Impact of Land Prices on the Rural Economy

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Sources of Data

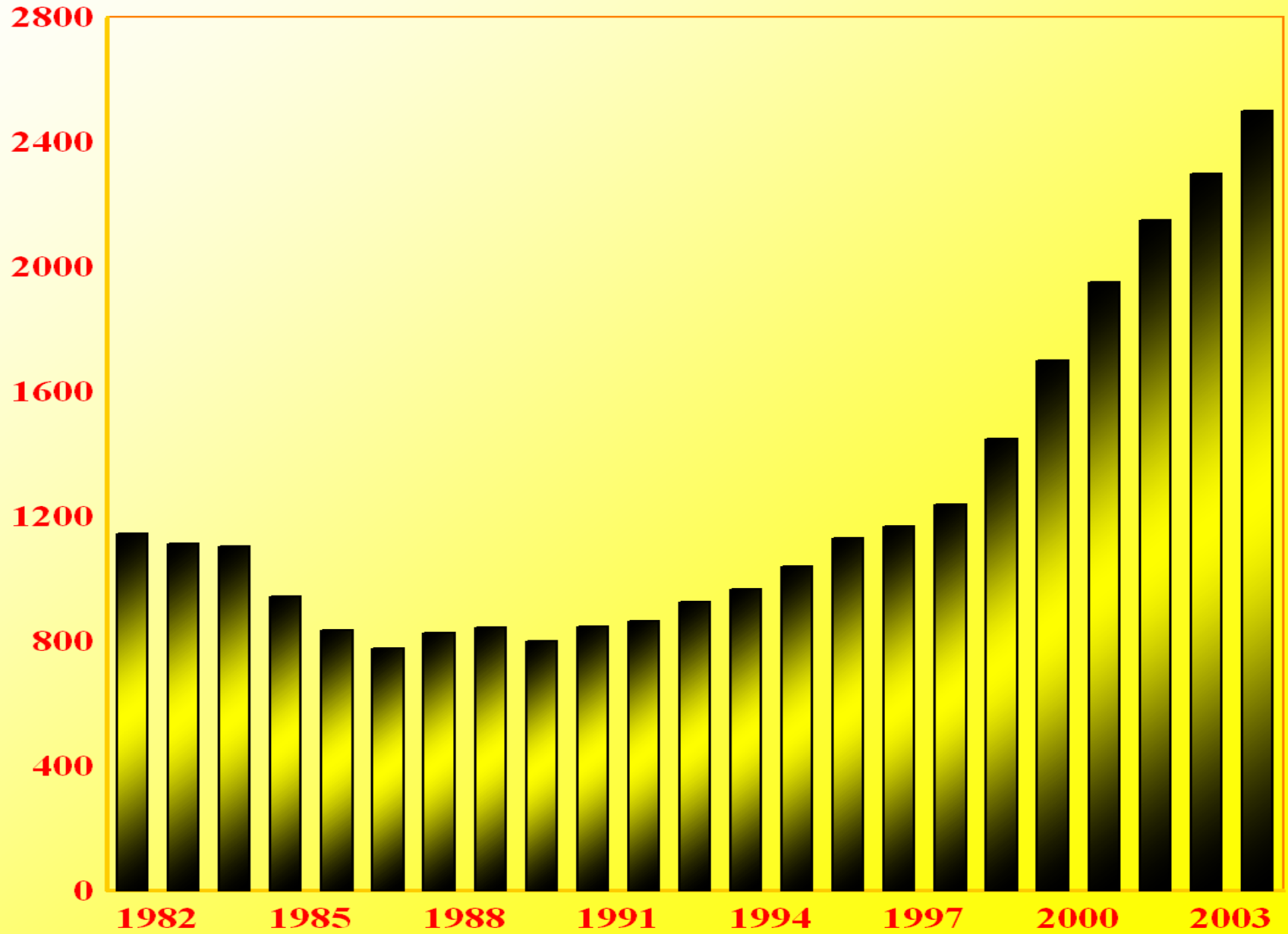
Wisconsin Agricultural Statistics Service
(www.nass.usda.gov/wi/)

- Land Values
- Cash Rents

Economic Research Service- USDA
(www.ers.usda.gov)

