



**THE VOLCKER ALLIANCE**  
*Working for Effective Government*

**FEDERAL RESERVE BANK  
OF CHICAGO**



**LINCOLN INSTITUTE  
OF LAND POLICY**



THE  
**PEW**  
CHARITABLE TRUSTS

# **Preventing the Next State Budget Crisis:**

Improving Budget Transparency to Bolster Fiscal Sustainability

**THE *HOW'S*, THE *WHY'S* AND THE *CONSEQUENCES*  
OF STATE AND LOCAL DEFICITS**

ROBERT INMAN

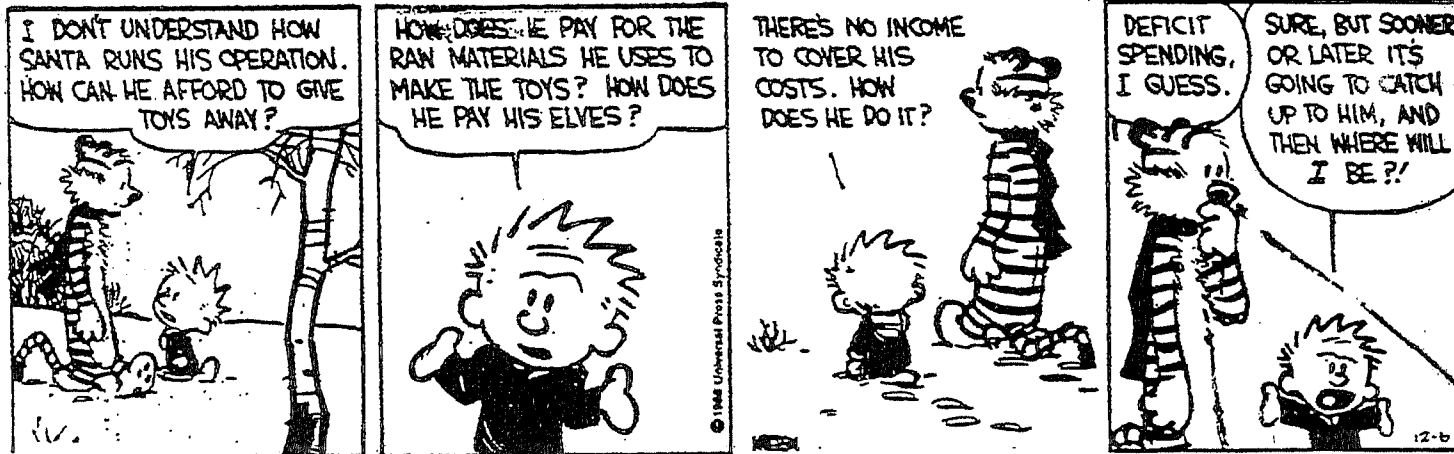
UNIVERSITY OF PENNSYLVANIA

ANDREW HAUGHWOUT

FEDERAL RESERVE BANK, NEW YORK

# WHAT'S THE PROBLEM

## CALVIN AND HOBBS



## **A CURRENT FISCAL CRISIS IS A CASH FLOW PROBLEM**

“CONTRACTUAL” OBLIGATIONS - AID - CASH > MAXIMAL TAX REVENUES

*“LEGALLY CONTRACTUAL” OBLIGATIONS TO:*

CURRENT BONDHOLDERS

CURRENT PENSIONERS

CURRENT SUPPLIERS

*“POLITICALLY CONTRACTUAL” OBLIGATIONS TO:*

MINIMAL SERVICES TO CURRENT RESIDENTS: EDUCATION, SAFETY (?)

FUTURE RESIDENTS: INFRASTRUCTURE (?)

FUTURE PENSIONERS (?)

# **A FUTURE FISCAL CRISIS IS A PROBLEM OF DECLINING PUBLIC WEALTH**

## *STEP 1: BUILD UP CONTRACTUAL OBLIGATIONS:*

- ☞ *Underfund* the Pension
- ☞ *Borrow* Short-Term (Rollover) and Long-Term
- ☞ *Delay* Supplier Payments

## *STEP 2: BUILD UP POLITICAL OBLIGATIONS*

- ☞ *Mandates* for Education and Poverty
- ☞ *Expand* Benefit Promises

## *STEP 3: DEplete CASH & ASSETS*

- ☞ *Sell* Cash and Assets
- ☞ *Fail to Maintain* Infrastructure

## **MONITORING FOR A FUTURE FISCAL CRISIS**

NET PUBLIC WEALTH =

[CASH & SECURITIES] - [LTDEBT + STDEBT] - [SUPPLIER OWED PAYMENTS]

+

[REPLACEMENT VALUE OF PUBLIC & ENTERPRISE INFRASTRUCTURE]

+

[PENSION FUND ASSETS - PENSION OBLIGATIONS]

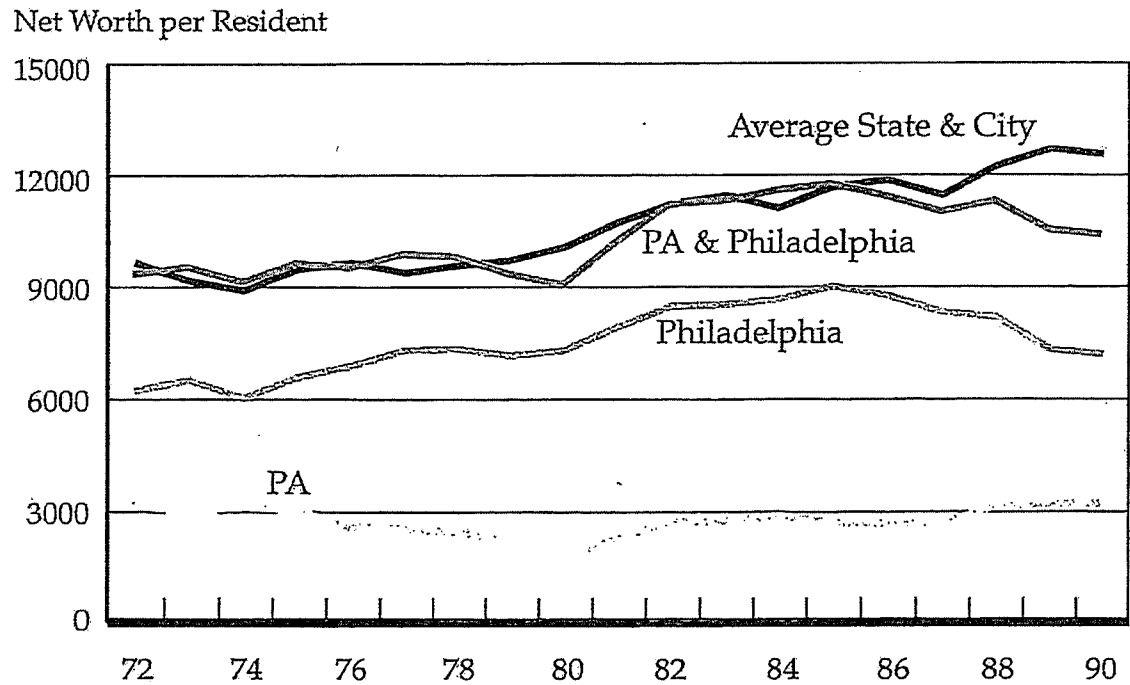
## WHO HAS HAD A CRISIS?

| Government           | Year | Pensions<br>(Normal Cost) | Supplier<br>Obligations | Dissave | Failure to<br>Maintain K | Sell Public<br>Assets | Sell Enterprise<br>Assets | Pension<br>(Withdrawals) |
|----------------------|------|---------------------------|-------------------------|---------|--------------------------|-----------------------|---------------------------|--------------------------|
| New York City        | 1975 | ✓                         | ✓                       | ✓       | ✓                        |                       | ✓                         | ✓                        |
| Cleveland            | 1977 |                           |                         | ✓       |                          |                       | ✓                         |                          |
| WPPSS                | 1983 |                           |                         |         |                          |                       | ✓                         |                          |
| Philadelphia         | 1990 | ✓                         | ✓                       | ✓       | ✓                        |                       | ✓                         |                          |
| Bridgeport, CT       | 1991 | ✓                         |                         | ✓       | ✓                        |                       | ✓                         | ✓                        |
| Orange Cty, CA       | 1994 |                           |                         | ✓       |                          |                       |                           |                          |
| Washington, DC       | 1995 | ✓                         | ✓                       | ✓       |                          |                       |                           | ✓                        |
| Miami, FL            | 1996 | ✓                         | ✓                       |         |                          |                       |                           | ✓                        |
| Detroit              | 2013 | ✓                         | ✓                       | ✓       | ✓                        | ✓                     | ✓                         | ✓                        |
| Puerto Rico          | 2017 | ✓                         | ✓                       | ✓       | ✓                        | ✓                     | ✓                         | ✓                        |
| International Crises |      |                           |                         |         |                          |                       |                           |                          |
| Argentine Provinces  | 1989 | ✓                         | ✓                       | ✓       |                          |                       | ✓                         |                          |
| Brazilian States     | 1994 |                           | ✓                       | ✓       |                          |                       | ✓                         |                          |
| Greece               | 2009 | ✓                         | ✓                       | ✓       | ✓                        |                       | ✓                         | ✓                        |
| Future Crises (?)    |      |                           |                         |         |                          |                       |                           |                          |
| Illinois             |      | ✓                         | ✓                       | ✓       | ✓                        |                       | ✓                         | ✓                        |
| New Jersey           |      | ✓                         |                         |         |                          |                       | ✓                         | ✓                        |

