

FARMLAND MARKET UPDATE

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Center for Commercial Agriculture

Indiana Farm Balance Sheet (\$/farm)

	2005	2010	2015	2020
Farm Assets	606,524	963,628	1,207,816	1,443,751
Real Estate	456,382	700,808	949,507	1,159,163
Farm Debt	72,780	113,012	157,250	152,365
Real Estate	38,454	64,909	82,054	73,821
Equity	533,744	850,616	1,050,566	1,291,386
Debt/Asset	12.0	11.7	13.0	10.6
Debt/Equity	13.6	13.3	15.0	11.8
Real Estate/Assets	75.2	72.7	78.6	80.3
Real Estate Debt/Total Debt	52.8	57.4	52.2	48.5

Source: USDA-ERS



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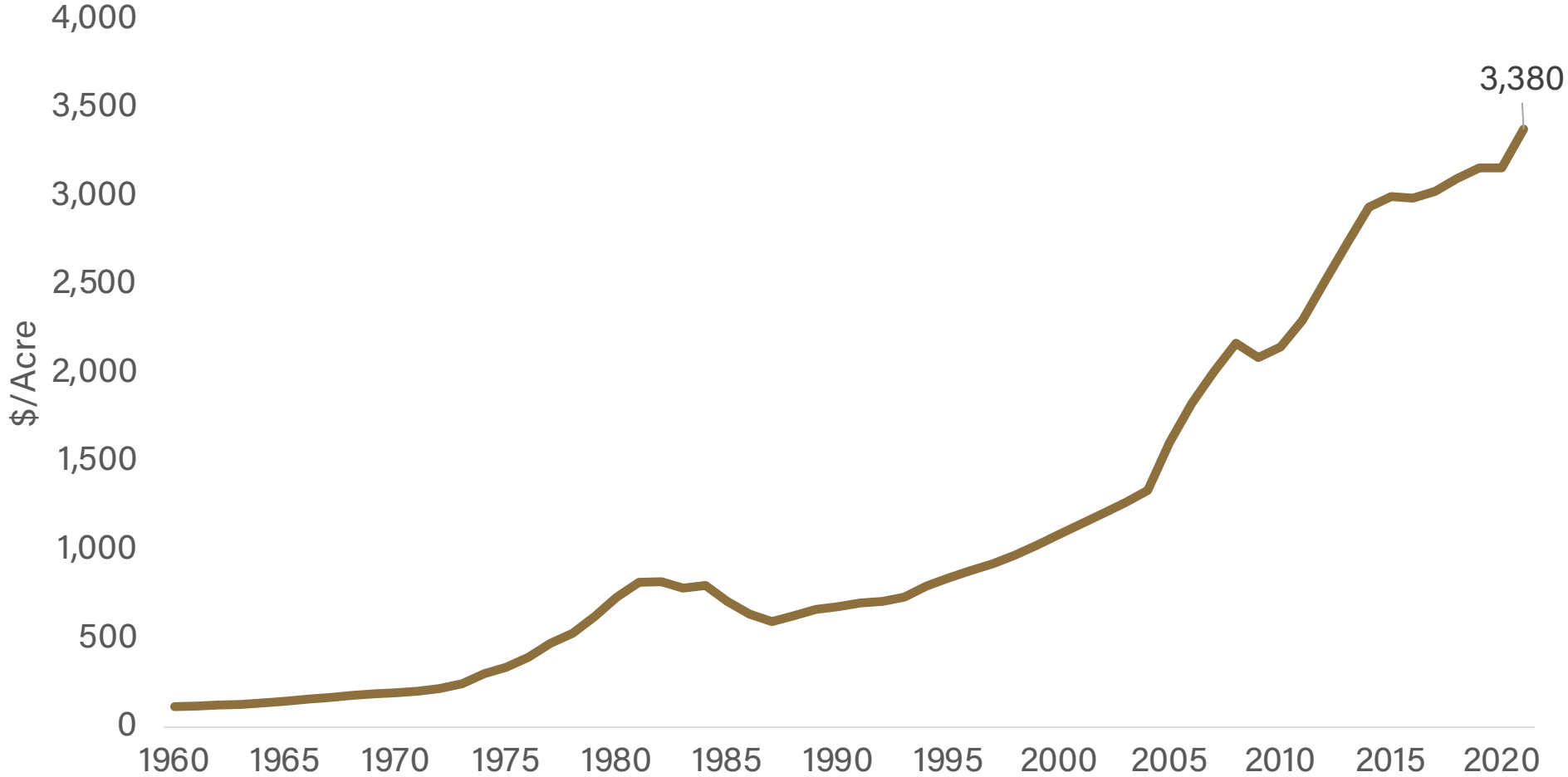
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Long-run US farm real estate values (\$/acre)