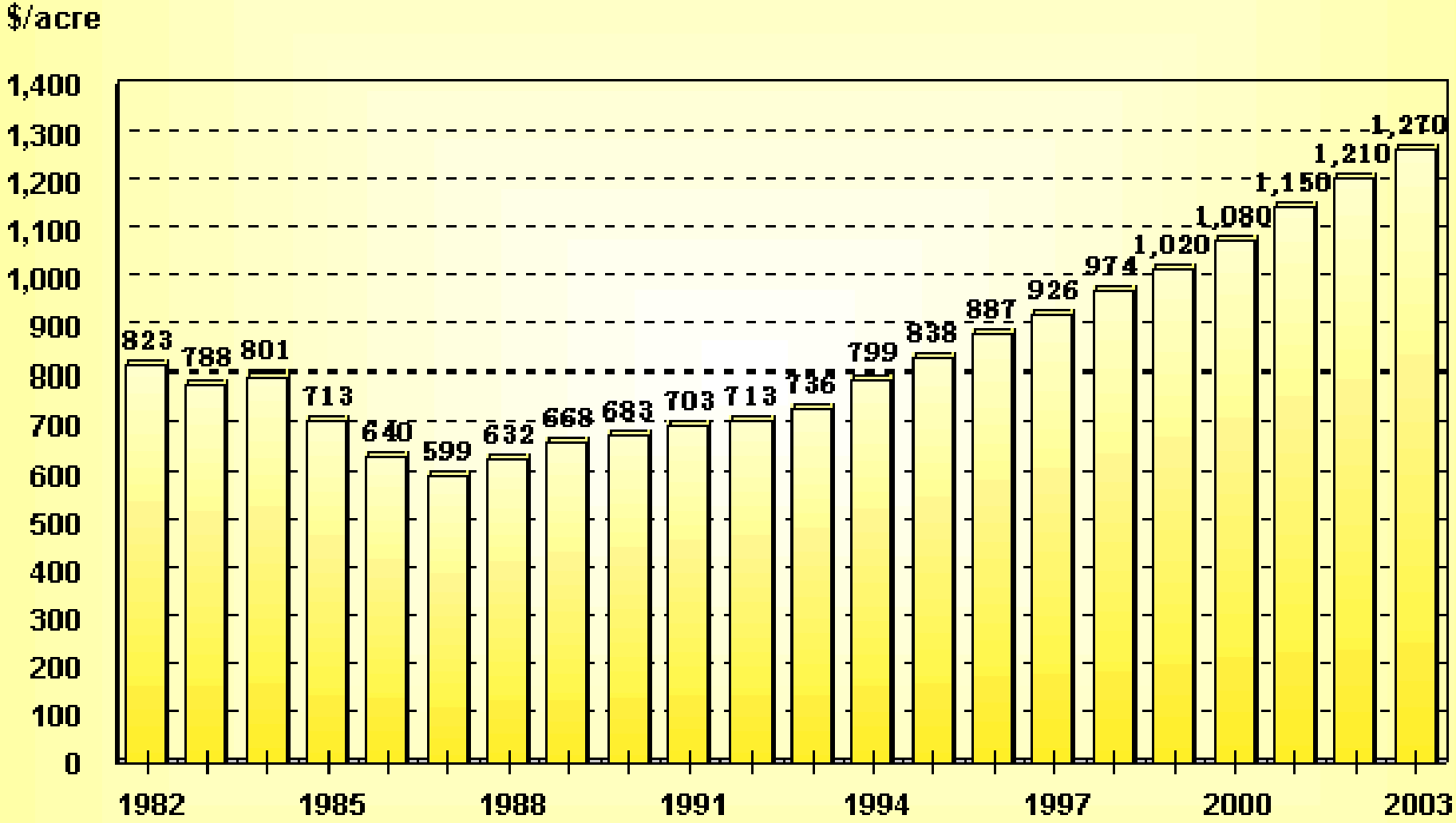
- Land Values
- Cash Rents
- Returns to Land