# A PHILADELPHIA STORY

## APPENDIX

### How Much Money Is in a Philadelphian's Public Purse?





## WHO MIGHT HAVE A CRISIS?

### “TAX SMOOTHERS” VIA RAINY DAY FUNDS:

Arizona, California, Colorado, Connecticut, Delaware, Idaho, Nevada, New Mexico

### “BORROWERS”

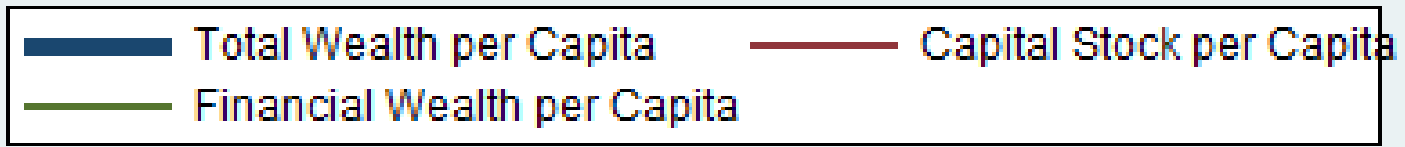
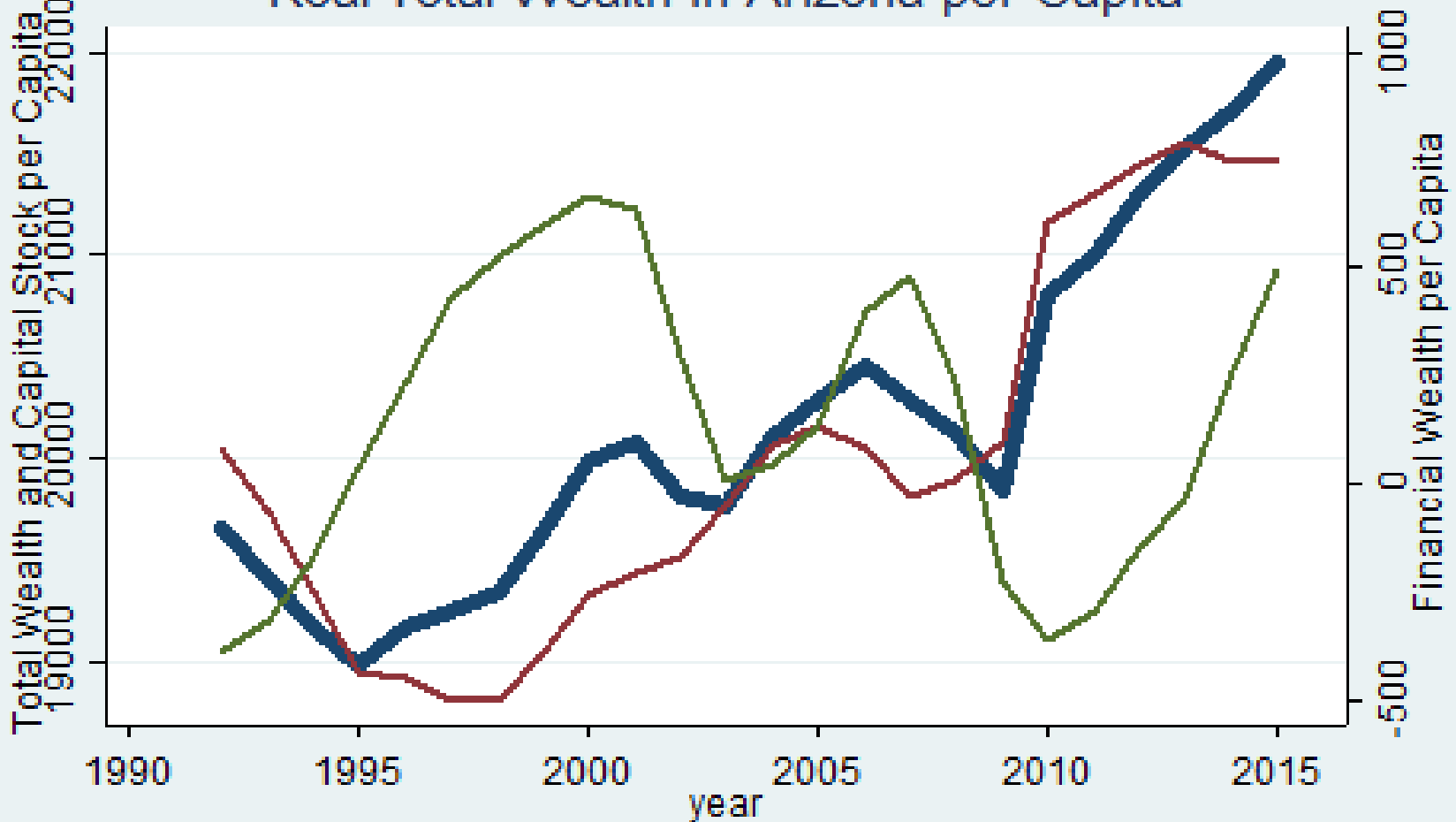
Illinois, Kansas, Maryland, Massachusetts, Mississippi, New Jersey

### “SAVERS”

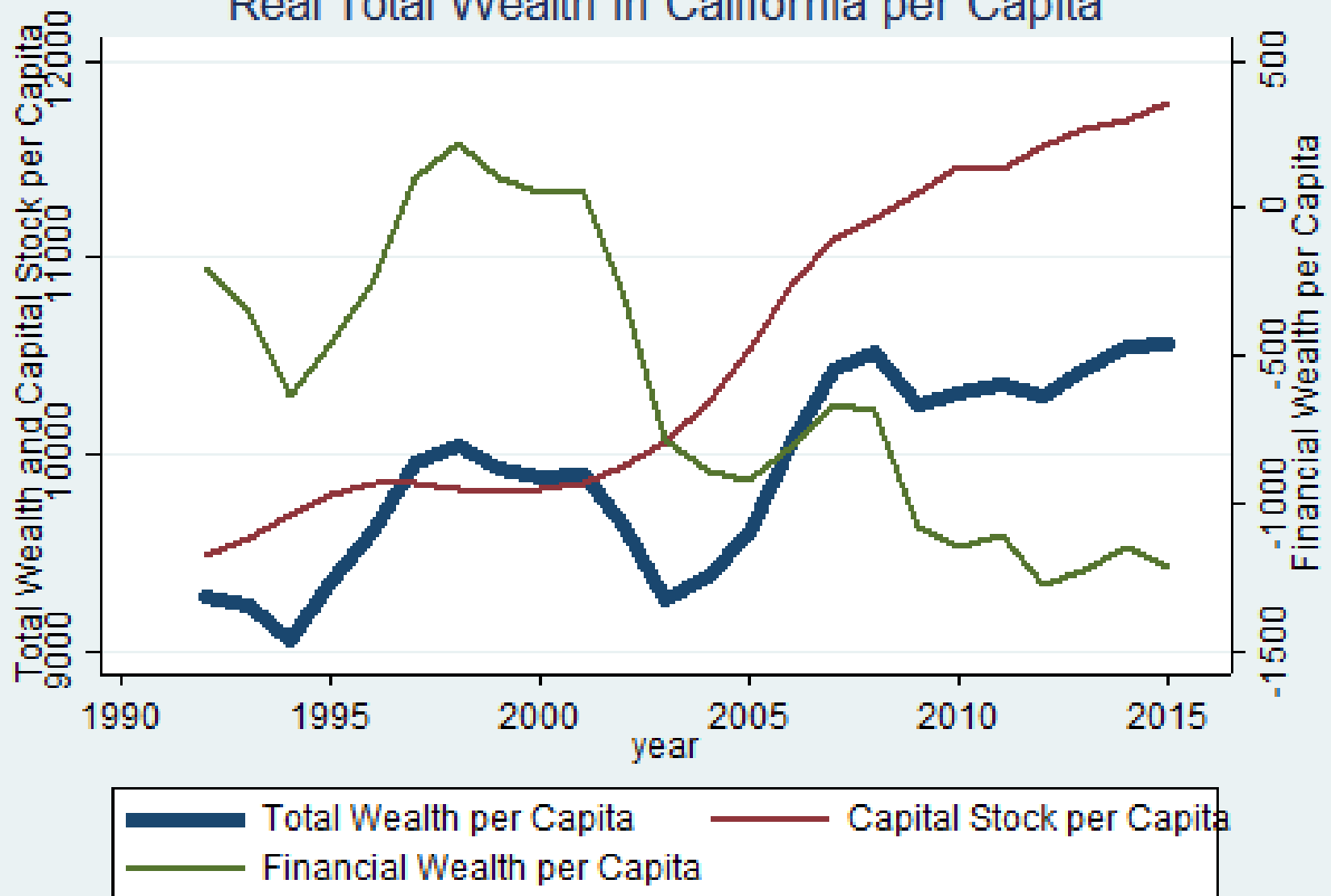
Iowa, Montana, Nebraska, North Dakota, South Dakota, Texas, Wyoming

## **TAX SMOOTHERS**

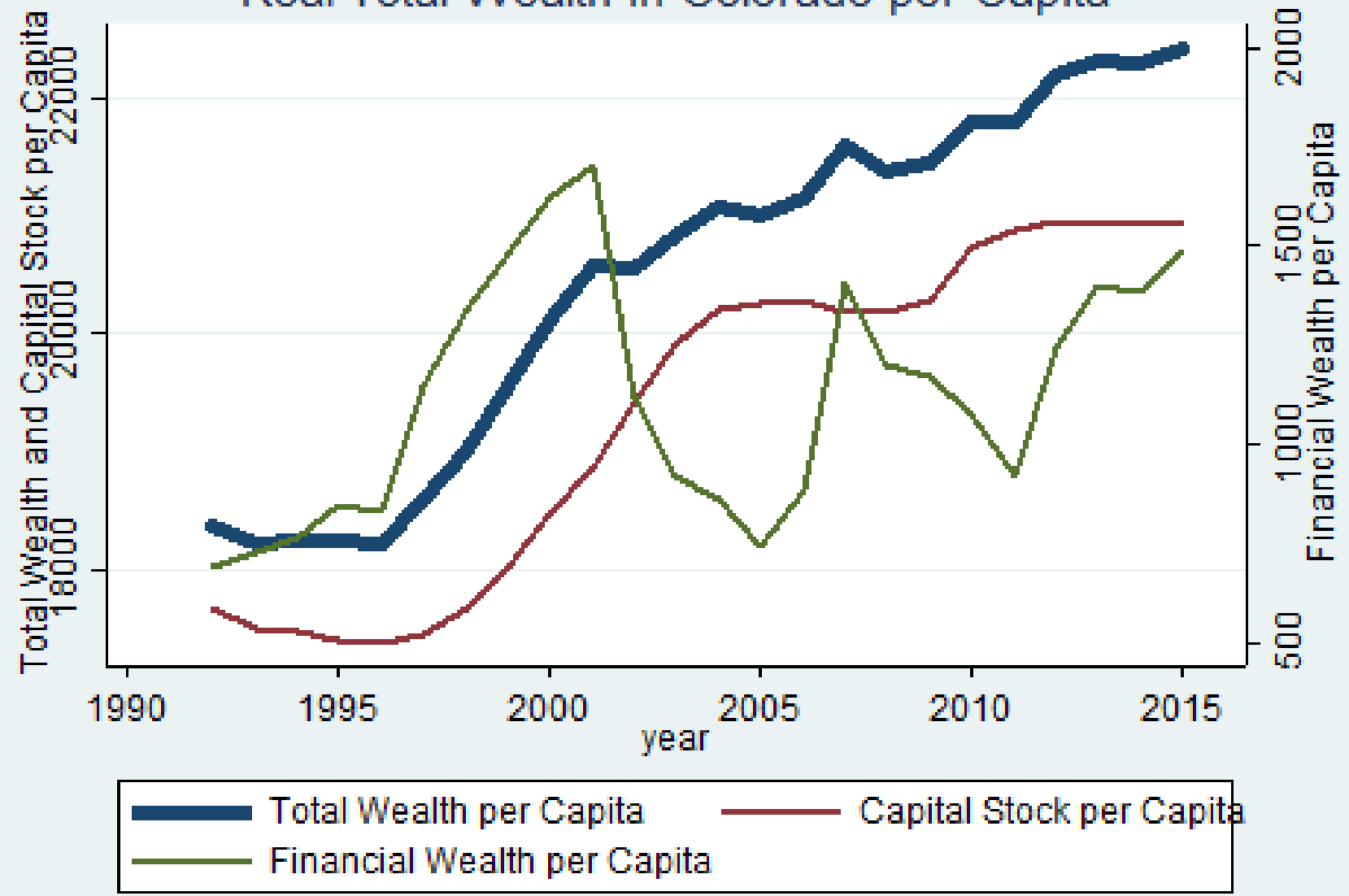
# Real Total Wealth in Arizona per Capita



