OVERVIEW

This episode examines how monetary policy affects housing markets, focusing on why changes in the Federal Reserve's monetary policy can produce different outcomes across regions and households. While changes in interest rates influence mortgage rates nationwide, local housing supply conditions shape how housing markets respond. In places where housing supply is constrained, changes in demand are more likely to result in larger changes in home prices; where new housing can be built more easily, more of the adjustment can occur through changes in housing supply. At the household level, differences in homeownership shape how people experience changes in interest rates. Historical inequalities in access to homeownership mean that these effects are not distributed evenly across households and communities.

Key Macroeconomics Links

- **Monetary Policy:** Actions taken by the Federal Reserve to influence interest rates and the money supply in order to promote maximum employment and price stability
- **Interest Rate:** The price of borrowing money, expressed as a percentage of the amount borrowed.
- **Housing Supply Elasticity:** The responsiveness of the quantity of housing supplied to changes in housing prices. Housing supply is more elastic when new homes can be built easily and less elastic when construction is constrained.
- **Contractionary Monetary Policy:** Policy that raises interest rates or reduces the money supply to slow economic activity and reduce inflationary pressures.
- **Expansionary Monetary Policy:** Policy that lowers interest rates or increases the money supply to stimulate borrowing, spending, investment, and economic activity.

Preview Question

How do you think interest rates impact housing prices and homeownership rates?

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Discussion Questions

1. Describe the sequence of events that connects monetary policy changes to changes in housing markets.
2. What is the difference between contractionary and expansionary monetary policy?
3. Explain the link between monetary policy, interest rates, and mortgage rates. Do you think that homebuyers think about this link when buying a home? Explain.
4. What determines whether housing supply is elastic or inelastic? Is supply elastic or inelastic in your local area?
5. Why do housing prices tend to change more in markets with inelastic housing supply compared with markets with elastic housing supply?
6. If everyone faces the same mortgage rates, why are existing homeowners and potential first-time homebuyers affected differently by changes in interest rates?
7. If the Federal Reserve raises interest rates to reduce inflation, which group is likely to be affected the most: existing homeowners with fixed-rate mortgages or renters hoping to purchase a home? Explain.
8. What is redlining and how did it affect access to homeownership for those from different racial and ethnic backgrounds? Are there examples of historical housing policies or neighborhood patterns in your own community that may still influence housing opportunities today?
9. Why are Black and Hispanic households less likely to buy a home compared to white households after contractionary monetary policy?
10. Should the Federal Reserve consider how changes in interest rates affect different groups of households when implementing monetary policy or should it focus only on its dual mandate of maximum employment and stable prices? Explain.

Multiple Choice Questions

1. When the Federal Reserve Bank uses contractionary monetary policy, what impact does it have on the economy?
   A. Interest rates increase, mortgage rates increase, economic activity slows
   B. Interest rates decrease, mortgage rates decrease, economic activity grows
   C. Interest rates increase, mortgage rates increase, economic activity grows
   D. Interest rates decrease, mortgage rates decrease, economic activity slows

   Answer: A

2. When the Federal Reserve Bank uses expansionary monetary policy, what impact does it have on the economy?
   A. Interest rates increase, mortgage rates increase, economic activity slows
   B. Interest rates decrease, mortgage rates decrease, economic activity grows
   C. Interest rates increase, mortgage rates increase, economic activity grows
   D. Interest rates decrease, mortgage rates decrease, economic activity slows

   Answer: B

3. Why is the housing market especially sensitive to changes in interest rates?
   A. Most homes are purchased using mortgages.
   B. Housing prices are set directly by the Federal Reserve.
   C. Homeowners can change their mortgage interest rates whenever they choose.
   D. Housing markets are unaffected by borrowing costs.

   Answer: A

4. A family is considering a $500,000 mortgage. If mortgage interest rates increase from 4 percent to 6 percent, what is the most likely result?
   A. Their monthly mortgage payment decreases.
   B. Their monthly mortgage payment increases, making the home less affordable.
   C. The home's selling price automatically falls.
   D. The amount they need to borrow decreases.

   Answer: B

5. Why do housing prices tend to respond more to increases in demand within cities with inelastic housing supply?
   A. More homes can be built quickly.
   B. Buyers are less interested in living there.
   C. It is difficult to increase the housing supply when demand rises.
   D. Mortgage rates are higher than in other cities.

   Answer: C

6. Why can the same mortgage interest rate affect existing homeowners and potential first-time homebuyers differently?
   A. They face different mortgage interest rates.
   B. They begin in different financial and housing situations.
   C. Existing homeowners are not affected by interest rates.
   D. Existing homeowners automatically receive higher mortgage rates.

   Answer: B

7. If the Federal Reserve raises interest rates to reduce inflation, which group is generally most likely to experience the greatest immediate difficulty purchasing a home?
   A. Existing homeowners with fixed-rate mortgages.
   B. First-time homebuyers.
   C. Homeowners who have already paid off their mortgage.
   D. Households that are not planning to move.

   Answer: B

8. What was the primary purpose of redlining?
   A. To encourage home construction in growing cities.
   B. To restrict mortgage lending in certain neighborhoods, often based on race.
   C. To lower mortgage interest rates for first-time buyers.
   D. To increase the supply of affordable housing.

   Answer: B

9. According to the episode, why can changes in monetary policy have different effects across racial and ethnic groups?
   A. The Federal Reserve sets different interest rates for different racial and ethnic groups.
   B. Mortgage rates do not respond to changes in monetary policy.
   C. Monetary policy affects only some regions of the country.
   D. Historical differences in access to homeownership have contributed to differences in homeownership and housing wealth across groups.