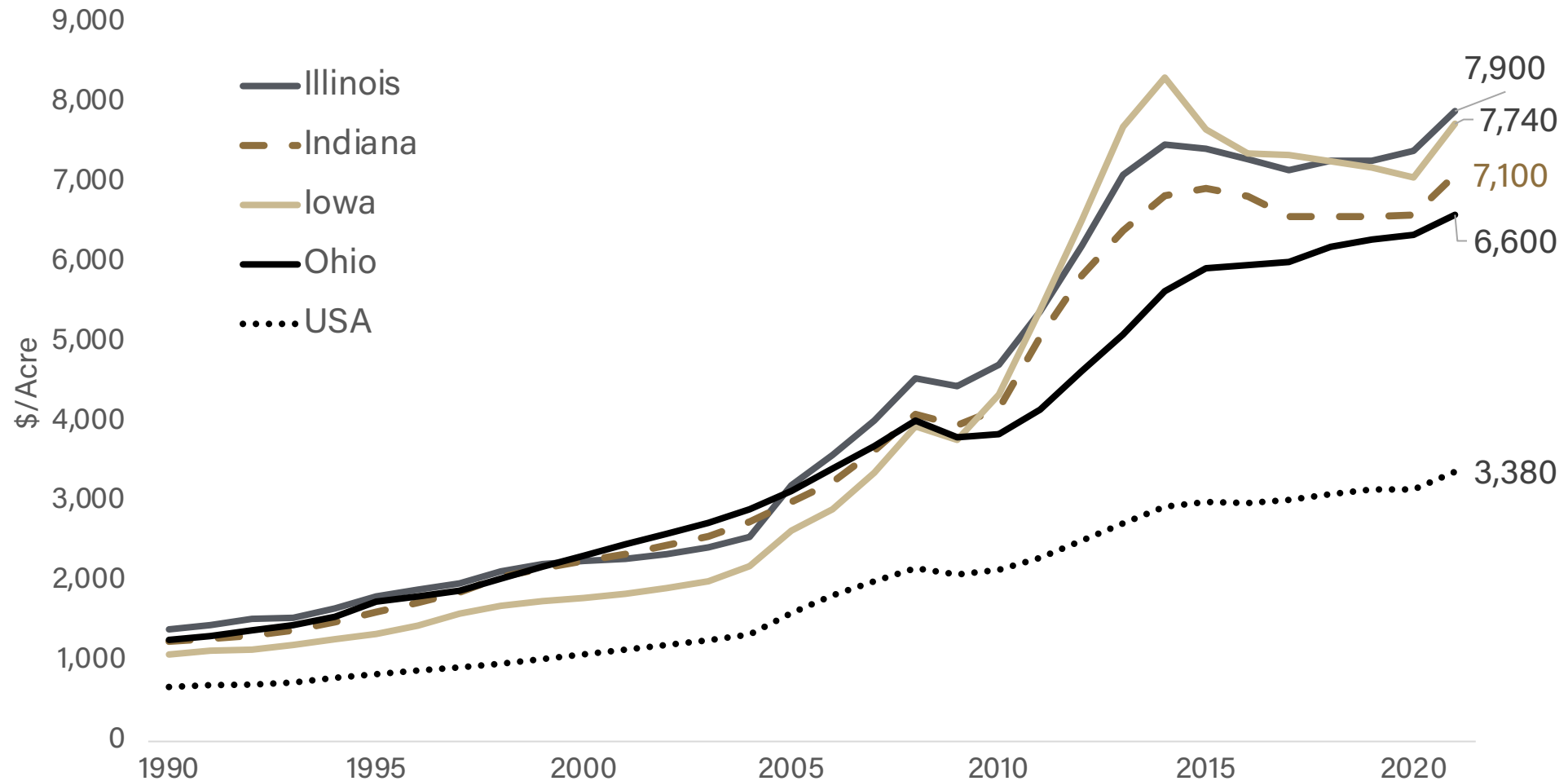


Source: USDA-NASS



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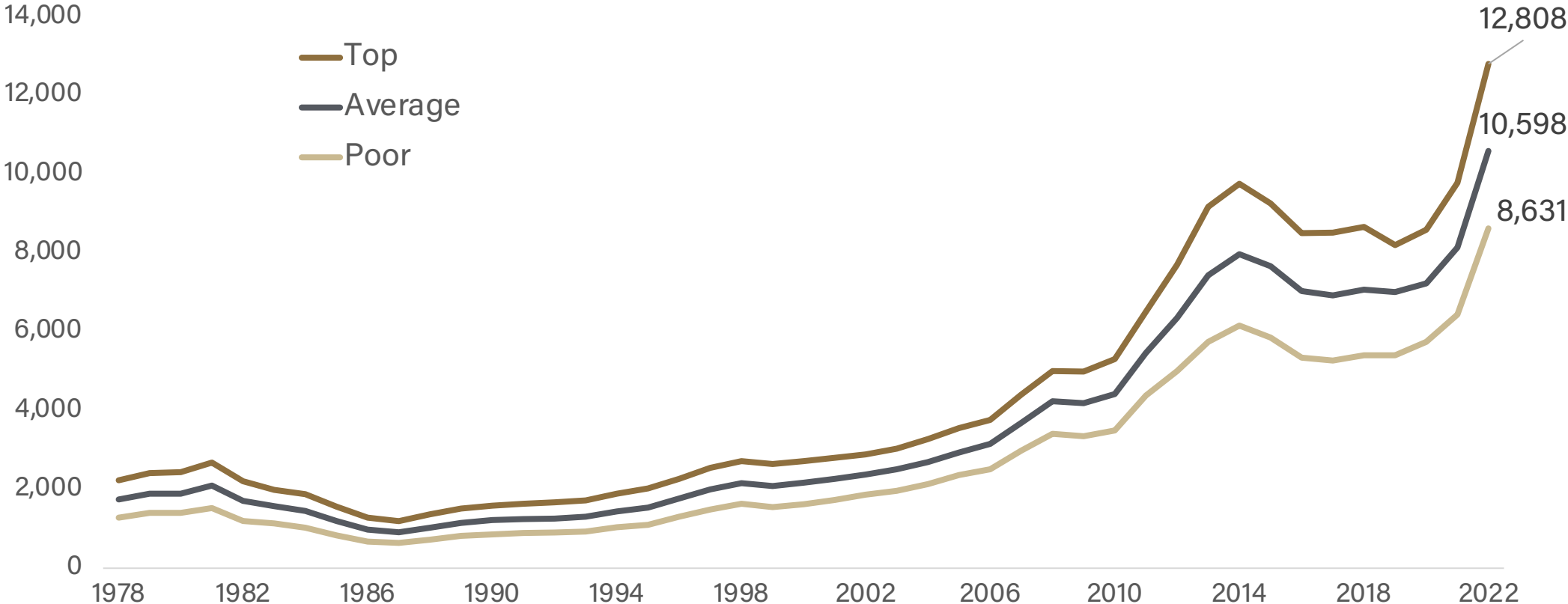
Corn Belt farm real estate prices (\$/acre)



