#### Fin 5413 CHAPTER SEVEN

SINGLE FAMILY HOUSING: PRICING, INVESTMENTS, AND TAX INVESTMENTS

#### Demand Determinants- Single Family Housing

- Population Growth
- Household formations
- Employment
- Household Income
- Interest Rates
- Federal Income Tax Policy
- Cost of Renting

#### Tax Treatment of Personal Residence (see Exhibit 7-4)

- Maximum interest deductions
  - Acquisition debt- \$1,000,000
  - Limited to the cost of property plus improvements
  - Home equity debt- \$100,000
- Points on mortgage loans deductible in year of purchase on primary residence – amortized on refinances
- Real Estate taxes deductible in year paid
- Capital gain exclusion \$500,000 married couple, every 2 years (principal residence)

#### Tax Treatment of Second Home

- Interest same as primary
- Points- amortized over life of loan
- No capital gain exclusion
- Vacation homes- special rules if also rented for income

#### Rent versus Purchase

- Advantages of Renting
  - Easy to move with low cost
  - No funds needed for down payment and closing
  - Credit quality less important
  - No investment risk
  - Maintenance is done for you

#### Rent versus Purchase

#### Disadvantages of Renting

- □ Limited in personalizing your residence
- May be evicted or lease not renewed
- Must live under someone else's rules
- May be fewer locational choices
- Is probably more expensive over the long run
- Does not build housing equity
- □ Less stake in your community

#### Financial comparison of Rent versus Own

- Treat like a capital budgeting decision
- See Exhibit 7-2, 7-3
- Need to have money for a down payment, or borrower larger amounts.
- Often need at least a 3 year ownership horizon to overcome the buying and selling costs.
- Overall advantage to housing depends on what it will be sold for in the future

#### Valuing Property: Appraisals

- Market value is the probable price that would be paid in a competitive market
- Three common approaches
  - Market or sales comparison approach compare to similar properties which sold recently
  - Cost approach cost to reproduce
  - Income approach PV of potential CF's
- One generally cannot get a mortgage without some sort of appraisal –based on the
- minimum of purchase price and appraised value

#### Sales Comparison Approach

- Find similar properties that have sold recently (typically three) Adjustments for:
  - ITIME, Location View, Design appeal
  - Quality of construction, Age, Condition
  - Size, Features, Functional utility
  - $\hfill\square$  Type and condition of systems, i.e., HVAC
  - Sale or financing concessions

#### Sales Comparison: Example

	Subject	Comp 1	Comp2
	\$152,000	\$150,000	\$161,000
Size	1800 sqft	1700 sqft + 8000	2000 sqft - 16000
Garage	2 car garage	3 car garage - 5000	1 car garage +7000
Indicated Value of Subject		\$153,000	\$152,000

#### Cost Approach

- Value of land plus cost of improvements
- Deduction for Depreciation
  - Physical depreciation
  - Houses "wear out" or age (roof wearing out)
  - Functional obsolescence
    - Old kitchen, low ceiling, old wiring, small closets
  - External obsolescence
    - Such as shifting land use
  - Curable vs. incurable
    - New paint, carpets, roof, etc. vs. ceiling height

#### Income Approach

#### Gross rent multiplier

- □ The ratio of house prices to monthly rents
- Example could rent out for 775 per month. If the Gross rent multiplier is 137, then the indicated value of the house is \$106,175
  - This is like the P/E ratio approach to value a stock
- Difficult to use for single family residential properties as most houses are not used as rentals

#### Investing In Distressed Properties

- Foreclosures are at record highs, indicating there may be some real estate bargains
- On alternative is to buy "pre foreclosure"
- Owner with equity may sell at a bargain to prevent foreclosure
- Lender may be willing to accept a "short sale" to avoid foreclosure

#### Investing In Distressed Properties

- Borrower unable to meet mortgage payments
- Market value of property below loan balance
- Delinquent in property taxes
- IRS liens
- Civil judgments/bankruptcy/divorce
- Mechanics and/or construction loan liens
- Personal debts
- Estate settlements

#### Investing In Distressed Properties

- Buyer must be aware of quality of title when investing in distressed properties
- To profit from investments in distressed properties, the investor must buy low and sell high
- The gain will be the selling price (less selling expenses), less the cost of improvements, less the financial holding costs, less the price the property was purchased for.