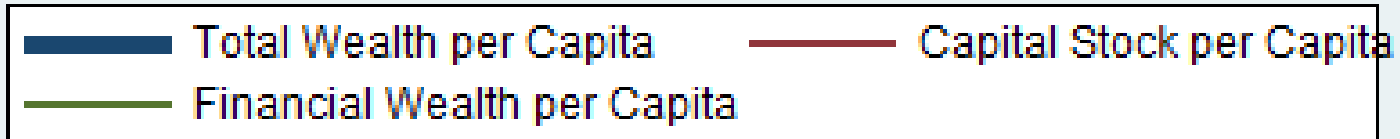
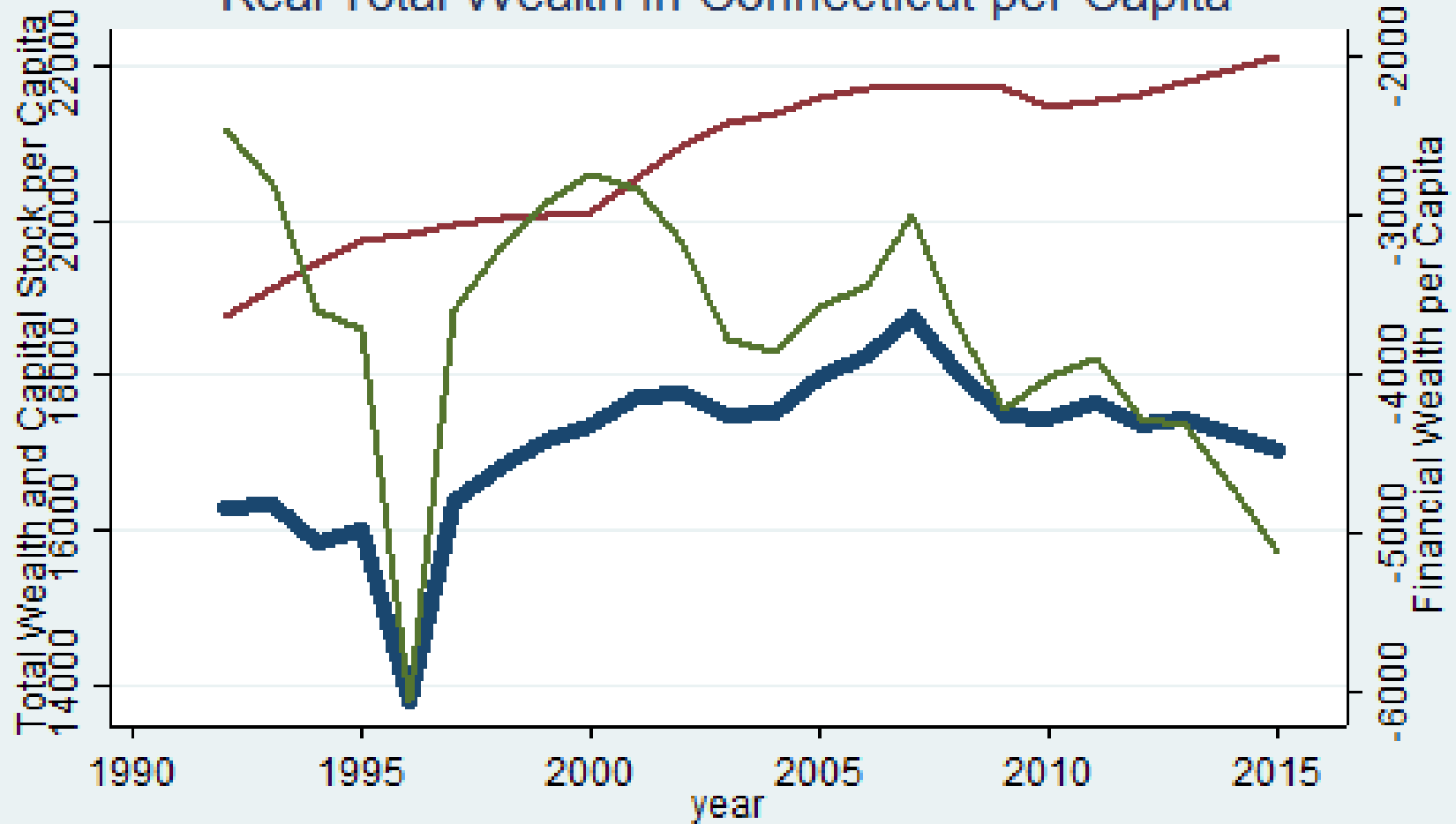
## Real Total Wealth in California per Capita



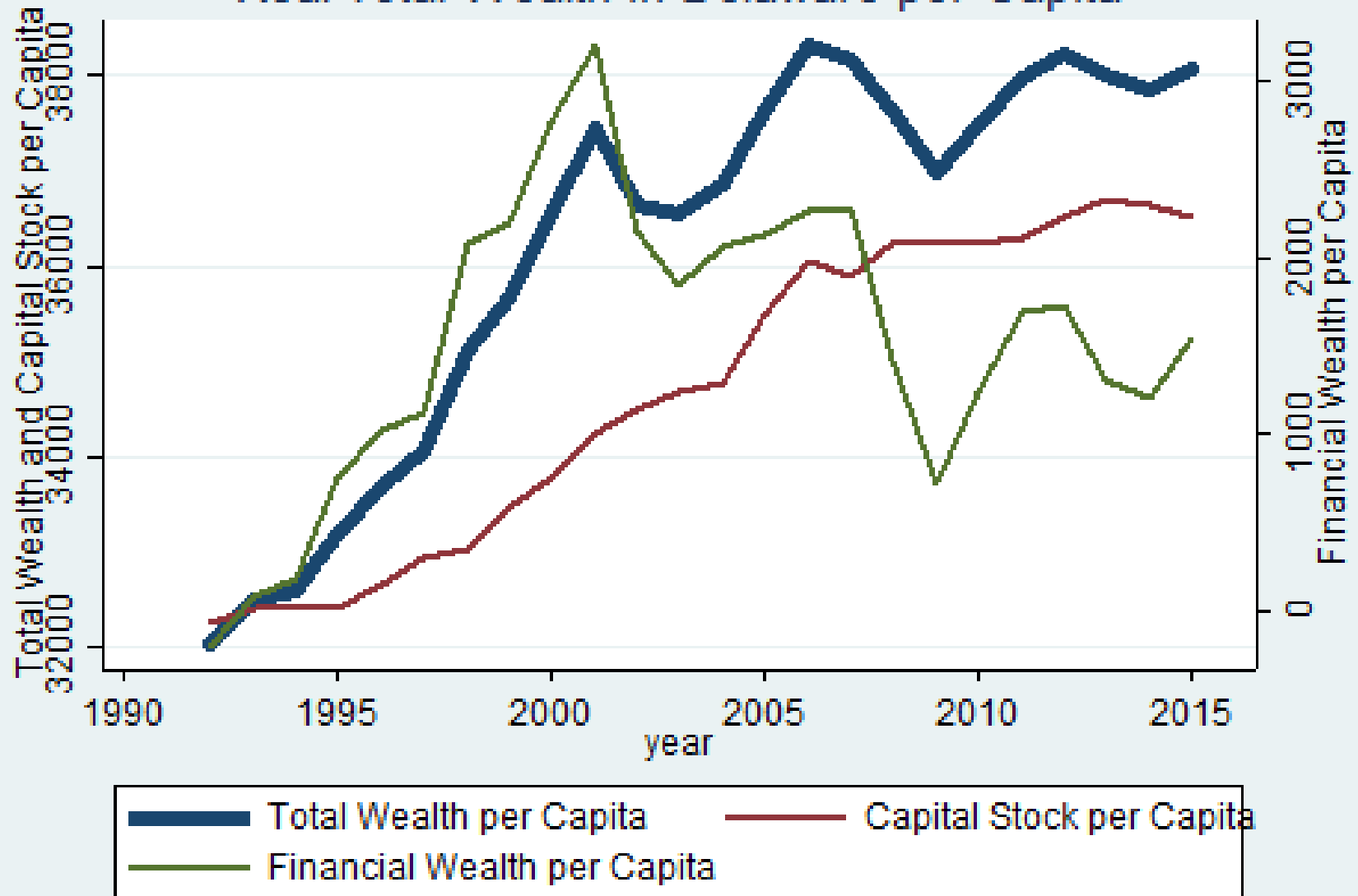
# Real Total Wealth in Colorado per Capita