Source: [USDA-NASS](#)

Indiana Farmland Values

Top, Average, and Poor Quality Land, 1978 – 2022

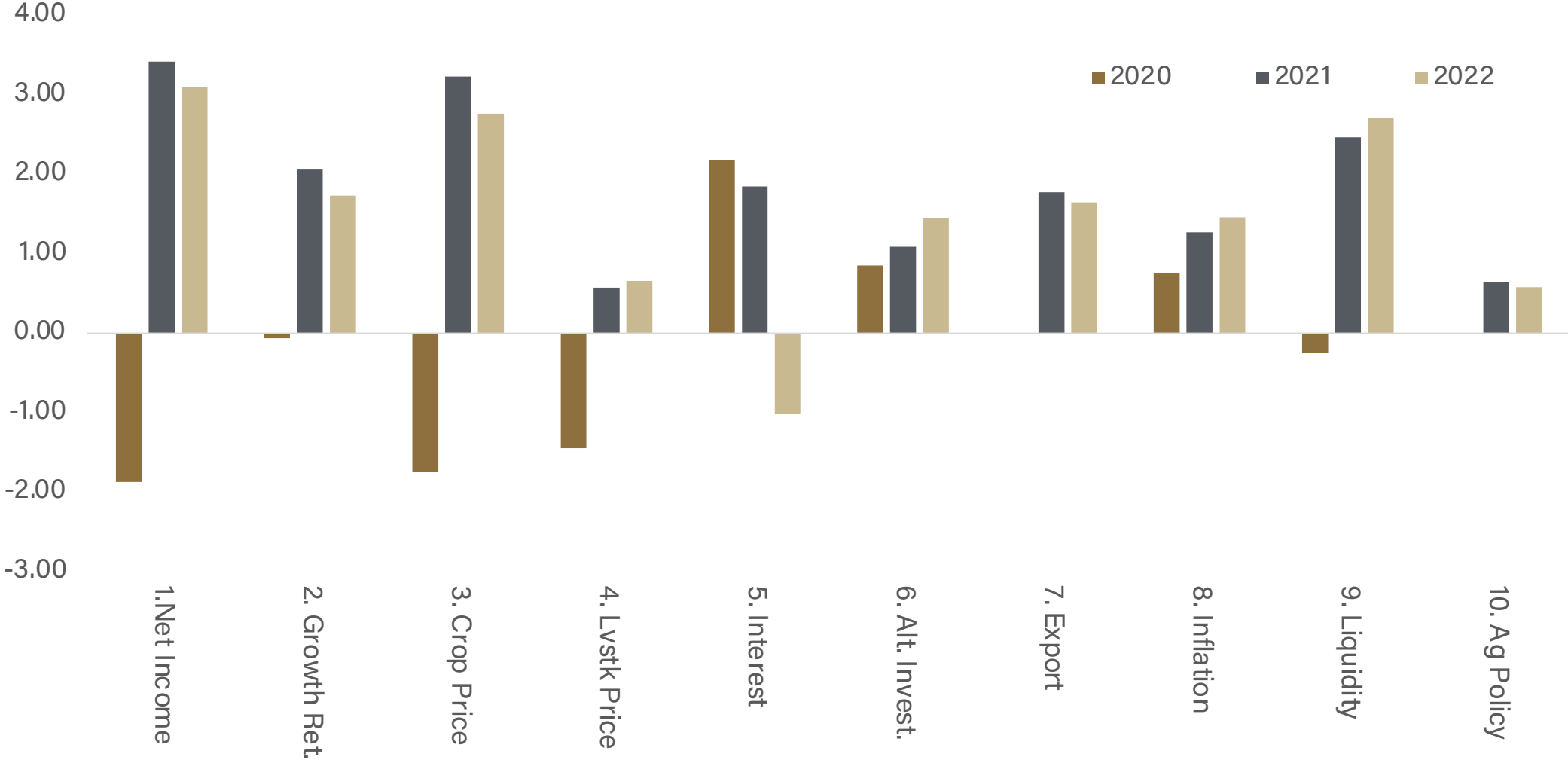


Source: Purdue Land Value and Cash Rent Survey



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Land Value Drivers



A simple model of farmland prices

A simple model of farmland prices

$$\text{Price} = \frac{\text{Expected returns}}{(\text{Discount rate} - \text{growth rate})}$$