# Budget Fixtures Kitchen/Bath Paint: Interior/exterior Back porch Flooring A/C Staging Total – Approx \$25,000



#### Project Repairs



- Put cement cap on addition
- Build master bedroom closet
- Install water heater
- Pour new back patio
- New flooring throughoutPaint interior/exterior
- New 30 year roof

#### Timeline

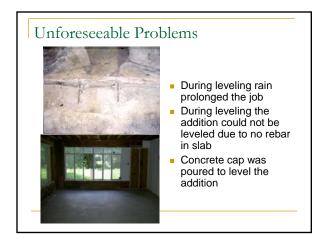
- 6 Weeks
- Before one project is completed another subcontractor has to be lined up
- Some projects can run at the same time
- Actually took 7 weeks

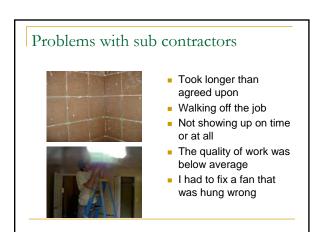


#### Timeline Extension

- Due to unforeseeable problems, the timeline had to be extended
- Extension was 1 week
- Due to subs taking longer than expected
- Also due to having to pour concrete cap

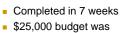








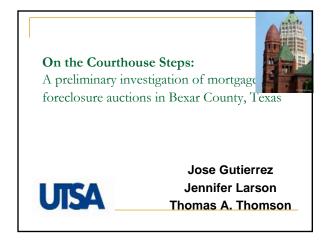




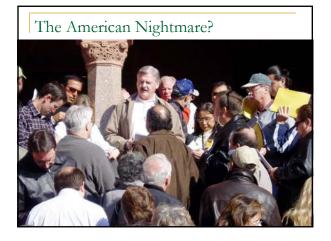
- approx 70,000 Sold for approx
- 6 weeks to sell home
- closing took 17 weeks





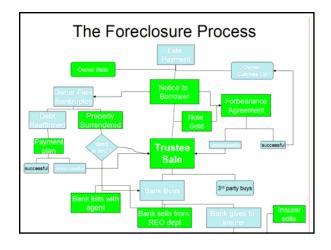


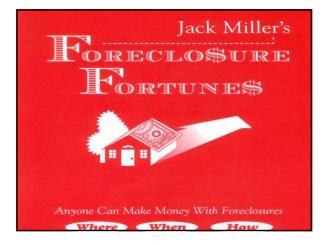


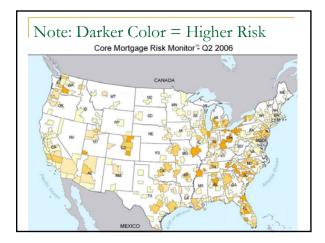










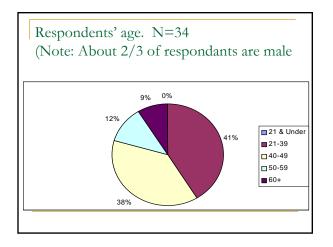


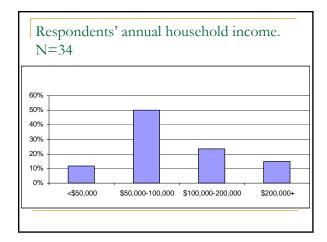
#### Objectives

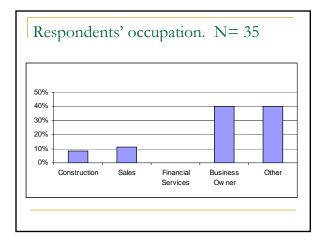
- Some reporters questions (who, what, when, where, why)
- What can the data tell us about the bidding process?

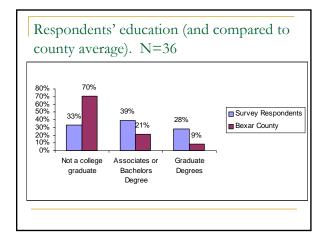
#### Bexar County Foreclosures

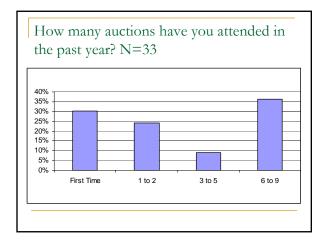
- First Tuesday of each month from 10 AM to 4 PM
- On the back steps of the County Courthouse
- Loud mostly disorganized
- Sheriff's sale on left mortgage and homeowners associations sales on right. We only consider mortgage sales
- Administered a survey to those willing to participate, mostly before the auctions began and during the lunch break