Wisconsin Farm Land Values



U.S. Average Farm Real Estate Value

Dollars per Acre, 1982 - 2003



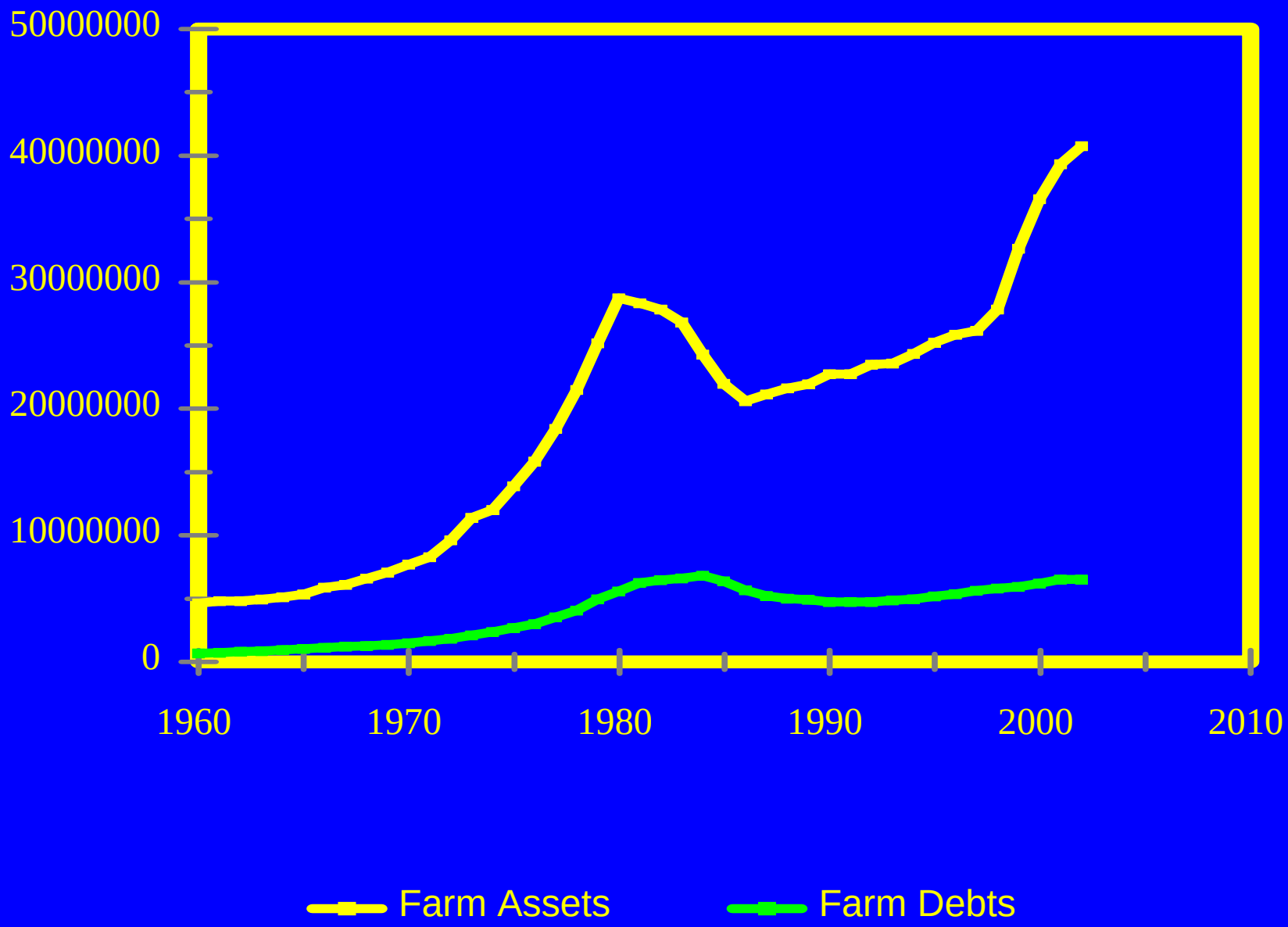
USDA · NASS; August 2003

Farm business balance sheet, December 31, (1000s)

Wisconsin

Item	1998	1999	2000	2001	2002
Farm assets	27,885,577	32,693,567	36,597,058	39,366,081	40,780,320
Real estate	18,092,265	22,624,713	26,617,309	29,279,040	30,187,532
Other assets	9,793,312	10,068,854	9,979,749	10,087,041	10,592,787
Farm debt	5,817,010	5,930,811	6,202,714	6,499,690	6,531,705
Non-real estate	2,955,673	2,915,272	3,091,260	3,221,032	3,263,559
Real estate	2,861,337	3,015,539	3,111,454	3,278,658	3,268,146
Equity	22,068,567	26,762,756	30,394,344	32,866,391	34,248,614

Wisconsin Balance Sheet Trends



Factors Affecting the Value of Land

Land Valuation Model

$$V = \frac{R}{d}$$

Where:

V is the value of land
R is the return or rent to land
d is the opportunity cost of capital

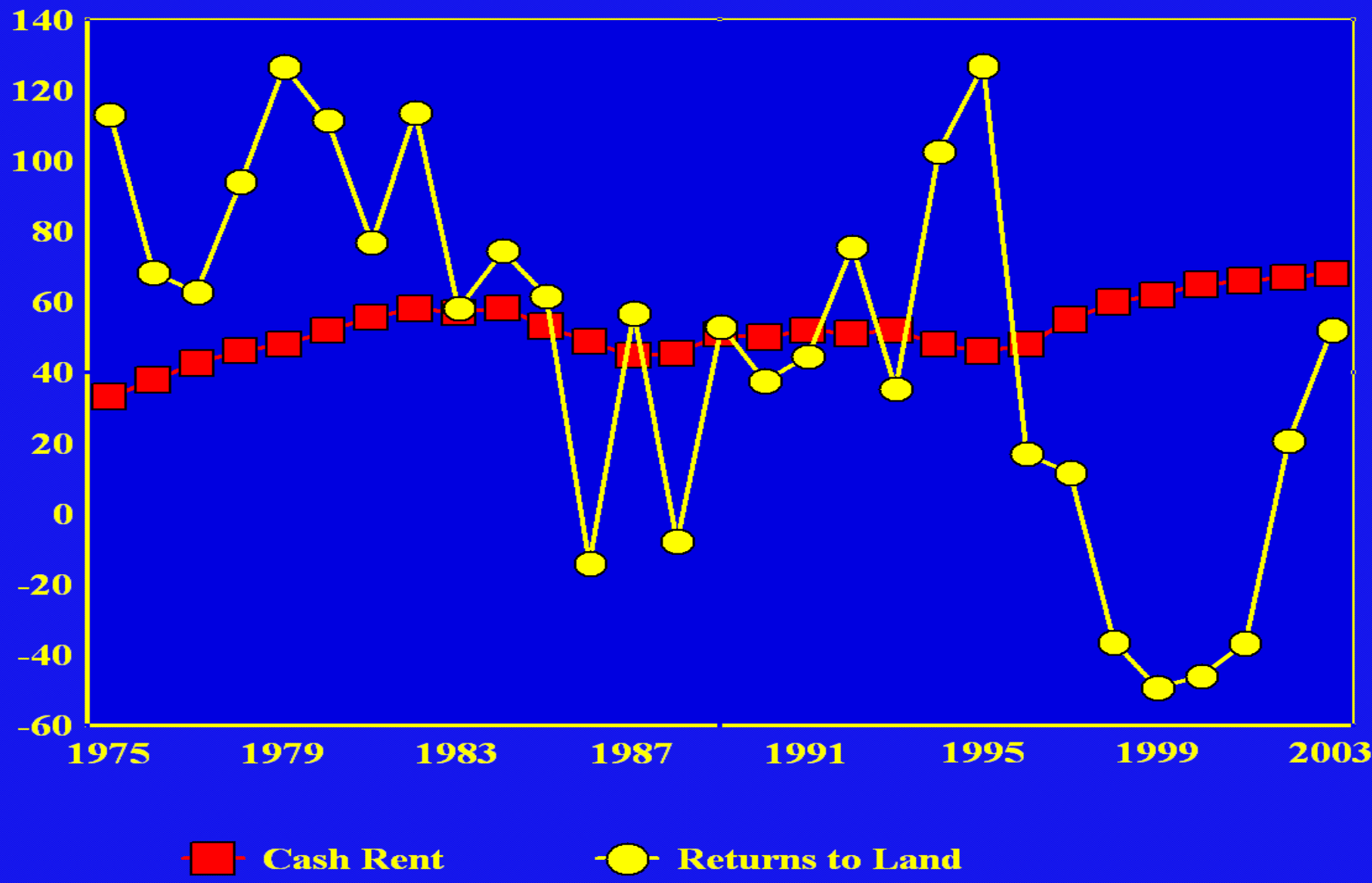
Increase in land values when:

Returns/rents to land increase (Positive relationship)
Opportunity cost of capital decreases (Negative relationship)

Rents

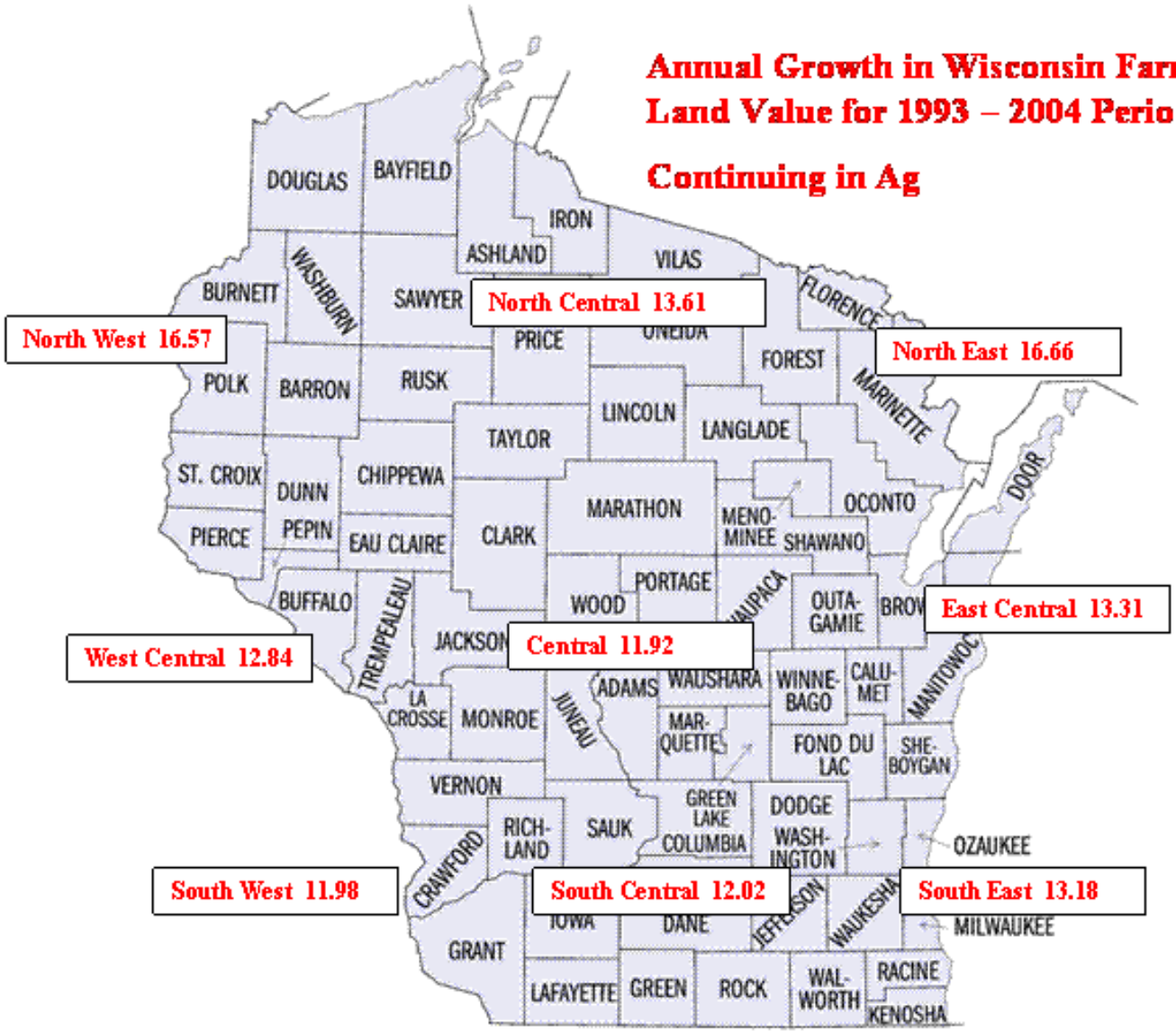
Wisconsin Cash Rents and Returns to Land