A simple model of farmland prices

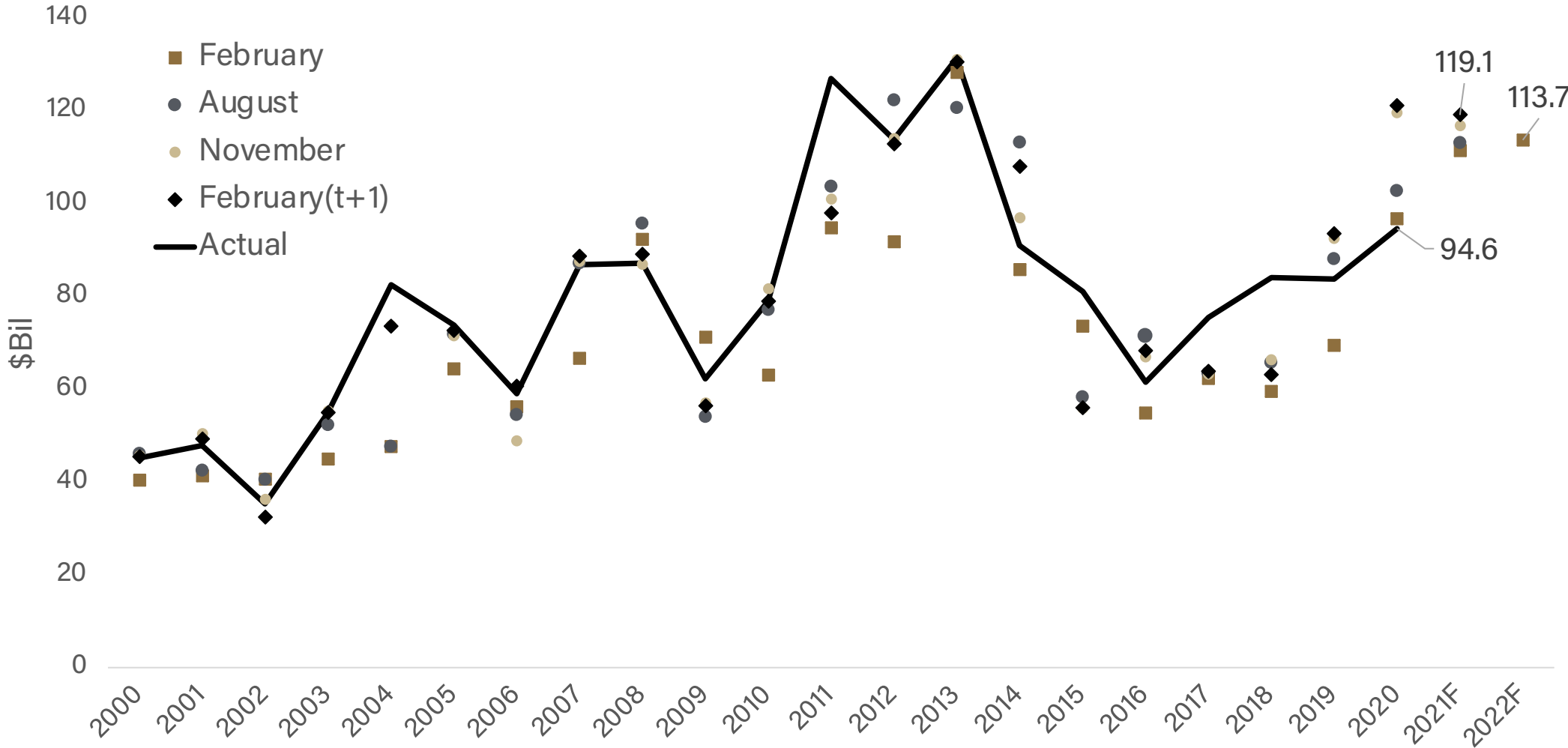
$$\text{Price} = \frac{\text{Expected returns}}{(\text{Discount rate} - \text{growth rate})}$$

Assuming a growth rate of 1%:

		Discount rate		
		3%	4.5%	6.0%
Expected returns	200	10,000	5,714	4,000
	300	15,000	8,571	6,000
	400	20,000	11,429	8,000

