVM [GAO, 2011]

- The appraisal industry is not immune from these disruptive forces – con't
  - Important question: as AVMs continue to evolve, what is the comparative advantage to having an "expert" appraise the property?
    - Can AVMs be used as an input to an appraisal?
      - Role of the appraiser would be to adjust the valuation produced by the AVM based on those factors not well accounted for by the AVM
      - Fannie Mae's new program
  - Right now appraisers have a near monopoly on house valuation for mortgage underwriting
    - Assuming that a monopoly will continue is a strategy for possibly losing that dominant position in the future.
    - A proactive strategy is needed

References:

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