

## Research Question

To what extent, if any, does the Federal Reserve's expansionary policy affect home prices?

## Background

- Post COVID-19, the Housing Market emerged with less supply and higher prices.
- In response, the Federal Reserve mimicked its 2008 quantitative easing strategy to stimulate the economy and to maintain aggregate output.
- The quantitative easing strategy included the mass purchasing of Mortgage-Backed Securities, cutting interest rates, and expanding the money supply.
  - Mortgage-Backed Securities refers to repackaged mortgage debts sold by banks to investors in the secondary housing market.

## Methodology & Model

$$\text{Median Sales Price} = \beta_0 + \beta_1 \text{Construction Costs}_i + \beta_2 \text{MBS Balance}_i + \beta_3 \text{Asset Balance}_i + \beta_4 \text{Listings}_i + \beta_5 \text{Days Listed}_i + \varepsilon_i$$

Regression analysis was performed on a dataset of 92 monthly observations, starting January of 2017.

- Mortgage-Backed Securities is being used as an explanatory variable for investor confidence.

## Limitations

- Data is limited to monthly observations.
- Dataset does not include 2008-2017 to allow for comparisons between the Great Recession and the Pandemic.

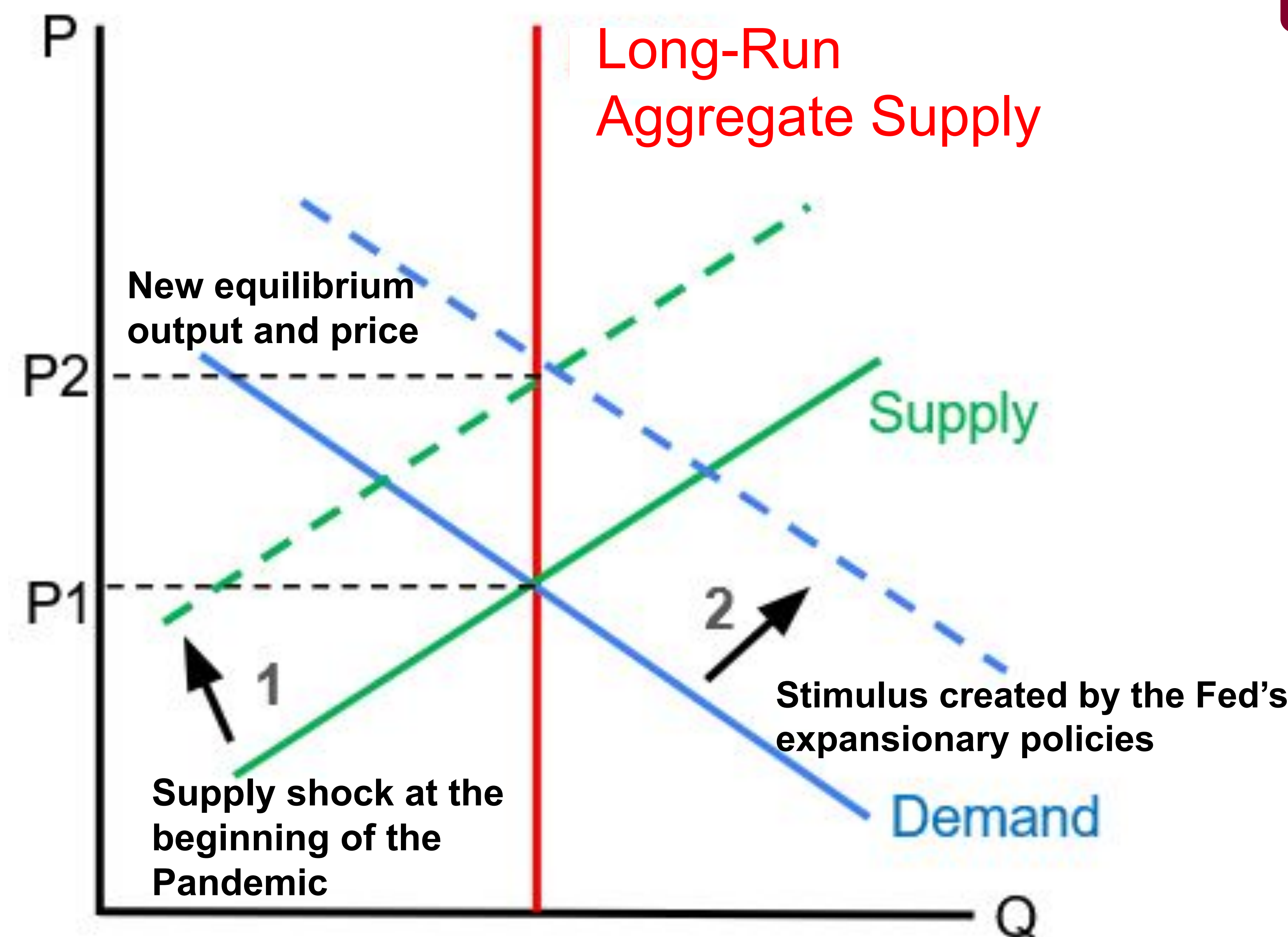


Figure 1: Explanation of interaction between national price levels and Federal Reserve Policy

- Every \$1 million in Mortgage-Backed Securities is associated with an \$0.061 increase in median sale price.
- In November of 2024, The Federal Reserve owned \$2.26 in MBS. The estimated effect of this MBS balance on the median sales price of homes is an increase of \$137,860.

## Preliminary Results

Table 1: Preliminary Regression Results

	Initial Model	Selected Model
Cost of Construction	-525.587*** (175.146)	-519.123*** (132.124)
Federal Funds Rate	-11,638.770*** (3,141.659)	-11,502.790*** (2,917.985)
MBS Balance	0.061*** (0.017)	0.055*** (0.018)
Other Asset Balance	-0.035*** (0.005)	-0.035*** (0.005)
Listings on the Market	0.003 (0.013)	0.006 (0.014)
Avg. 30-Year Mortgage Rate	4,206.785 (4,095.941)	3,684.638 (4,113.952)
Median Days Listed on the Market	330.054* (179.589)	560.489*** (180.514)
Cost of Oil	-53.639 (243.631)	
Seasonal Variable	12,753.080*** (3,416.267)	
Constant	508,356.900*** (29,902.980)	505,669.500*** (25,855.200)
	89 0.944	89 0.935

## Policy Implications and Future Research

- Though gradually decreasing their Mortgage-Backed Securities (MBS) balance since 2022, the Federal Reserve bought \$1.4 trillion in MBS since the pandemic.
- The Federal Reserve should continue to offload its Mortgage-Backed Securities assets and simultaneously increase interest rates to contract the economy back to equilibrium output.
- Future research should continue to follow the housing market and the Mortgage-Backed Securities balance of the Federal Reserve as time passes.
- Future policy research should also evaluate the impact of stronger rate cuts and the effectiveness of homeowner assistance programs to reduce the rates of foreclosures.

## References