Farm Income

Farm Incomes Forecast to Decrease in 2022, But Potential to Improve

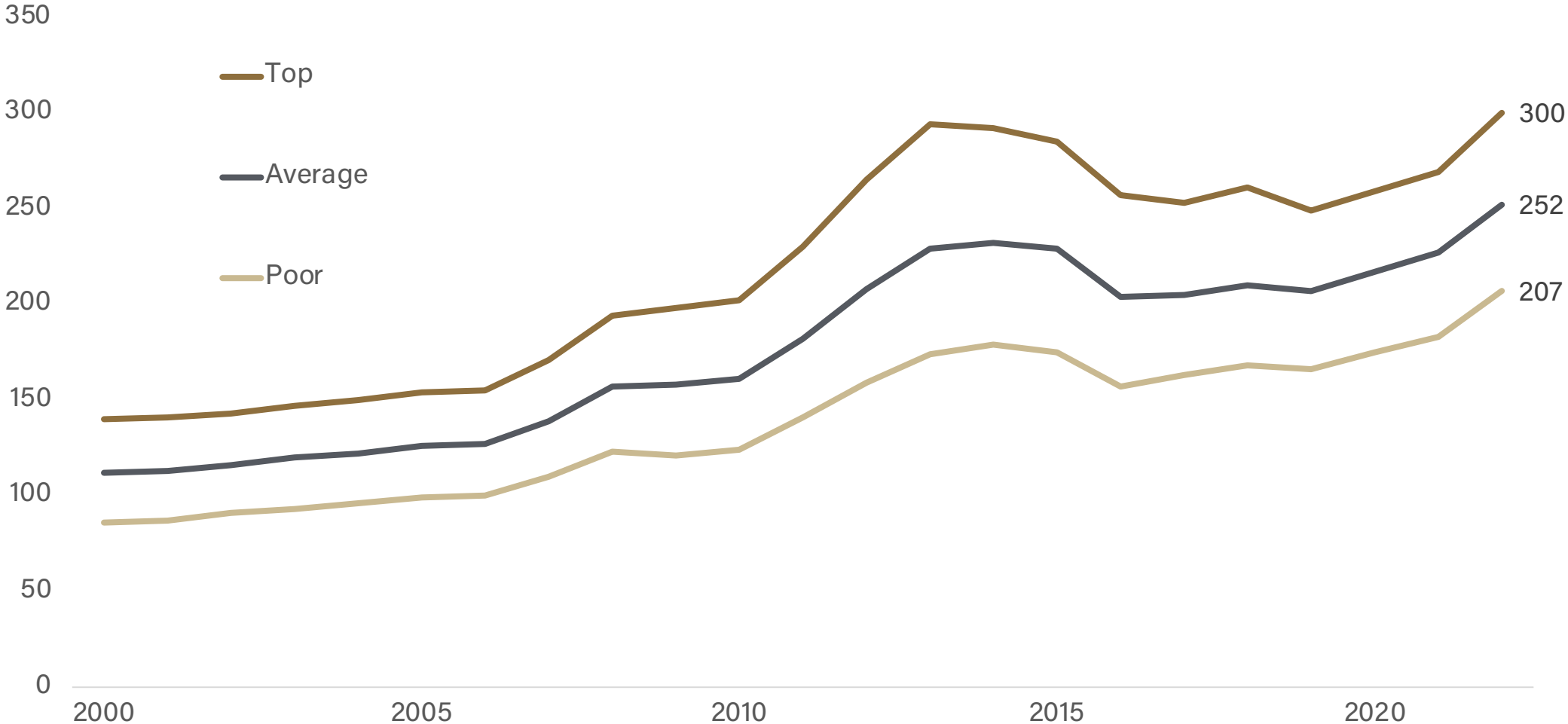


Source: USDA-ERS



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Cash rents increasing slowly



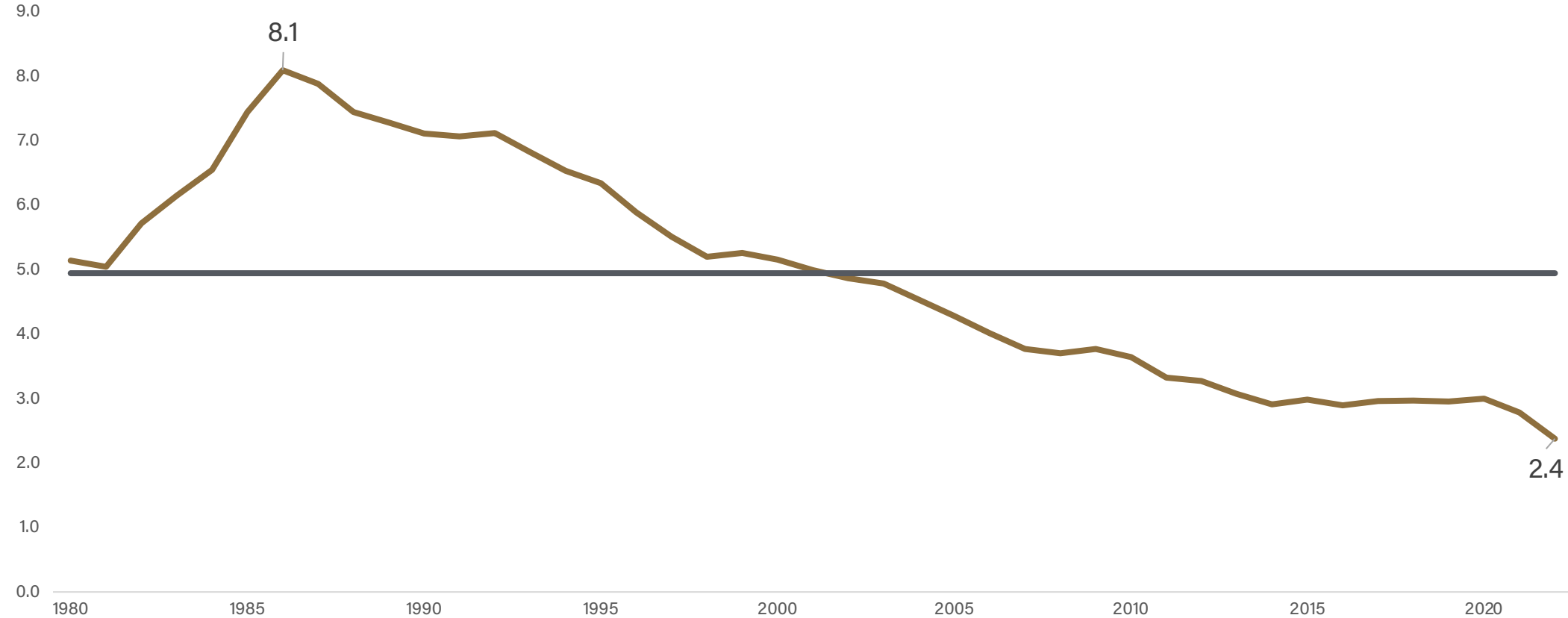
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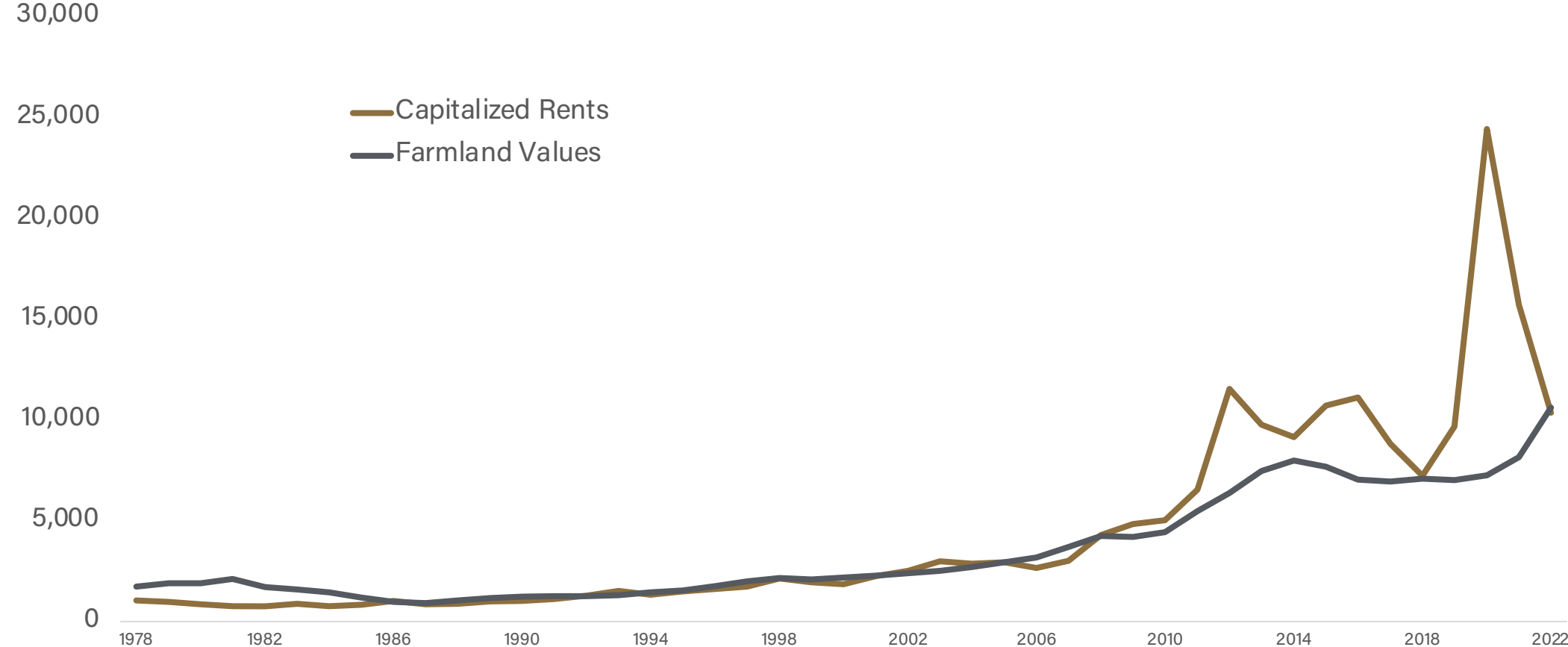
Cash rent to land value ratio