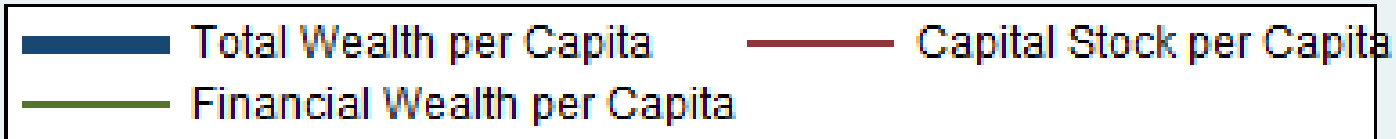
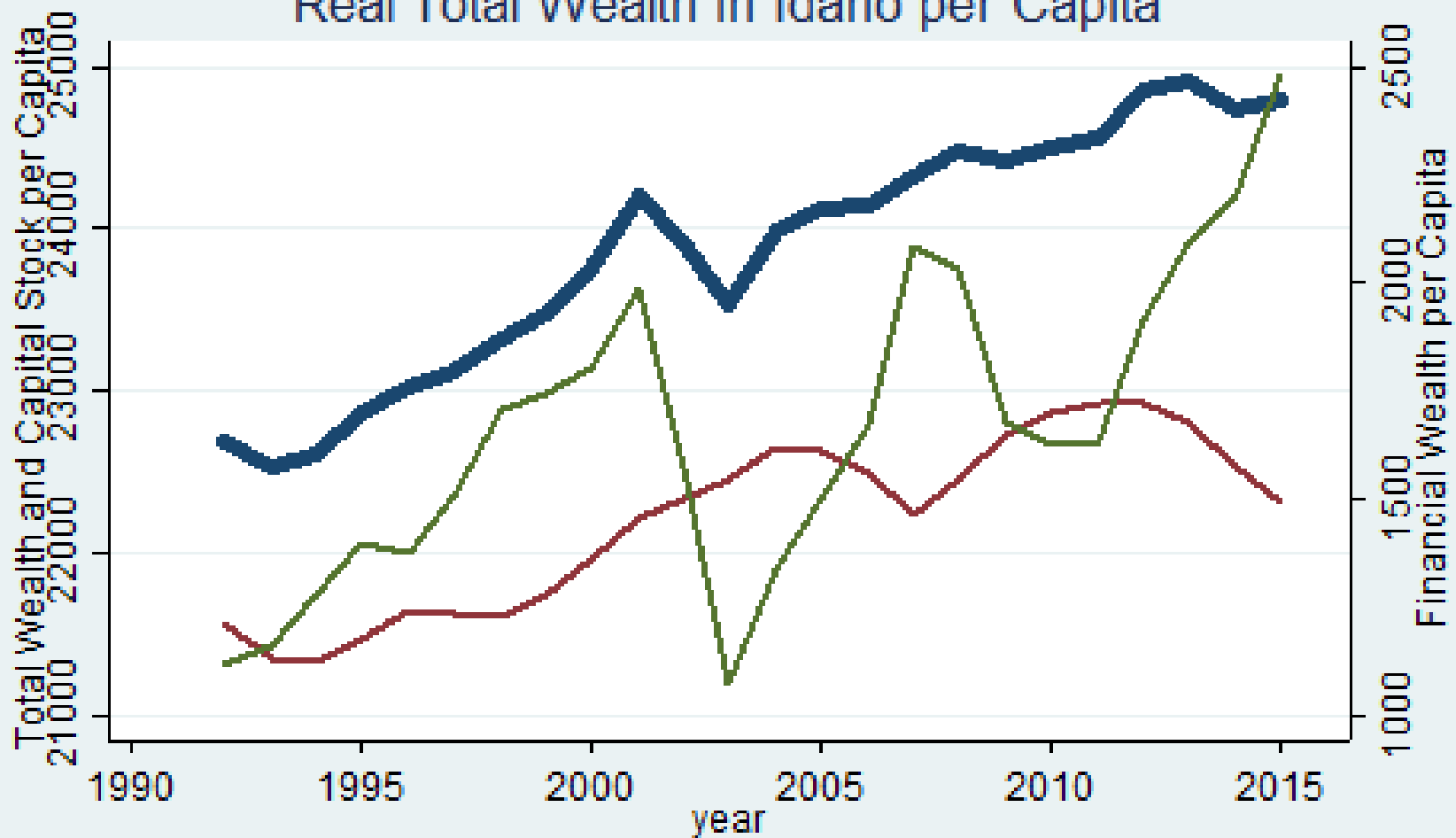
## Real Total Wealth in Connecticut per Capita



## Real Total Wealth in Delaware per Capita

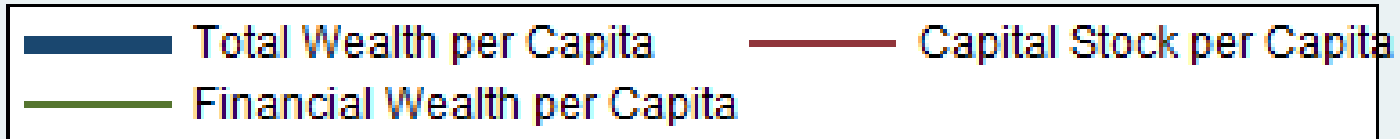
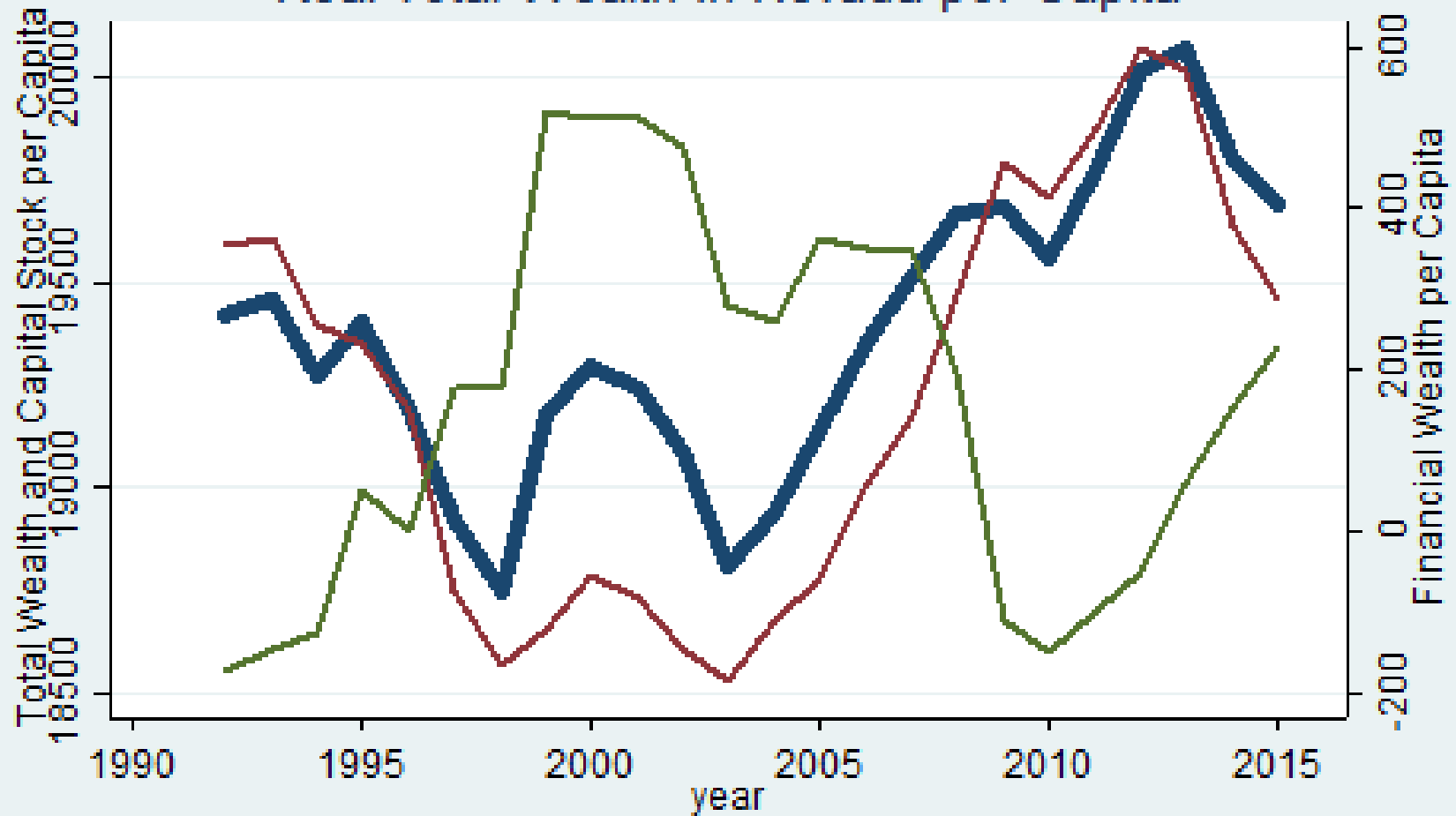


