#### Should I own a home in Vancouver?

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- 1. It's ok not to own
- 2. There are some good reasons to own
  - ► Tax?
  - Contracting frictions
- 3. Calculation of own vs rent depends in part on
  - Where are prices heading?
    - ► Interest rates are low today
    - Supply elasticity: theory and reality
  - Your taste for price risk.
    - Owning a home is risky
    - Owning a home is insurance

#### It's ok not to own

- "I'm sick of paying the landlord, I'd rather pay myself instead"
- ▶ No. Efficient, no tax, riskless market:
  - Landlords:

$$\underbrace{\mathsf{Rent} + \mathsf{Capital}\;\mathsf{Gain} - \mathsf{Expenses}}_{\mathsf{Return}\;\mathsf{to}\;\mathsf{owning}} = \underbrace{\mathsf{interest}\;\mathsf{rate} \times \mathsf{price}}_{\mathsf{Opportunity}\;\mathsf{cost}\;\mathsf{of}\;\mathsf{capital}}$$

Owner occupiers:

 $Dividend + Capital Gain - Expenses = interest rate \times price$ 

► Own vs rent: Rent = Dividend - Capital Gain + Expenses

Stuff owners get that renters don't



# Rent vs. Dividend - Capital Gain + Expenses vs interest rate × price Why might owning be better?

► Owners have a lower cost of capital than owners [NO]

- Owner "dividend" bigger than rental dividend [YES]
- Owner capital gains bigger than landlords'? [YES]
- Owner expenses lower than landlords'? [MAYBE]

#### Owning and taxes

- Owners pay:
  - Property tax (with a bit of a credit)
  - Sometimes get credits for investment
  - Rarely capital gains
- Landlords pay:
  - Property taxes
  - Income tax on rent less:
    - "Depreciation"
    - Mortgage interest
    - Property taxes
    - Maintenance
  - Capital gains when and if realized
  - ▶ Net liability may be restricted to be positive
- Depending on scenario, owners pay less (Vancouver diciest)
- Frightening fact:
  - Rent to price ratio lower in Vancouver than Seattle
  - Yet renting is relatively tax-friendly in Canada
    - No mortgage interest deduction here



## Mortgage payments and cost of capital

- ▶ PMT = interest + amortization
- Constant payment is common
  - Subject to interest adjustment
  - Early payments are mostly interest
  - Subsequent payments are mostly amortization
- Amortization is equivalent to buying a bond, so not a true cost
- But Equity in the home could be earning interest
- Is owners' interest rate less than landlords'?
  - A bit lower default risk
  - Commonly same mtg rate, higher loan amount to owner
  - Big difference: landlords can deduct interest
  - ▶ US: owner occupiers can deduct, too.

#### Owner dividend vs rental dividend to landlord

- Owner dividend may be large because of "feelings"
- Owner dividend, unlike landlords' is taxed
- BUT landlords get to take "depreciation"
  - Only on structure
  - ▶ Which may be less than 10% of value
  - Structure share much larger in "Flatland"

## Owner vs landlord capital gains

- Not a valid argument: "Prices in Vancouver always rise"
  - That's why your landlord invests
- Yes a valid argument: "I don't have to pay capital gains tax"
  - But landlords can dodge in a variety of ways
  - Notably not selling

# Owning vs renting: expenses and contracting frictions

- ► Landlord Releasing costs
  - ► Landlord worries you will move
  - Has to charge you for moving soon
  - Makes you want to move
- Your moving costs
  - You worry apartment won't be available in the future
- Maintenance
  - Investment not your benefit
  - So you underinvest
  - Damage not your problem
  - So landlord charges accordingly
  - ► Typically see "1 building 1 owner"
  - So backyard, detatched home unlikely rental
  - ▶ But: you are a nerd, and your landlord is handy

# Owning vs renting: lifecycle considerations

- ► Owning requires a downpayment ⇒ kids should rent
- ▶ Selling a home is costly ⇒ kids and movers should rent

#### Is it cheaper to own or rent?

- Rent versus "user cost"
  - Mortgage
  - Opportunity cost of equity
  - Property tax
  - Maintenance
  - Insurance
  - **•** . . .
  - Less appreciation
- ▶ So we need to know appreciation rate

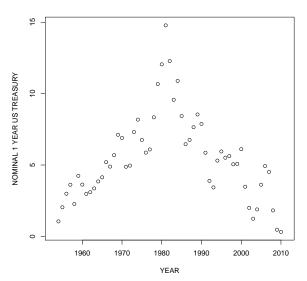
#### How much appreciation to break even?

- 4 BR North Shore home
  - Price: 1.1M
  - ▶ Rent:  $35000/\text{year} \Rightarrow 3.2\%$
  - ▶ Mortgage + equity return:  $\approx 3\%$ .
  - ▶ Maintenance:  $10k \approx 1\%$
  - ▶ Insurance, taxes, etc:  $6k \approx .5\%$
  - Selling costs:  $4\%/10 \approx .4\%$
  - ▶ Total owner: 4.9%
  - ▶ Appreciation rate to break even  $\approx 1.7\%$
- What's missing?
  - Will 3% interest rates persist?
  - ▶ Will prices appreciate 1.7%?
  - Related questions!
  - ► Yield curve says "no"
  - ▶ History says "no"
- ▶ Need a lot more than 1.7% on a detached home in Kits
  - Redevelopment options??