   Answer: D

10. Which statement best reflects the policy question implied at the end of the episode?
    A. The Federal Reserve should focus only on its dual mandate of maximum employment and stable prices.
    B. The Federal Reserve's dual mandate should be considered alongside the unequal effects monetary policy can have across regions and households.
    C. The Federal Reserve should set different interest rates for different regions of the country.
    D. The Federal Reserve should prioritize reducing housing inequality over controlling inflation.

    Answer: B

True / False Questions

1. When the Federal Reserve exercises contractionary monetary policy, interest rates will go down.
   Answer: False

2. When the Federal Reserve exercises expansionary monetary policy, interest rates will go up.
   Answer: False

3. A change in the Federal Reserve's interest rate can influence mortgage rates, which in turn affect housing markets.
   Answer: True

4. Housing markets are especially sensitive to changes in interest rates because most homes are purchased using mortgages.
   Answer: True

5. Higher mortgage interest rates generally reduce the monthly mortgage payment required to purchase a home.
   Answer: False

6. In cities with inelastic housing supply, increases in housing demand tend to cause housing prices to rise more than a market with an elastic supply.
   Answer: True

7. A mortgage rate change can affect existing homeowners and potential first-time homebuyers differently because they begin in different financial and housing situations.
   Answer: True

8. First-time homebuyers are generally less affected by increases in mortgage interest rates than existing homeowners with fixed-rate mortgages.
   Answer: False

9. Redlining was a policy that restricted mortgage lending in certain neighborhoods, often based on race.
   Answer: True

10. Historical differences in homeownership and housing wealth don’t explain why changes in interest rates can affect racial and ethnic groups differently.
    Answer: False

Application Questions

Question #1: Interest Rate Comparisons

Suppose three families are considering buying the same home. Each family has a different income level, so the maximum affordable monthly payment (25% of their monthly income) is different.

Family	Maximum Affordable Monthly Payment
A	$1,800
B	$2,200
C	$2,800

The monthly mortgage payments with mortgage rates of 3% and 7% are as follows.

At 3%: $1,686

At 7%: $2,661

Questions

1. Which families can afford the home when interest rates are 3%?
2. Which families can afford the home when interest rates are 7%?
3. Which family is most affected by this increase in interest rates?
4. What does this illustrate about monetary policy and homeownership?
5. What does the ability to buy a house mean for wealth accumulation, which includes the equity an owner gains over time? Explain how redlining may have impacted wealth accumulation.

Answers

1. A, B, and C
2. Only C
3. Both A and B are most impacted by interest rate changes because the increase affects their ability to buy a house.
4. This implies interest rate increases will impact the poorest families in the economy, and their ability to buy their first home.

5. Homeowners will accumulate wealth through equity in their home, which reflects the home's increased value. Homeowners are able to accumulate wealth through what is likely their biggest asset, their home. Thus you will likely see a separation of wealth accumulation between homeowners and non-homeowners. The same difference in wealth accumulation may be seen by households impacted by redlining. Families that were denied or restricted mortgages would not as easily be able to buy a home, leading to inequalities in wealth accumulation.

Question #2: Housing Supply & Demand Curves

Questions

1. Draw supply and demand for two cities, San Francisco, CA and Urbana-Champaign, IL. San Francisco has a relatively inelastic supply curve and Urbana-Champaign has a relatively elastic supply curve. Now assume that contractionary monetary policy impacts both markets by shifting demand for housing by an equal amount.
2. In the graph, compare the price changes in San Francisco to the price changes in Urbana-Champaign. Which equilibrium price change is larger? Which equilibrium quantity change is larger?
3. Explain why the same decrease in housing demand produces different outcomes in the two cities.

Answers

1. Equilibrium price and quantity decrease in both cities. (See the "Episode in a Graph" for an opposite case—an increase in housing demand associated with expansionary monetary policy).
2. San Francisco experiences a larger decrease in equilibrium price and a smaller decrease in equilibrium quantity. Urbana-Champaign experiences a smaller decrease in equilibrium price and a larger decrease in equilibrium quantity. (See the "Episode in a Graph" for an opposite case—an increase in housing demand associated with expansionary monetary policy).
3. The outcomes differ because housing supply is relatively inelastic in San Francisco and relatively elastic in Urbana-Champaign. When supply is less responsive, more of the decrease in demand is reflected in price because this is a movement along supply; when supply is more responsive, more is reflected in quantity (also because this is a movement along supply).

Innovative Ways to Extend the Lessons

1. **Listen to our podcast!**
   - **Student Assignment:** Listen to the generated podcast summary and reflect: *What is lost or gained when research is translated into casual language? What do you note here that you did not when watching the video? What does the video do a better job of explaining? What do you understand better from both listening to the podcast and watching the video?*
2. **Explore Mortgage Affordability**
   - **Student Assignment:** Have students look up the average housing price and average incomes in their hometown. Then use an online mortgage calculator to compare monthly mortgage payments for the average home price at different interest rates (e.g., 3%, 5%, and 7%). Ask them to discuss how changes in interest rates affect mortgage payments and the decision to buy a home for different income levels.
3. **Explore Historical Redlining Maps**
   - **Student Assignment:** Using the University of Richmond's Mapping Inequality project, students can examine historical redlining maps for a nearby city and compare them with current patterns of homeownership, housing values, or neighborhood demographics. Discuss how historical policies may continue to influence racial and ethnic groups today. What types of policies can be implemented to provide equity in the housing market?