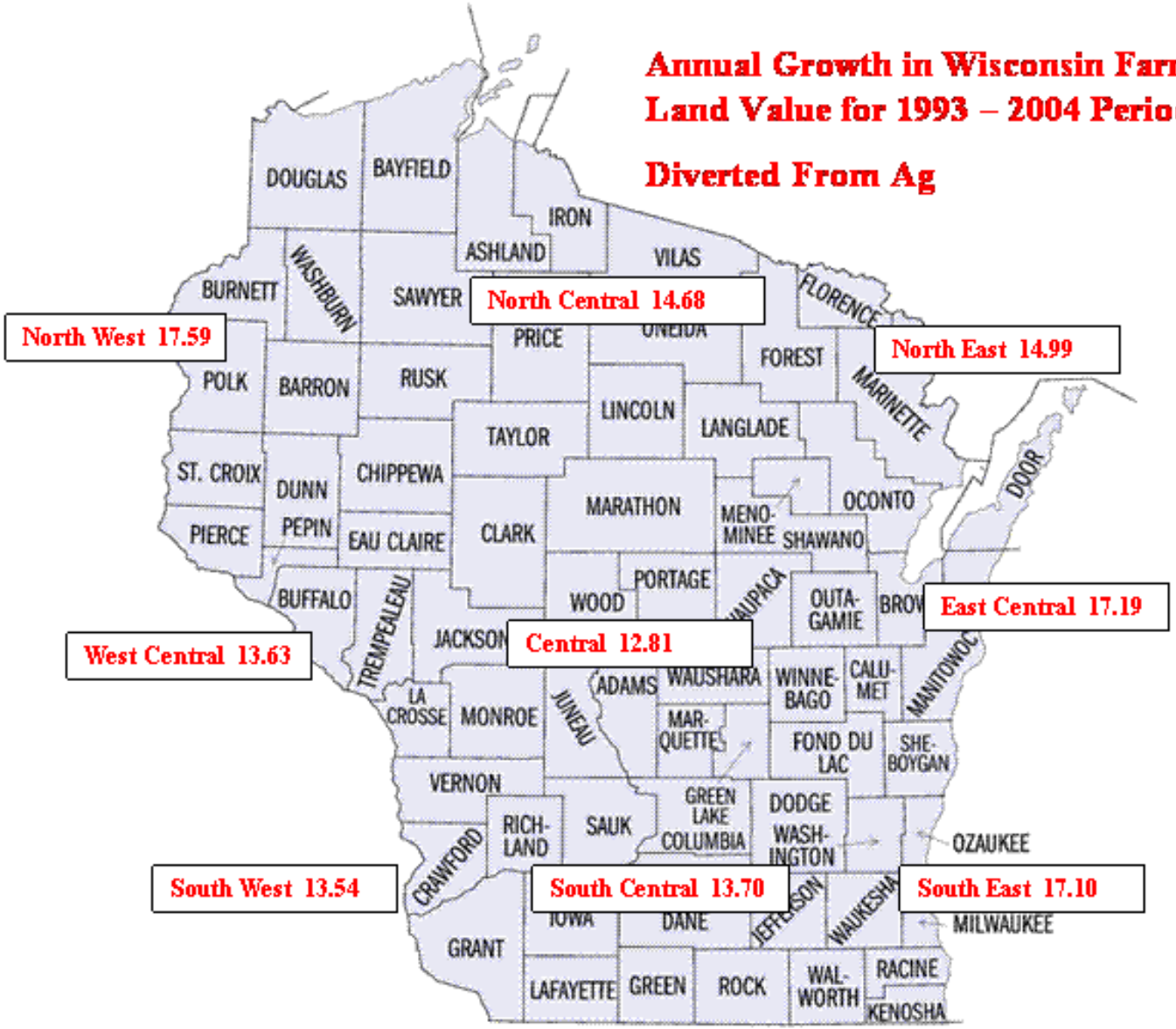
Data Source: USDA-ERS



Interest Rates

Interest Rates -- 10 Year Treasury Bond


Annual Growth in Wisconsin Farm Land Value for 1993 – 2004 Period:
Continuing in Ag
North West 16.57
North Central 13.61
North East 16.66
West Central 12.84
Central 11.92
East Central 13.31
South West 11.98
South Central 12.02
South East 13.18
DOUGLAS
BAYFIELD
IRON
ASHLAND
VILAS
BURNETT
WASHBURN
SAWYER
FLORENCE
PRICE
ONEIDA
FOREST
MARINETTE
POLK
BARRON
RUSK
LINCOLN
LANGLADE
TAYLOR
ST. CROIX
DUNN
CHIPPEWA
DOOR
MARATHON
OCONTO
PIERCE
PEPIN
EAU CLAIRE
CLARK
MENO-MINEE
SHAWANO
BUFFALO
TREMPEALEAU
WOOD
PORTAGE
WAUPACA
OUTA-GAMIE
BROW
JACKSON
MANITOWOC
ADAMS
WAUSHARA
WINNE-BAGO
CALU-MET
LA CROSSE
MONROE
JUNEAU
MAR-QUETTE
FOND DU LAC
SHE-BOYGAN
VERNON
GREEN LAKE
DODGE
RICH-LAND
SAUK
COLUMBIA
WASH-INGTON
OZAUKEE
CRAWFORD
IOWA
DANE
JEFFERSON
WAUKESHA
MILWAUKEE
GRANT
LAFAYETTE
GREEN
ROCK
WAL-WORTH
RACINE
KENOSHA


Annual Growth in Wisconsin Farm Land Value for 1993 – 2004 Period:
Diverted From Ag
North West 17.59
North Central 14.68
North East 14.99
West Central 13.63
Central 12.81
East Central 17.19
South West 13.54
South Central 13.70
South East 17.10
DOUGLAS
BAYFIELD
IRON
ASHLAND
VILAS
BURNETT
WASHBURN
SAWYER
FLORENCE
PRICE
ONEIDA
FOREST
MARINETTE
POLK
BARRON
RUSK
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GREEN
ROCK
WAL-WORTH
RACINE
KENOSHA