#### Today's interest rates are WAY low

If you think rates will jump 4% soon, add 4% to required appreciation

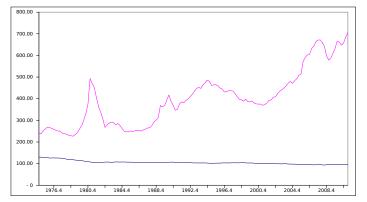


## How much appreciation is reasonable?

- Giant real historical price appreciation in Vancouver
- Not so much rent
- Subject to this is the data we have (CMHC?)

► Pink: price

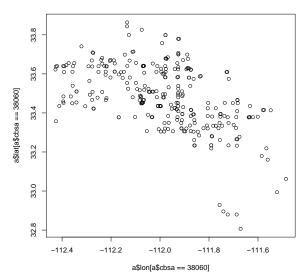
▶ Blue: rent



## Phoenix: when prices rise, they will crash

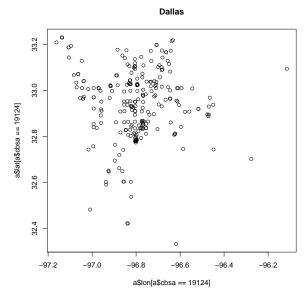
Plotted: lat and lon of Starbucks in Phoenix





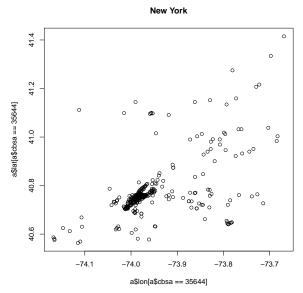
## Dallas: when prices rise, they will crash

As in the 80s



## New York: when prices rise, will they crash?

A bit in the late 80s, not much this time around

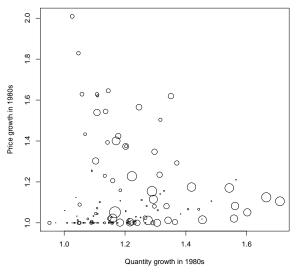


# Vancouver is more like New York and will never be cheap



## We know that "bubbles" are punished in "Flatland"

To a lesser extent in the "zoned zone?"



#### China



- ▶ Some demand in Vancouver is driven by Chinese wealth
- ▶ In the long run, nicest city in China is good
- ▶ Short run risks of bubble collapse in China
- Reasonable people disagree about magnitude of the risk

## Returning to pricing

$$\frac{\mathsf{Rent} - \mathsf{Expenses} + \mathsf{Capital} \; \mathsf{Gain}}{\mathsf{Price}} = r$$
 
$$\mathsf{net} \; \mathsf{dividend} \; \mathsf{rate} = r - g$$

- ▶ We don't know what g is
- ▶ When *r* is very small, easy to believe very high prices
- Hence I can't say if we're in a bubble or not
- Many are willing to declare bubble
- Easy to see downside risks
- ► Easy to envision long run growth

## Owning a home is risky

- ▶ I don't know value of my home today within 20%
- Over 10 years range of outcomes huge
- Housing is most of most of our wealth
- We might want a high return to compensate for risk
- Luckily, our labor income doesn't move with housing . . .
  - e.g. investment banker in New York
  - Oil people in Texas
- ... but our retirement income likely does
  - Defined benefit pensions and BC economy
  - Stocks and the global economy
  - Puzzle: weak correlation (stocks, housing)
  - Smaller puzzle after '07?

## Owning a home is insurance

- Bad if prices fall, but there are options
  - Trade up
  - ▶ Don't sell
    - Moving is a hassle at any age
- Good if prices rise
- ▶ In a perfect world, almost zero net exposure to housing costs
- Real world
  - Renting: negative exposure?
  - Owning: positive exposure?

## Are owners long housing?

- Working backward, Grandma never sells
  - ▶ Unless she goes into a nursing home . . .
    - ▶ Does she then need the money?
    - Maybe this is why no LTCI market?
  - ...Or lives a very long time
    - May be why no one buys life annuities
  - Bequest and housing risk??
  - Home equity is not a crazy buffer for old age
- Trades up are more common than down
- Is Vancouver correlated in price with your next market?
- ▶ Do you have to move or want to move?
- Owning pre-tenure is risky

#### Are renters short housing?

- Yes, if rental consumption is fixed
- ▶ But it's not
- And renters (no kids) are a mobile population
- So if flexible, no need to insure against high rents
- Rent control helps with this . . .
- ...But may increase starting rents
- So only buy to protect against rent inflation if you
  - Have kids and like your school
  - Aren't productive enough to get outside offers
  - Care a lot if your grandkids can afford Vancouver

#### Questions?

- It's ok to rent
- What are legitimate rationalizations of owning
- Vancouver price future is uncertain with clear downside risk
- Vancouver is not going to be cheap anytime soon
- Owner housing is both risk and insurance