## Real Total Wealth in Idaho per Capita

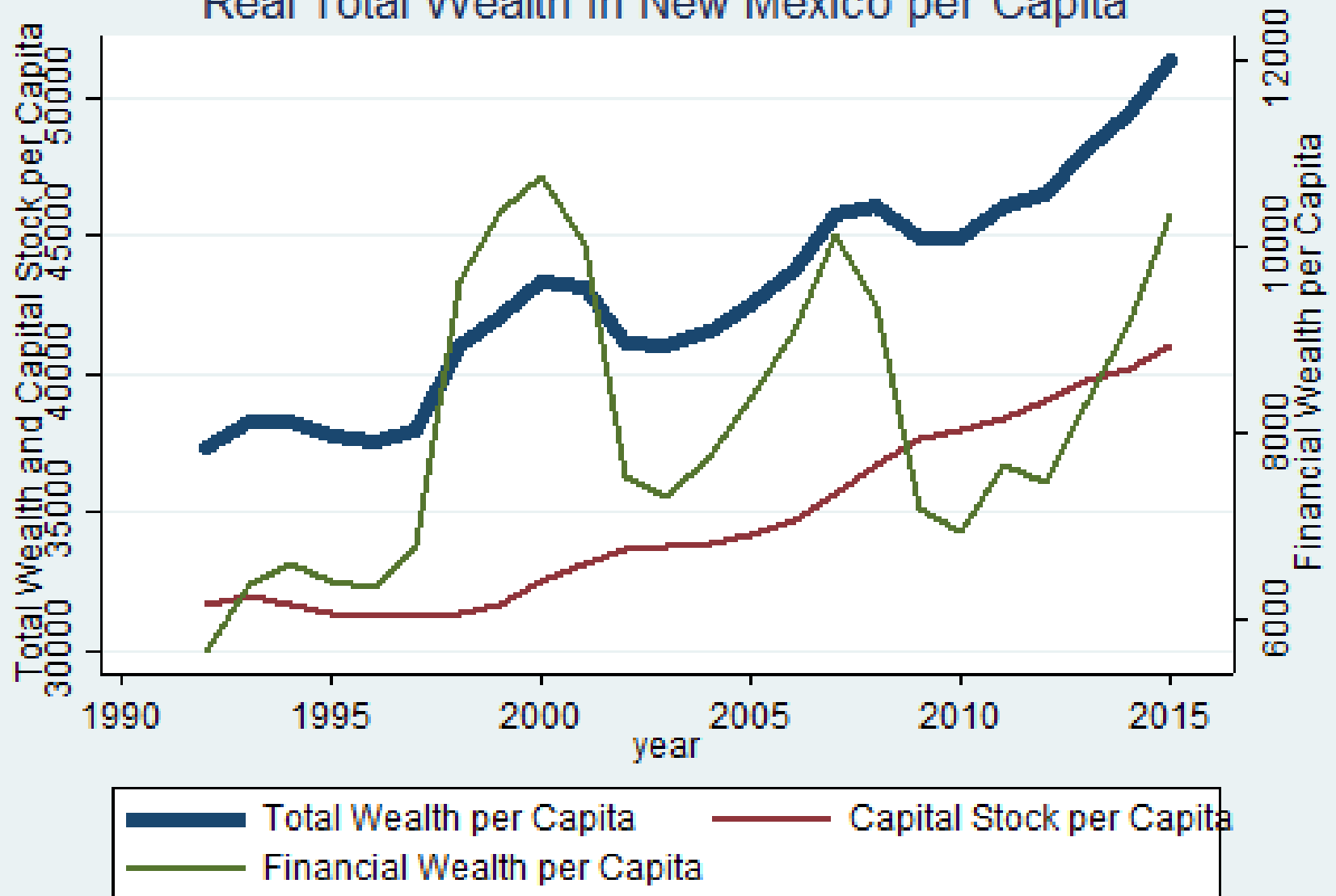




## Real Total Wealth in Nevada per Capita

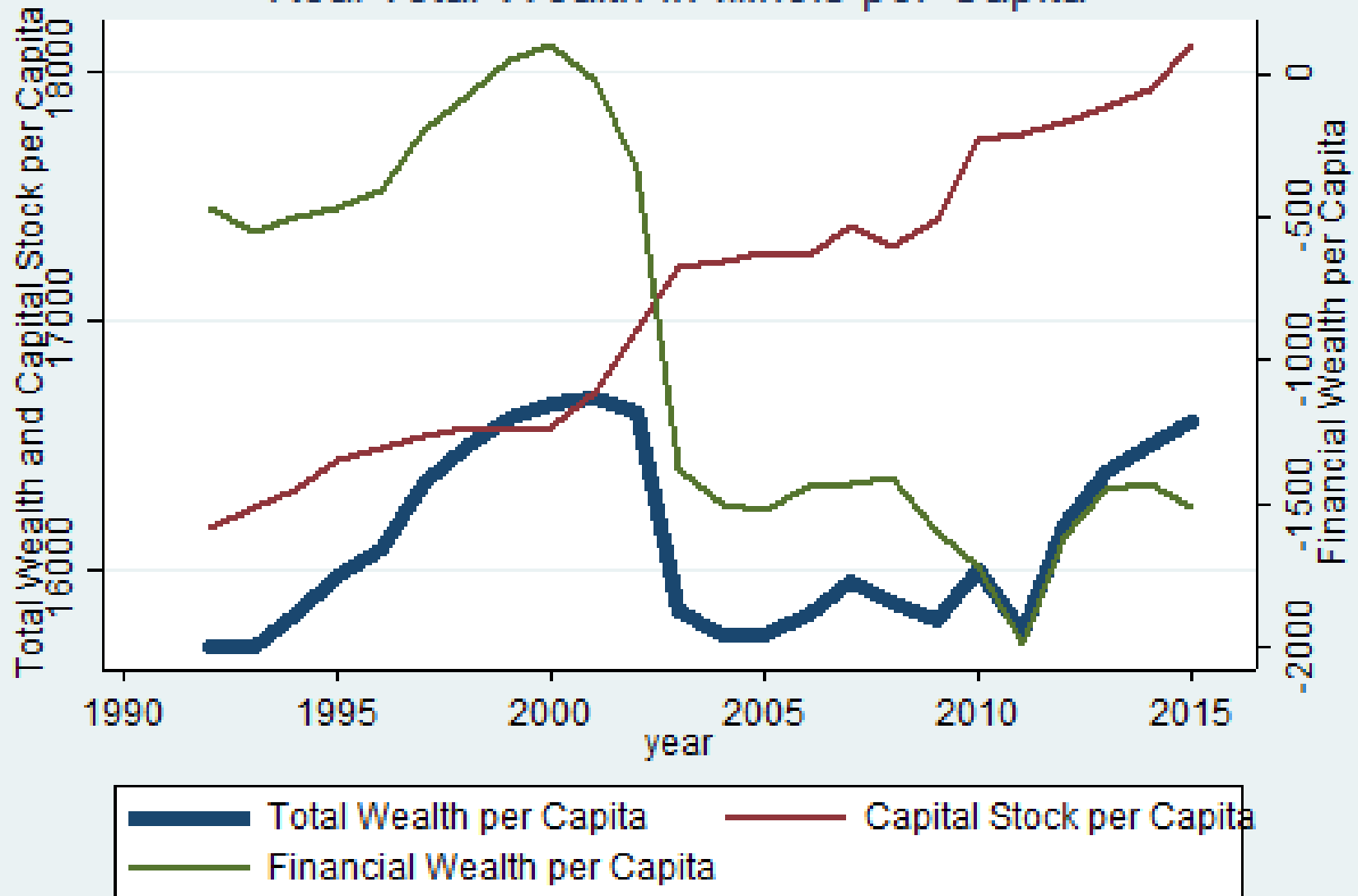


## Real Total Wealth in New Mexico per Capita

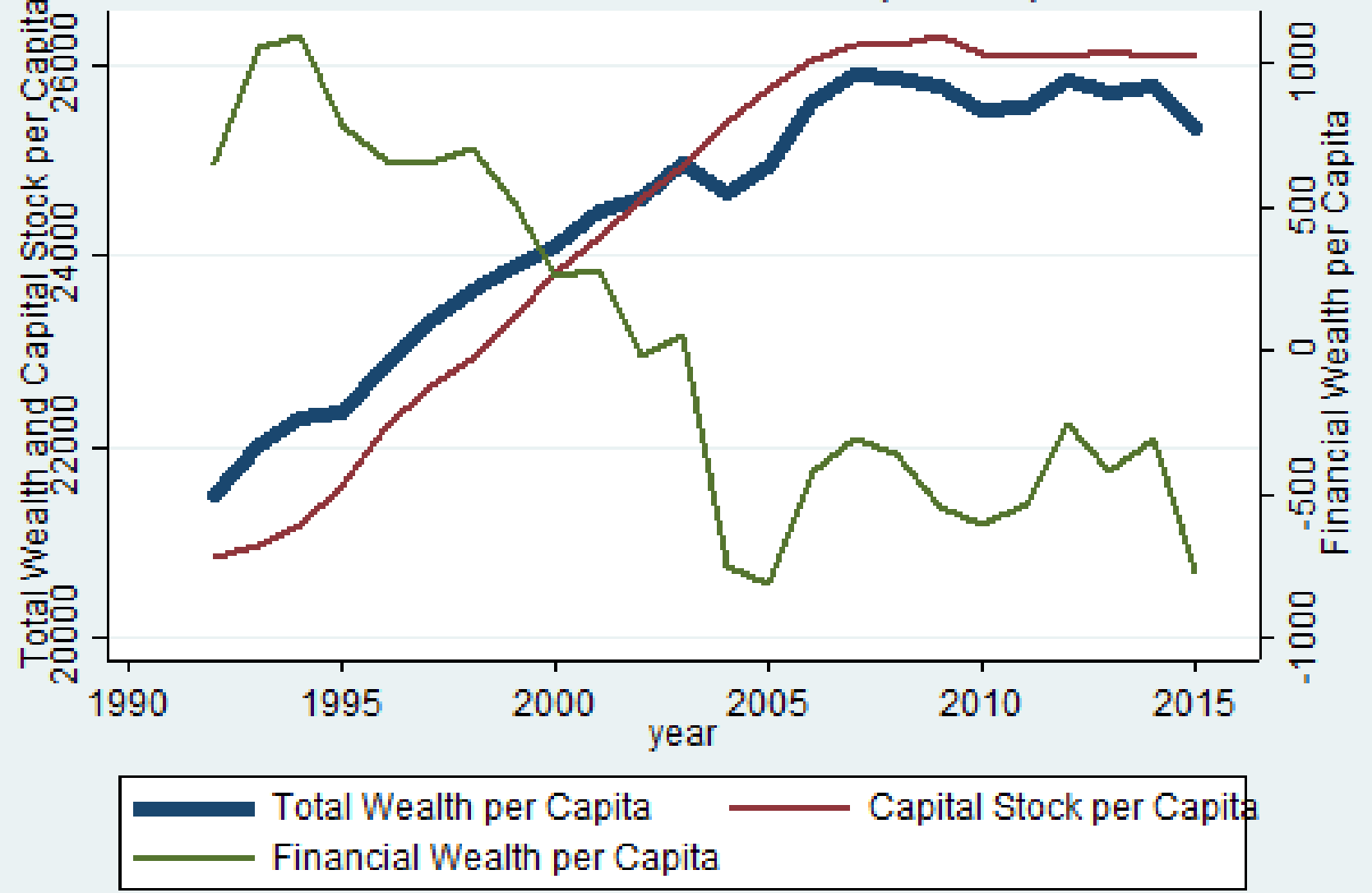


**BORROWERS**

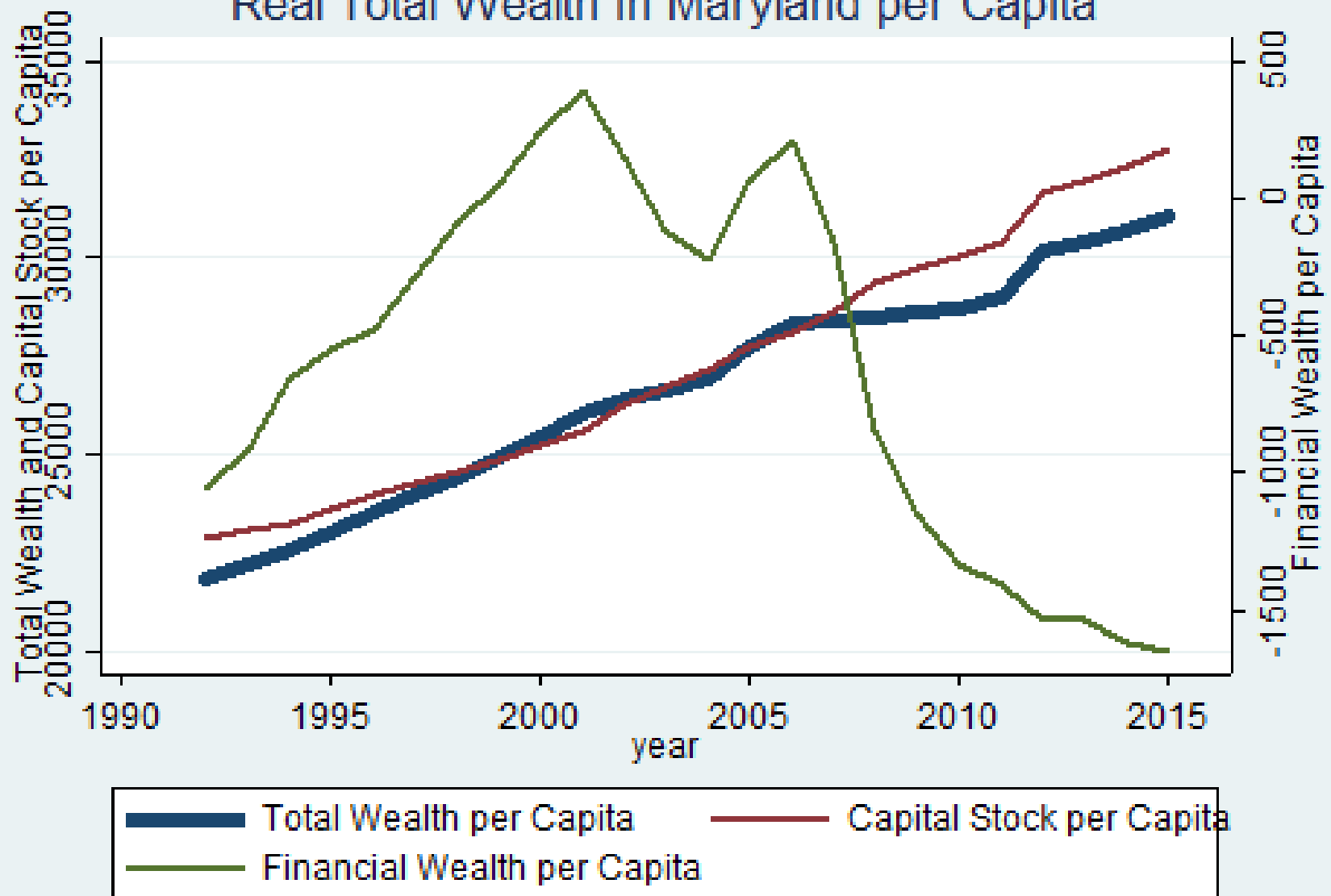
## Real Total Wealth in Illinois per Capita