Average Quality Land, 1980 – 2022



Capitalized rental rates and land values

Average Quality Land, 1978 – 2022



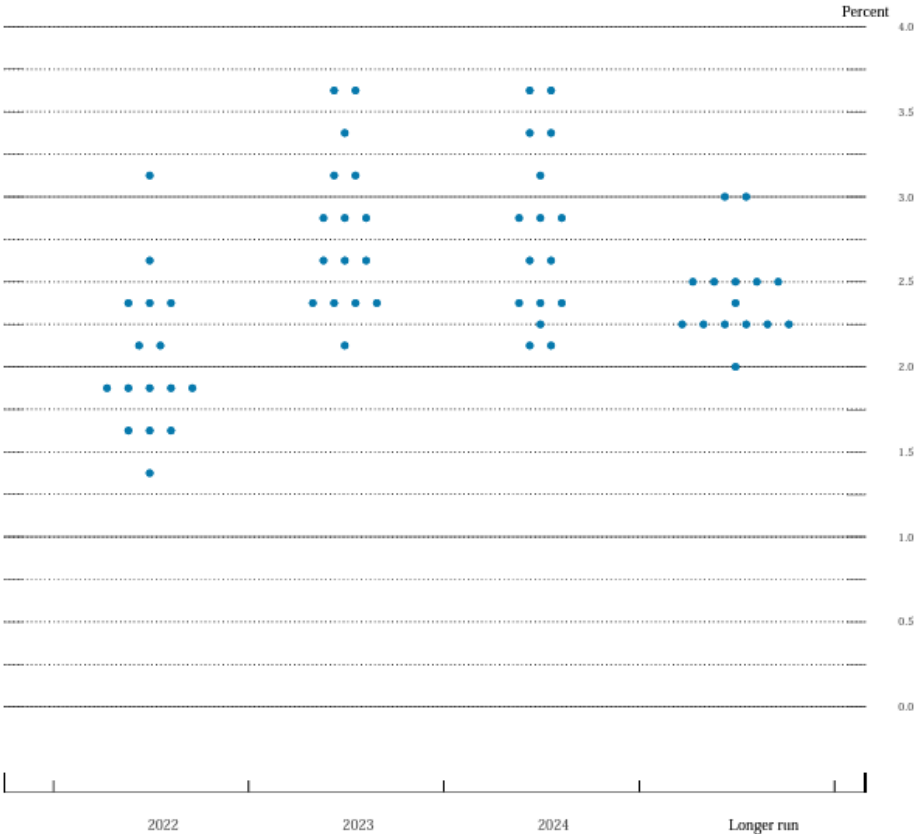
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Discount Rates