Owned Land as a Percent of Land in Farms

Source: Census of Agriculture

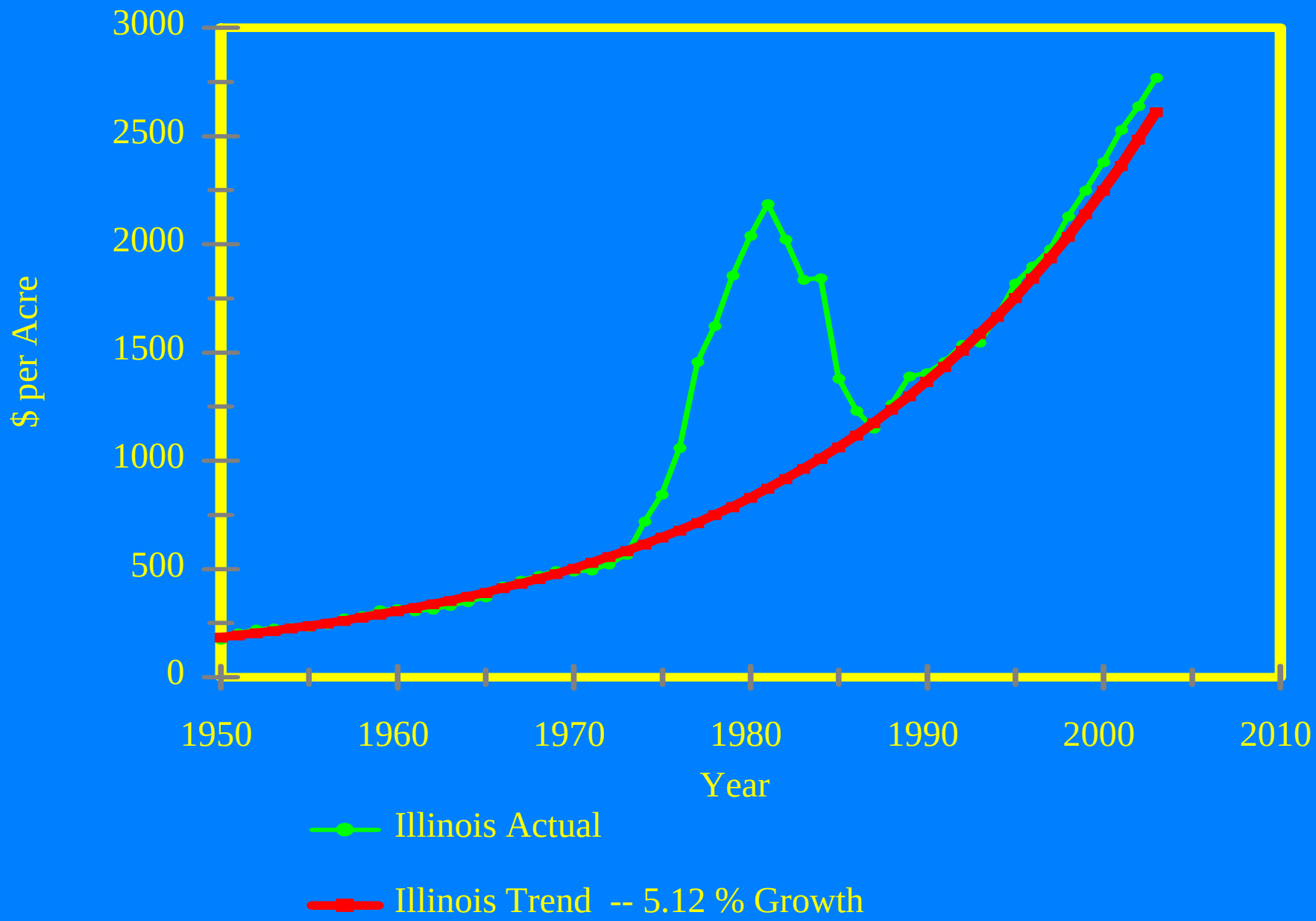
Year	Wisconsin	Illinois	Michigan	Minnesota
2002	72.20	42.36	61.84	60.37
1997	72.71	39.56	61.32	59.36
1992	72.69	38.36	62.44	57.94
1987	73.73	40.30	65.47	60.13