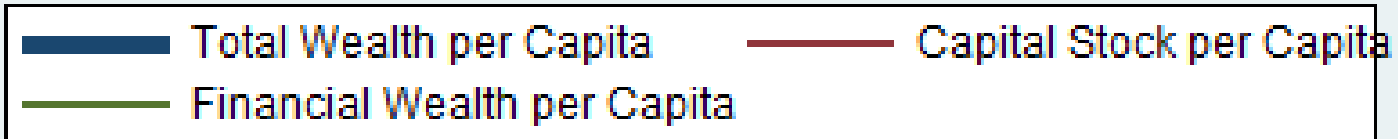
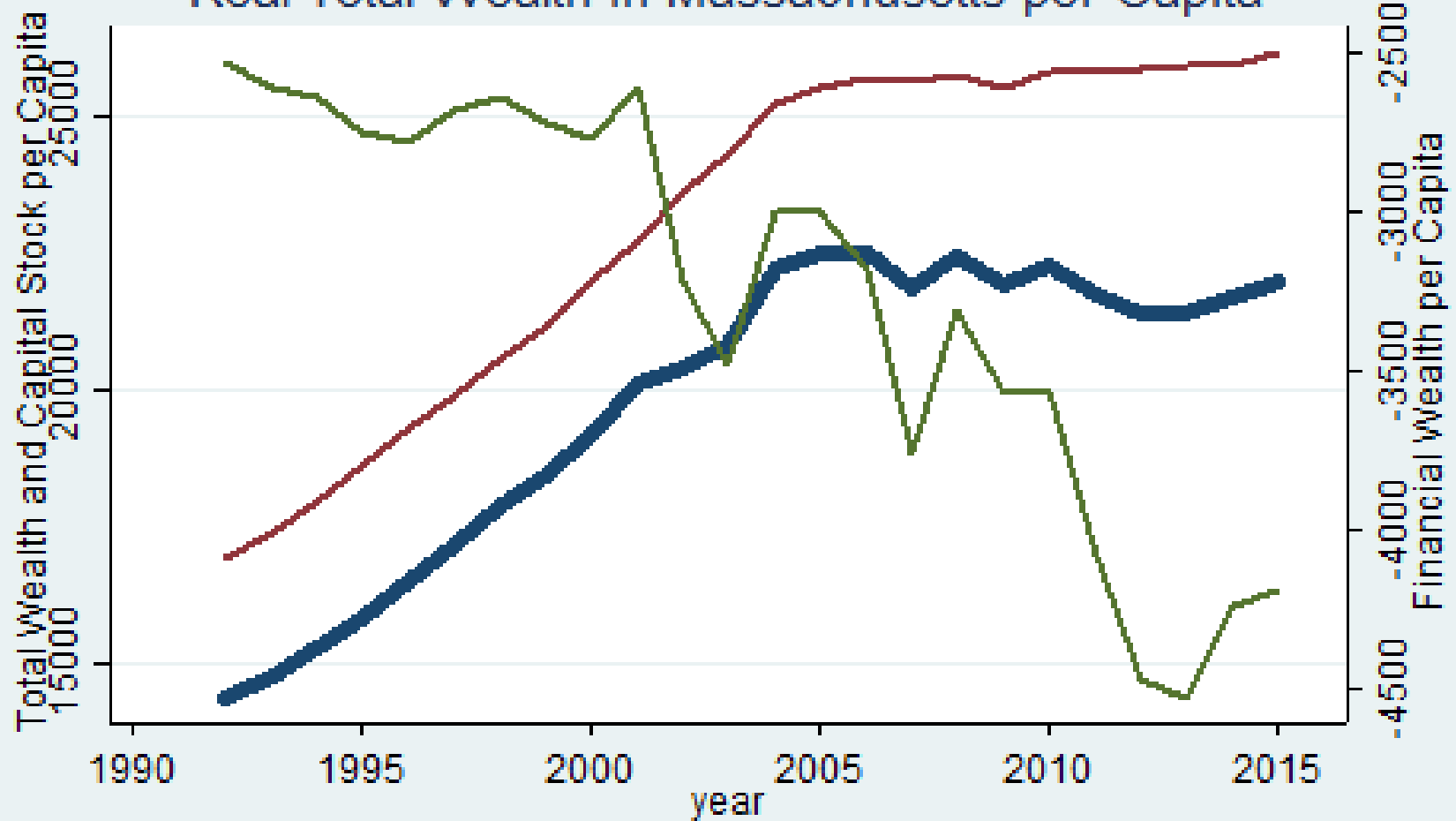
# Real Total Wealth in Kansas per Capita



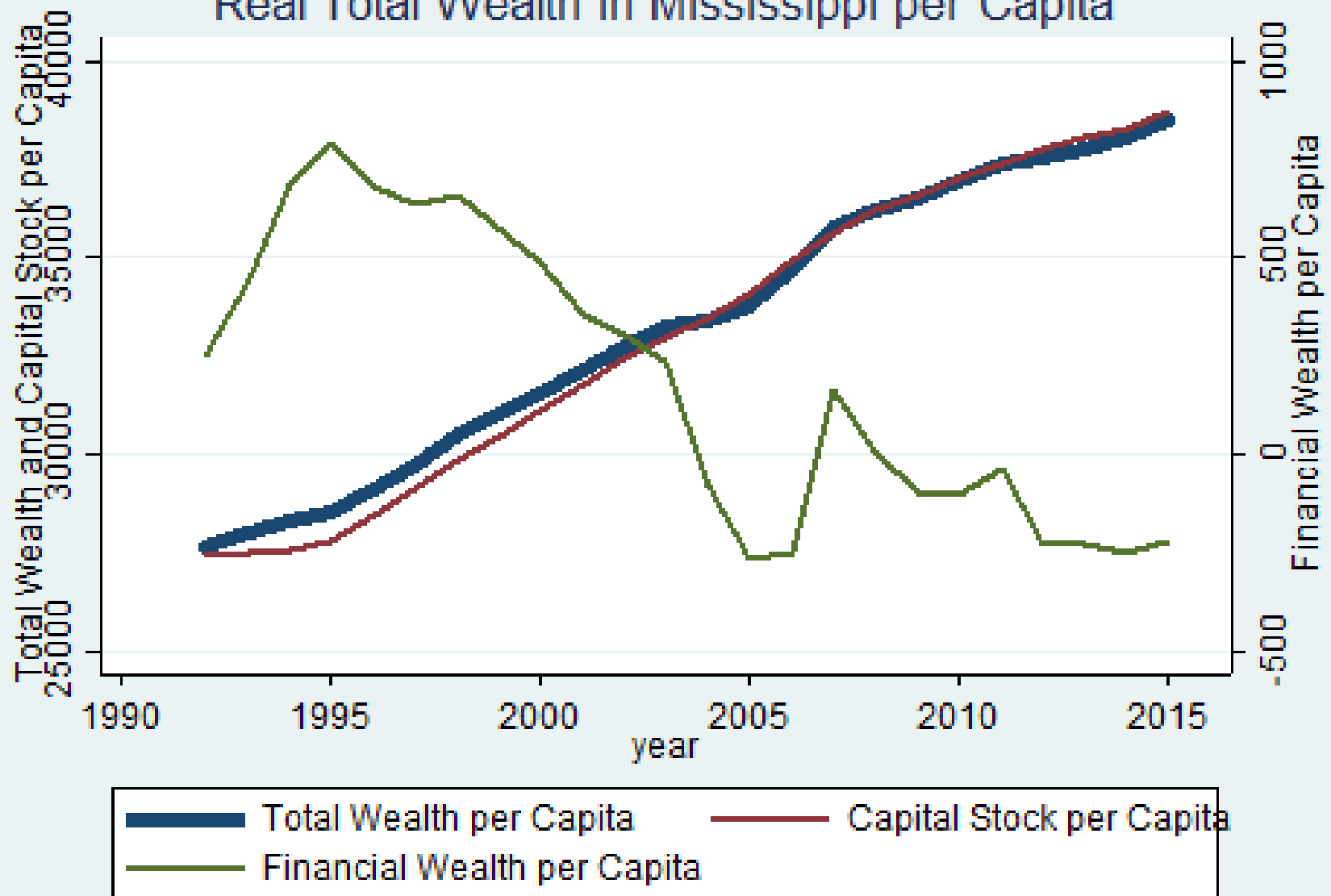
## Real Total Wealth in Maryland per Capita