FOMC Dot Plot

For release at 2:00 p.m., EDT, March 16, 2022

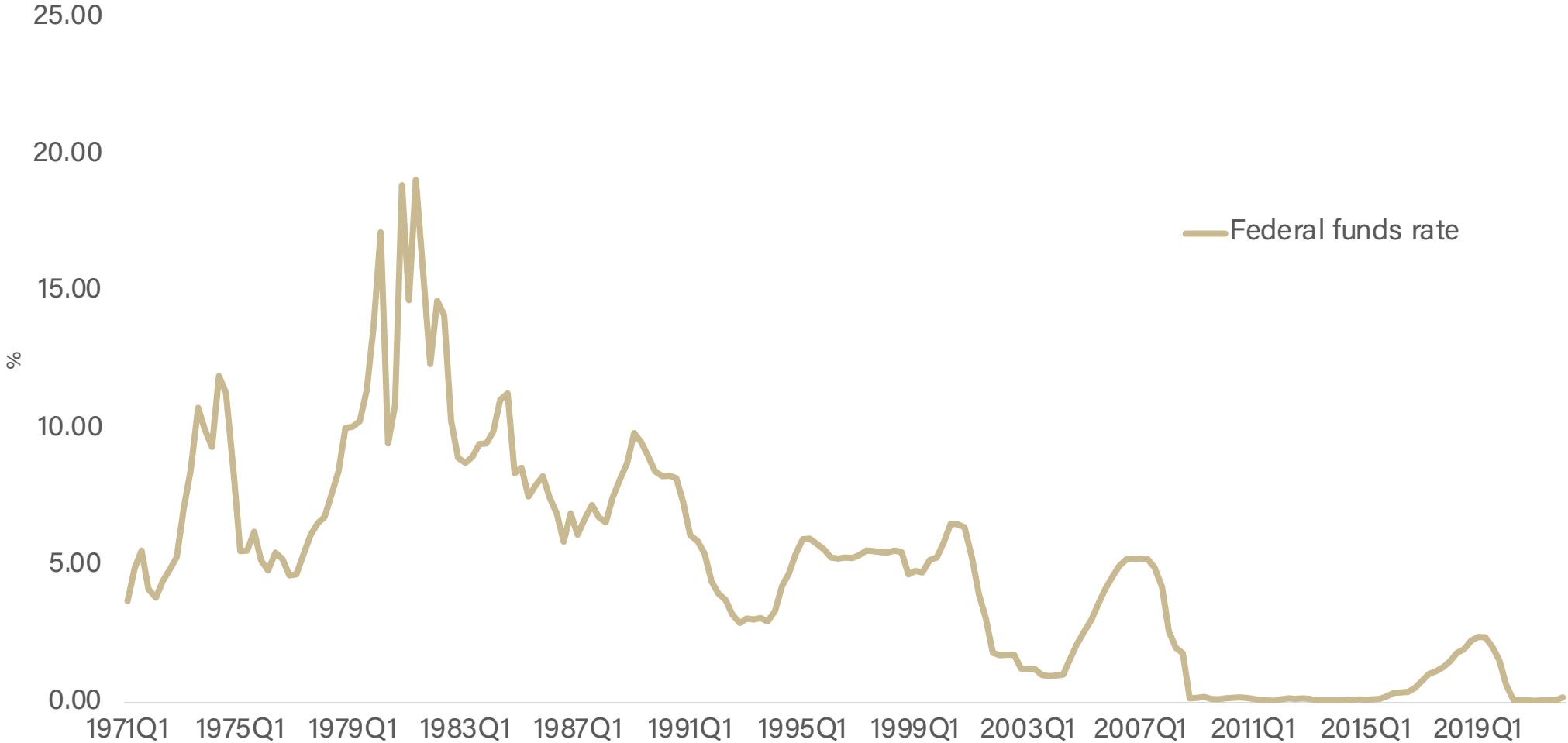
Figure 2. FOMC participants' assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate



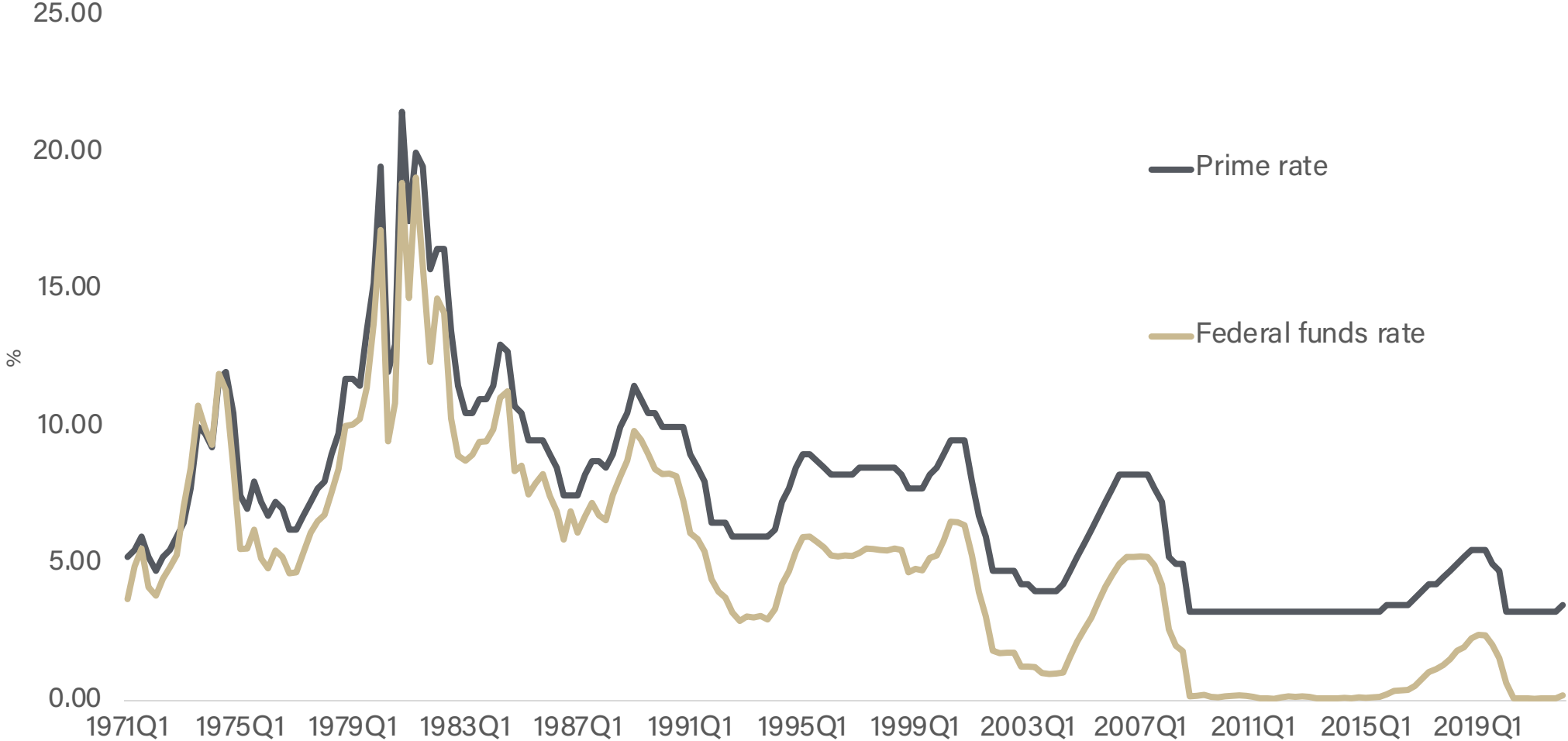
The Fed's dual mandate



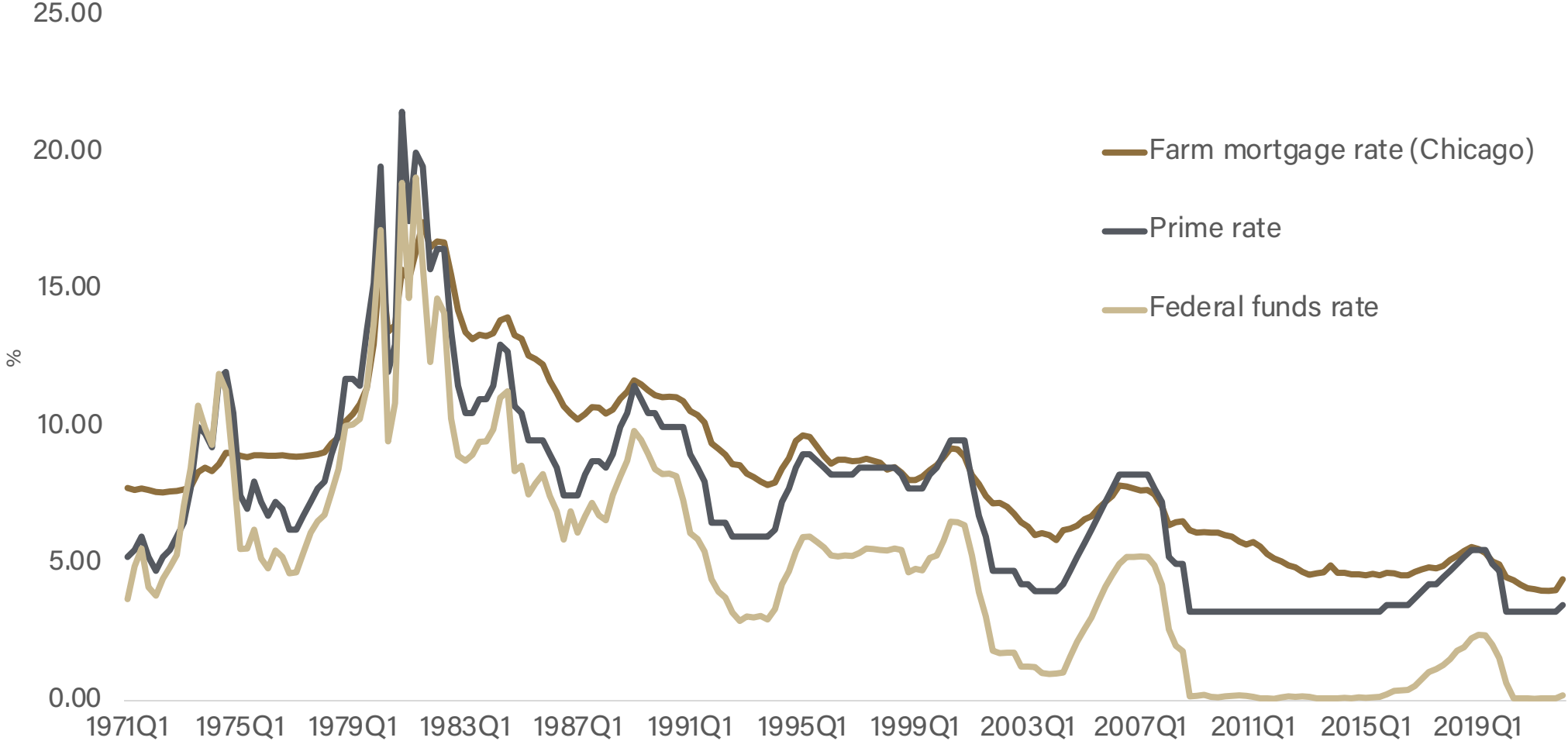
Discount rates



Discount rates



Discount rates



THANK YOU



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