Harvested Cropland as a Percent of Land in Farms

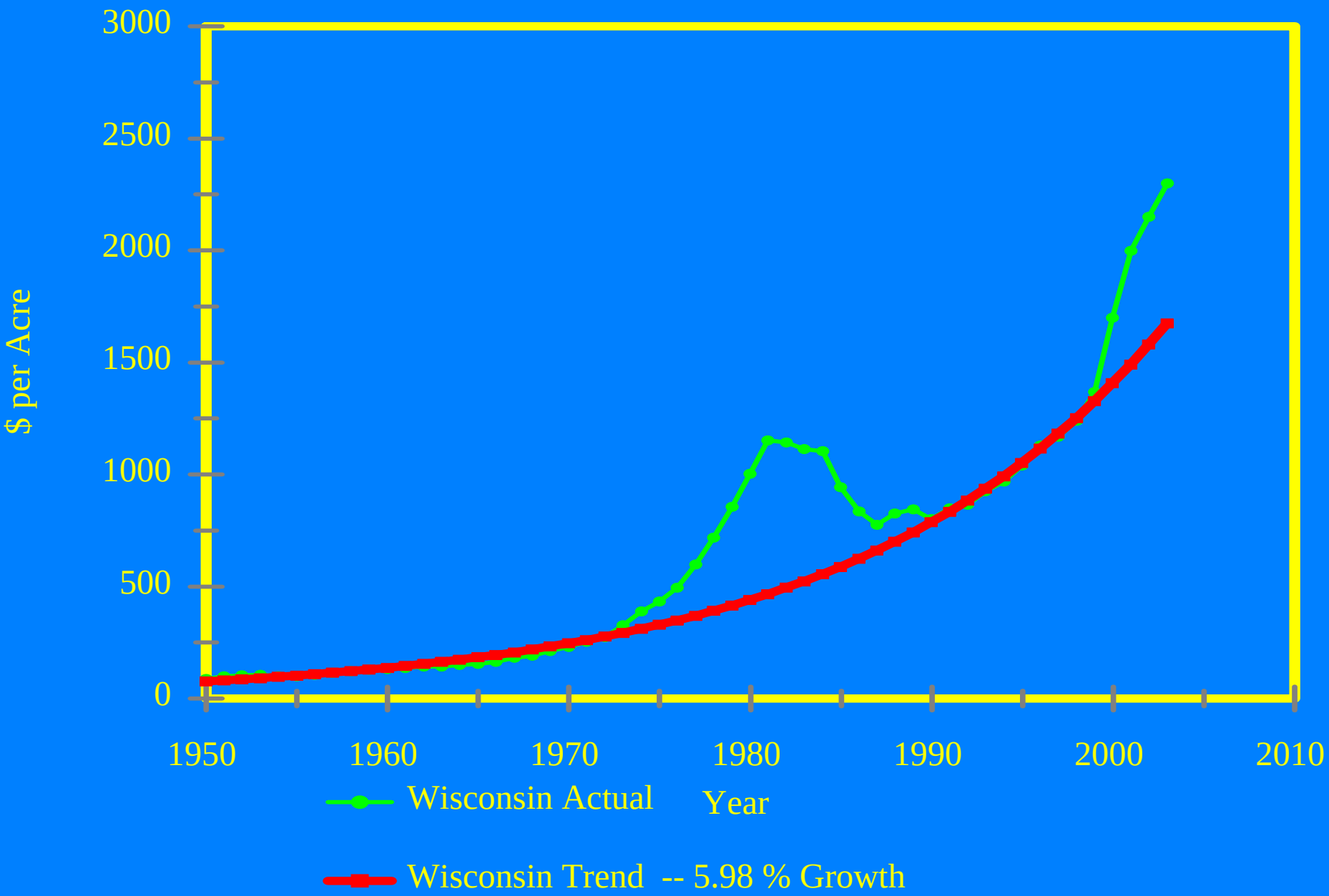
Source: Census of Agriculture

Year	Wisconsin	Illinois	Michigan	Minnesota
2002	56.72	82.62	67.32	70.51
1997	57.89	81.88	68.11	72.97
1992	57.19	80.25	65.27	70.91
1987	56.21	70.47	59.83	62.60

Value of Illinois Farm Real Estate



Value of Wisconsin Farm Real Estate



Use-Value Assessment

Use-Value Assessment of Farm Land:

Returns to Land

Tax Adjusted Capitalization Rate

Changes in Use-Value Assessments Due to Changes in Economic Factors

Factor	Relationship with Use-value
Average corn price	+
Average corn yield	+
Cost of production	-
Average mortgage rate	-
Municipal tax rate	-

Key Benefits of Moving to a Use-Value System

- Ties farm property taxes to farm incomes such that tax levies move in concert with farm incomes

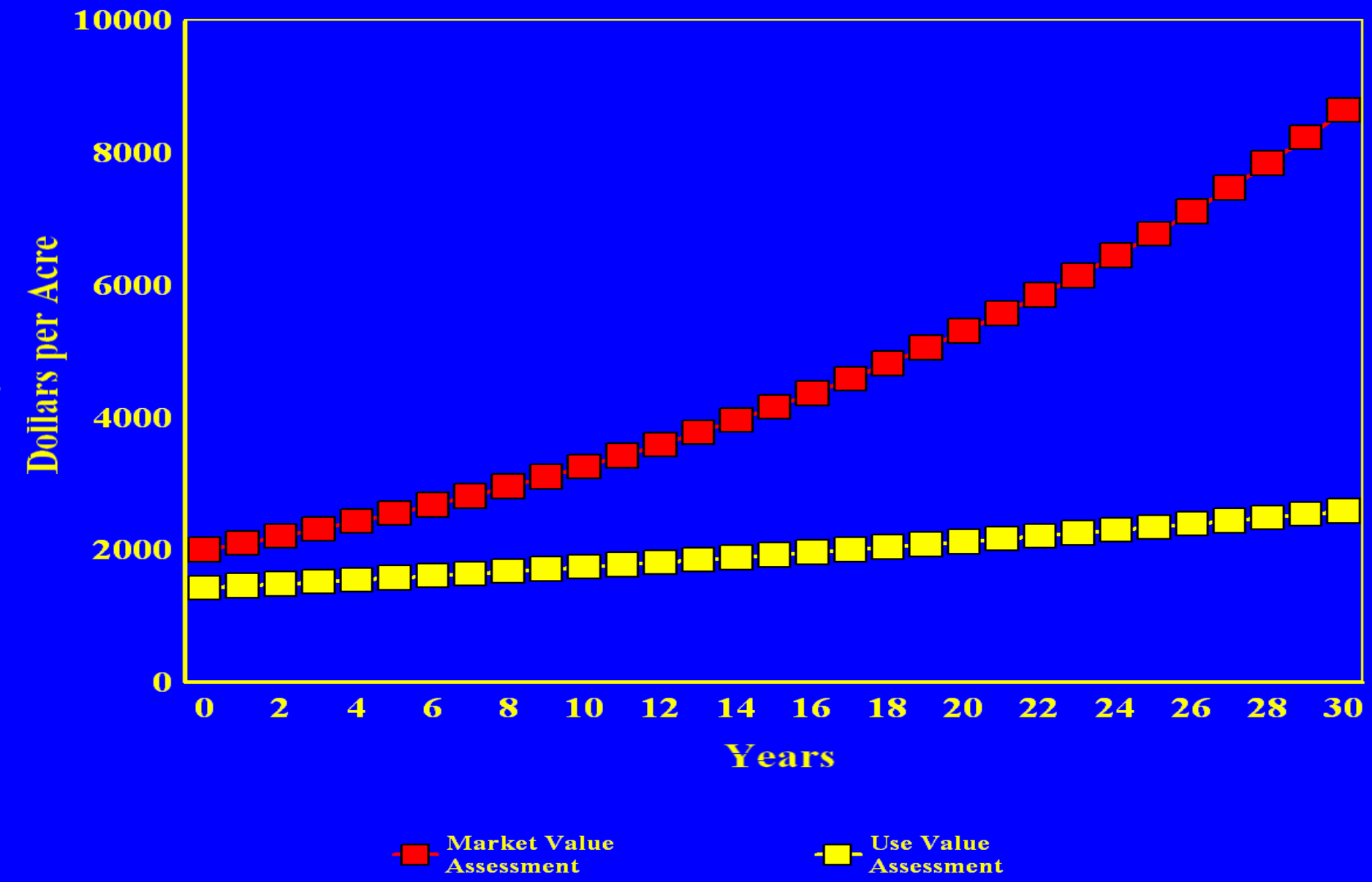
  Falling farm incomes ------> Lower property taxes
  Rising farm incomes -------> Higher taxes