## Real Total Wealth in Massachusetts per Capita

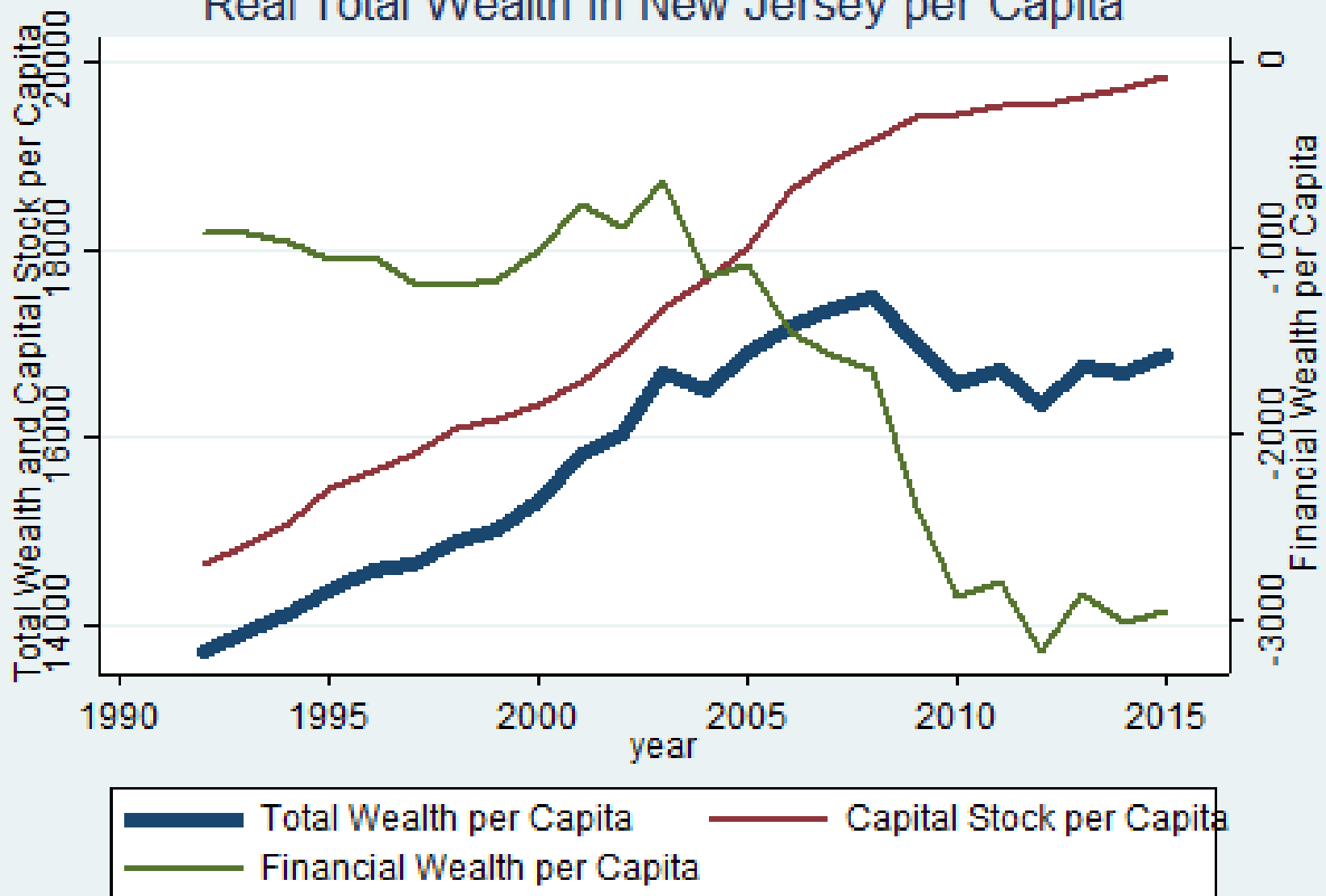


## Real Total Wealth in Mississippi per Capita



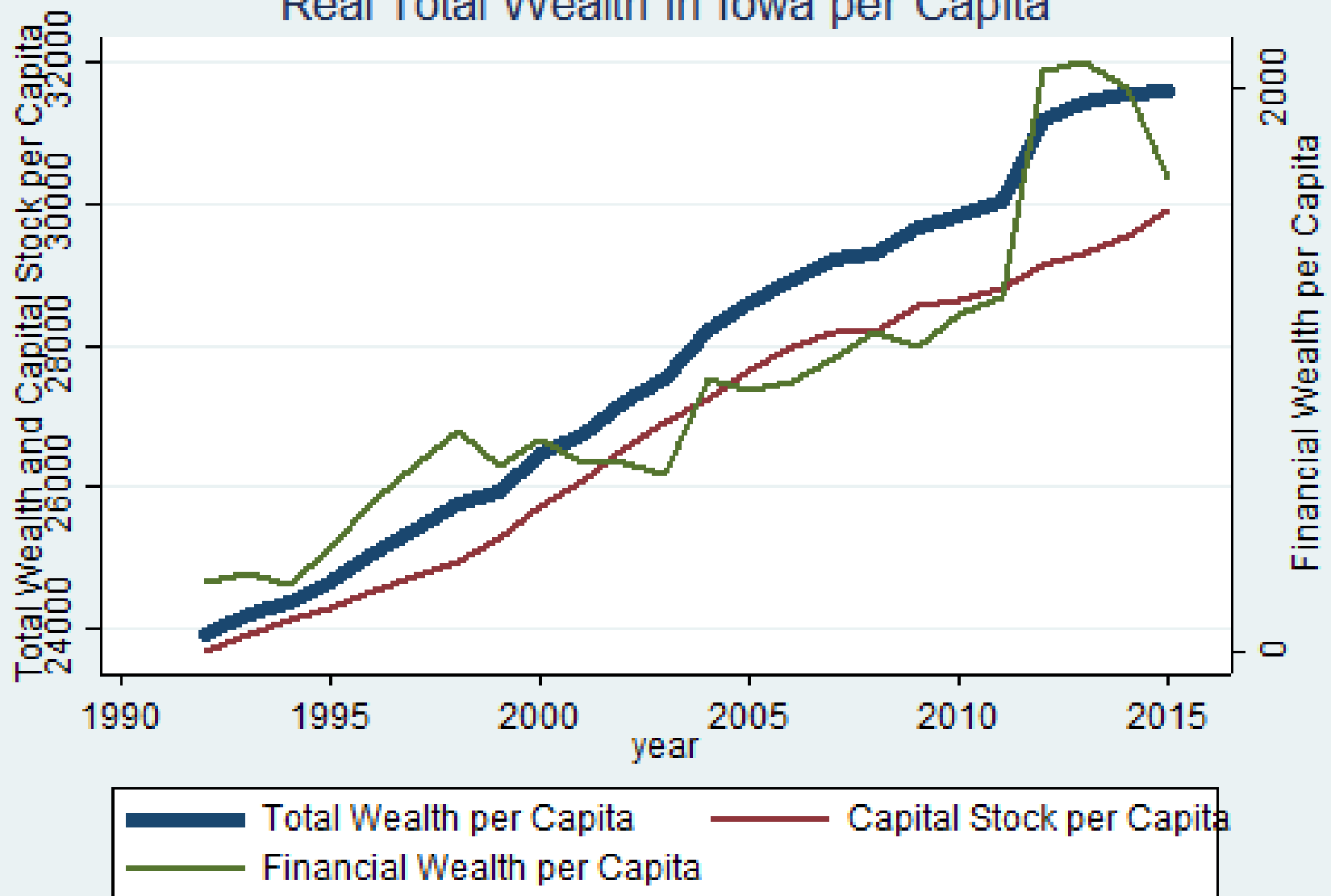


## Real Total Wealth in New Jersey per Capita

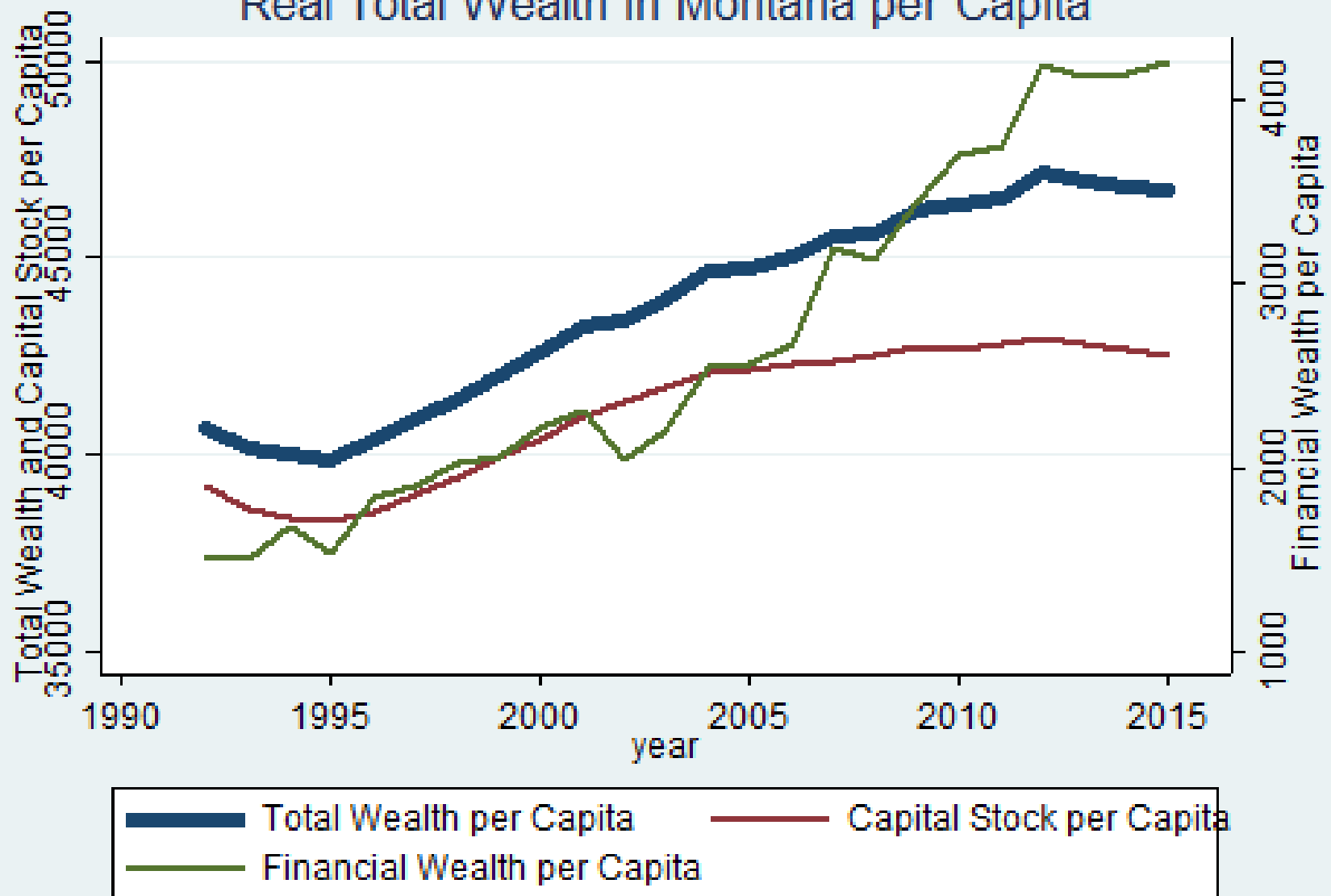