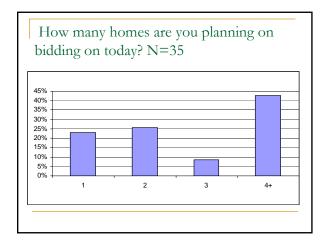


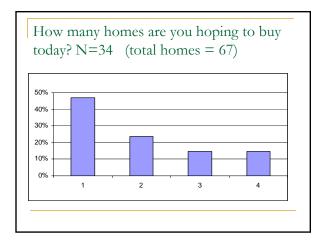


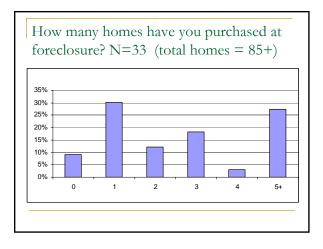


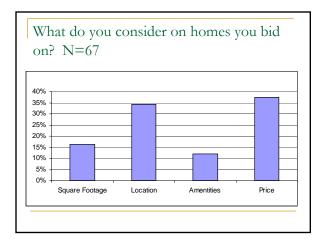


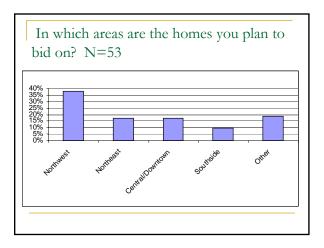


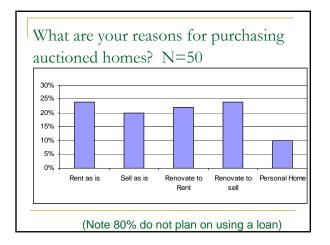


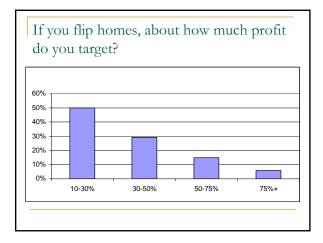






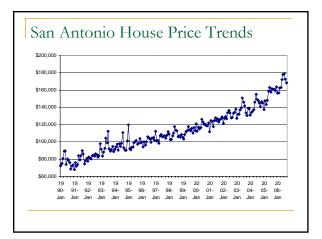






#### Data Analysis

- We obtained auction data from RexReports
- We only use the mortgage part of the data. Must indicate conventional, FNMA, FHA or VA (we don't consider tax sales, home owners associations sales, 2<sup>nd</sup> mortgages, or home equity)
- We have data from 13 auctions
- About 700 mortgage notices per month
- About 250 sales per month
- About 15% are sold to third parties



Variable	Mean	StdDev	Min	Max
Note Amount	<mark>98.882</mark>	62.616	13.53	760.00
Note Rate	6.379	0.773	5.23	9.17
Term	28.642	4.194	5.00	40.00
Loan Balance	<mark>97.828</mark>	63.549	2.56	779.12
Equity	<mark>8.415</mark>	25.984	-191.43	194.98
FHA	0.400	0.490	0.00	1.00
VA	<mark>0.076</mark>	0.265	0.00	1.00
Not Fannie	0.085	0.278	0.00	1.00
Fannie	<mark>0.440</mark>	0.496	0.00	1.00
Square Feet	1.672	0.697	0.38	6.00
Loan Age	3.639	2.468	0.10	14.44
First Bid	<mark>101.004</mark>	63.901	1.00	716.41
Winning Bid	102.244	64.146	1.05	716.41
Bid Premium	1.240	6.685	0.00	108.16
Thirdparty	0.144	0.351	0.00	1.00

Dependent Variable	Opening Bid			
N = 2471	Model A	Model B		
Covariate	Estimate t stat	Estimate t stat		
Intercept	13.373 12.47	-13.712 -1.79		
Loan Balance	<mark>0.896</mark> 97.43	<mark>0.788</mark> 57.28		
Equity		<mark>0.120</mark> 4.86		
FHA		7.805 5.96		
VA		<mark>-7.958</mark> -3.49		
Not Fannie		<mark>-5.906</mark> -2.63		
Square Feet		<mark>14.111</mark> 11.24		
Loan Age		-0.295 -0.73		
Term		-0.178 -1.26		
Note Rate		<b>2.691</b> 2.24		
Adj R-squared	0.79	0.81		

Party Sale				
Covariate	Estimate	p-value	Estimate	p-value
Intercept	-2.295	<.0001	-2.361	0.0063
Loan Balance			-0.009	<.0001
Equity	<mark>0.035</mark>	<.0001	<mark>0.037</mark>	<.0001
FHA			<mark>-0.808</mark>	<.0001
VA			-0.338	0.1804
Not Fannie			-0.176	0.4399
Square Feet			0.217	0.1330
Loan Age			<mark>0.142</mark>	0.0006
Term			<mark>0.044</mark>	0.0171
Note Rate			- <mark>0.159</mark>	0.2082
Corr_Square		0.10		0.16

going to a	third part	y		
N = 355	Model C		Model D	
Covariate	Estimate	t stat	Estimate	t stat
Intercept	-5.68	-3.48	-11.20	-1.10
Loan Balance	0.99	71.68	0.97	36.70
Equity	0.57	19.77	0.50	14.20
FHA			-0.31	-0.14
VA			-4.43	-1.42
Not Fannie			-2.43	-0.95
Square Feet			4.57	2.27
Loan Age			<mark>1.02</mark>	2.22
Term			-0.31	-1.53
Note Rate			0.85	0.55
Adj R-squared		0.94		0.95

#### Summary

- It appears that lenders opening bid is about the amount they are owed
- Lenders bid about \$8000 higher on FHA loans, \$8000 lower on VA loans and 6000 lower on conventional loans compared to FNMA loans
- Third parties are most likely to bid when there is equity in the house (About 15% of sales)
- Third party bidders bid an average 31 cents on the dollar for equity (57 cents at the margin)

### Thank You!

## Questions?