- Keeps non-farm land markets from impacting farm land property taxes

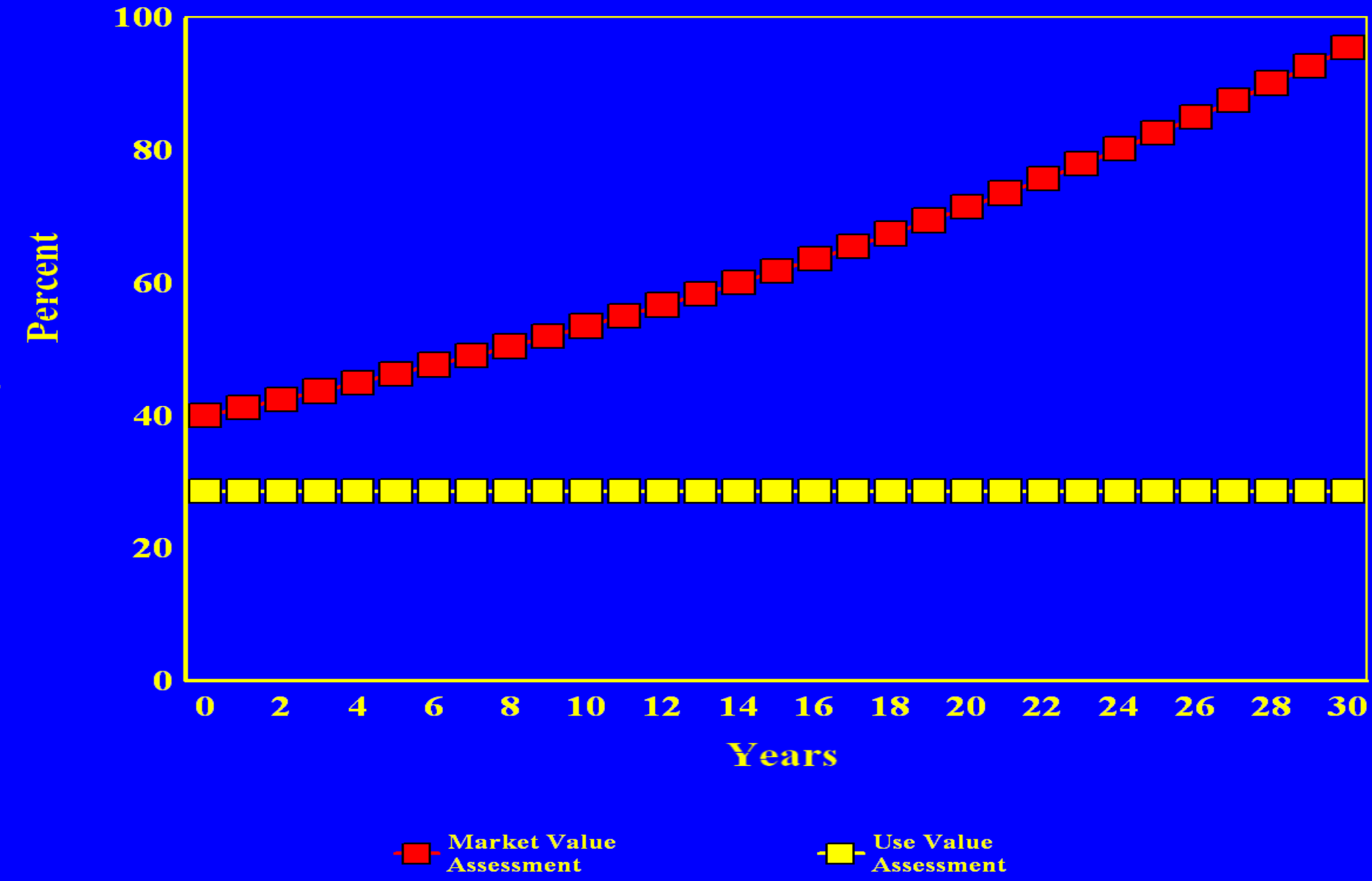
  Rising urban land values
  Higher farm land values
  Higher farm land assessments
  Higher property taxes
  Cash flow deficits
  Forced sale of farm land (push off farms)

	Base Value	Annual Growth
Land	2000	5%
Income	100	2%
Tax Rate		2%
FCS Interest Rate		5%

Farm Land Assessments



Property Taxes as a Percent of income



Present Values of Property Taxes on Land Appreciation and Capital Gains Taxes