**SAVERS**

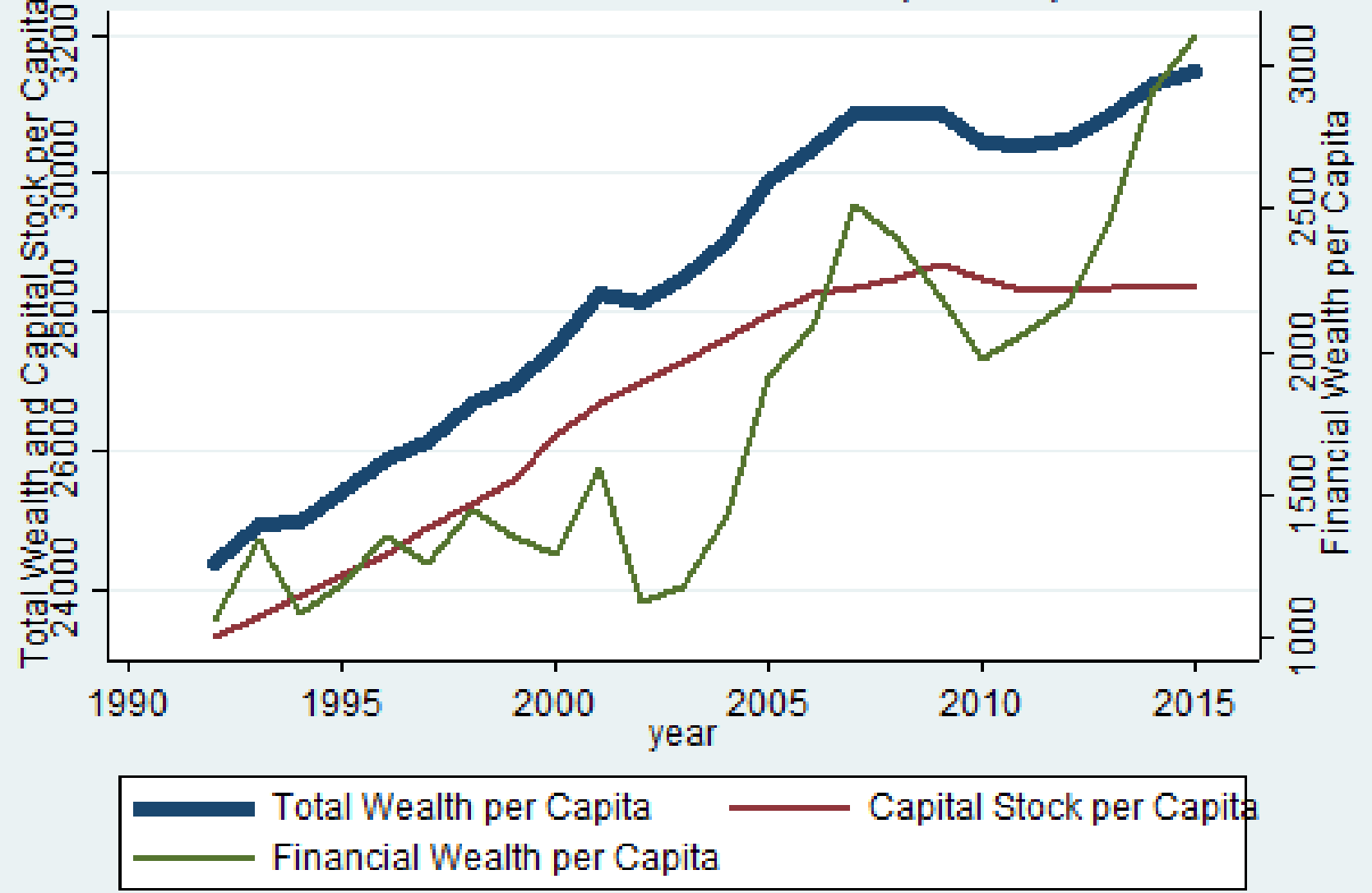
## Real Total Wealth in Iowa per Capita



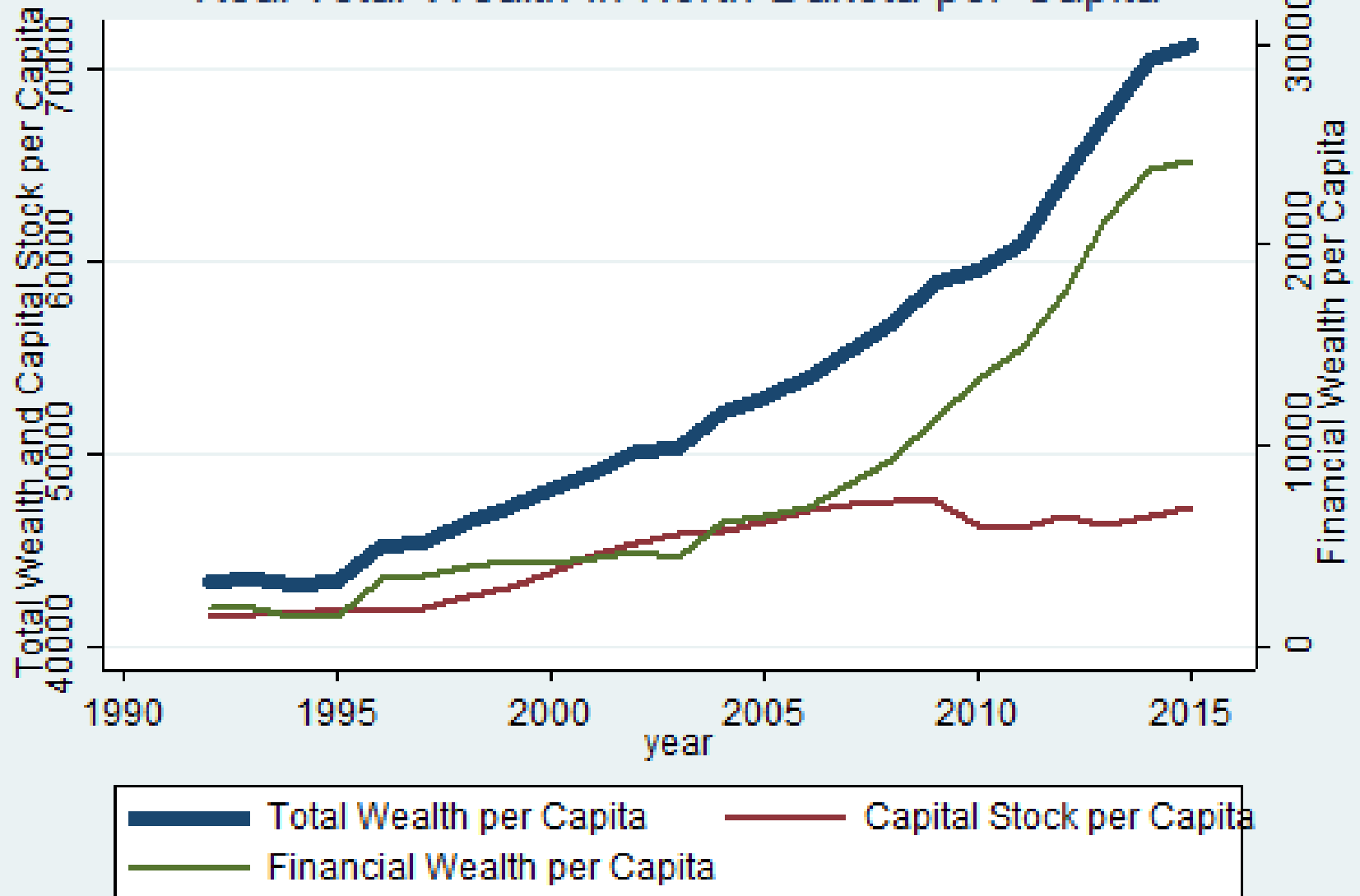
## Real Total Wealth in Montana per Capita



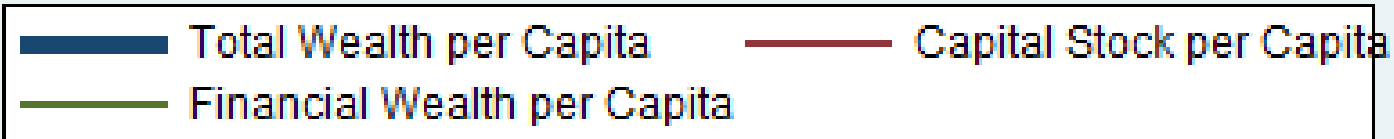
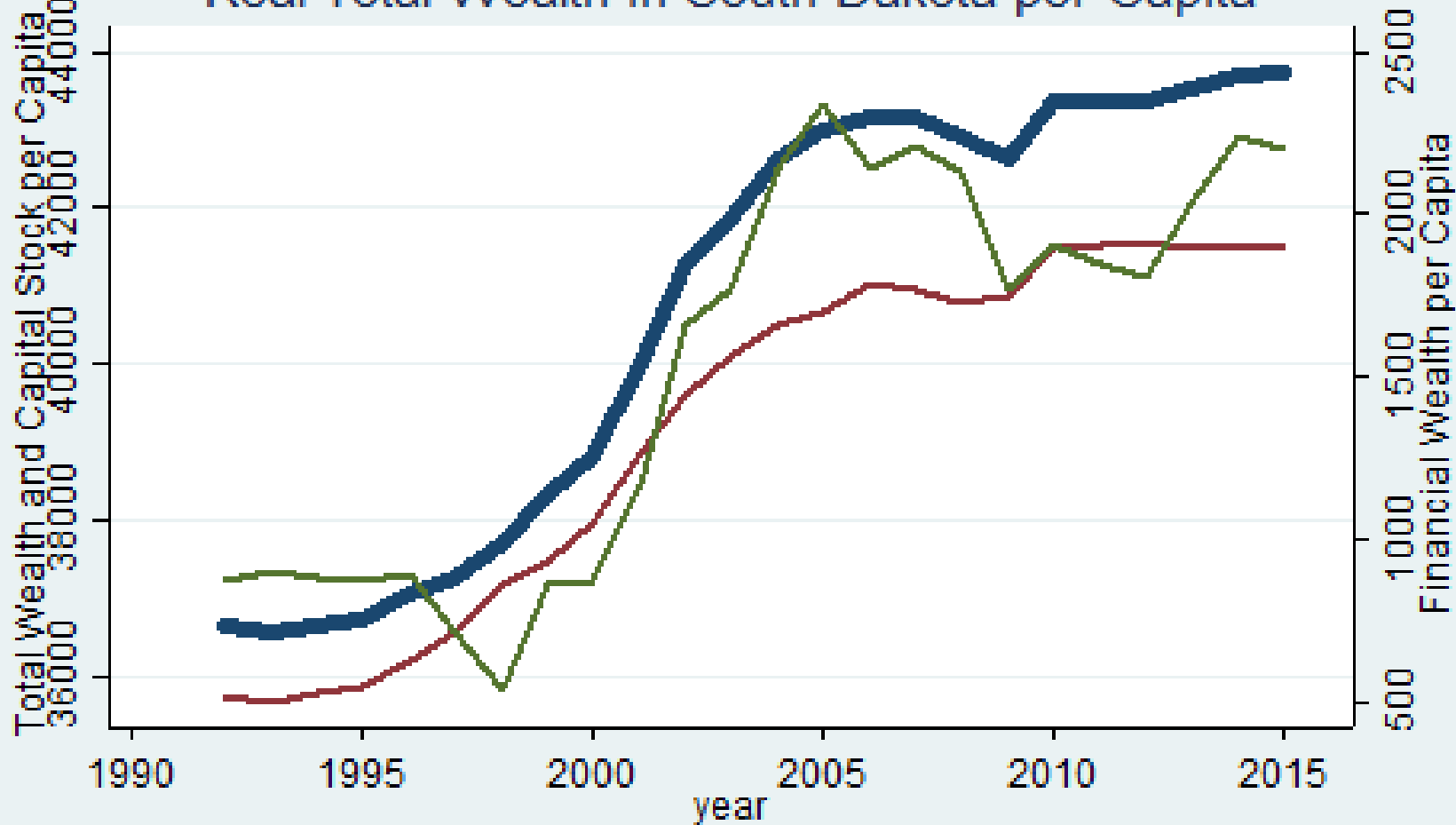
# Real Total Wealth in Nebraska per Capita



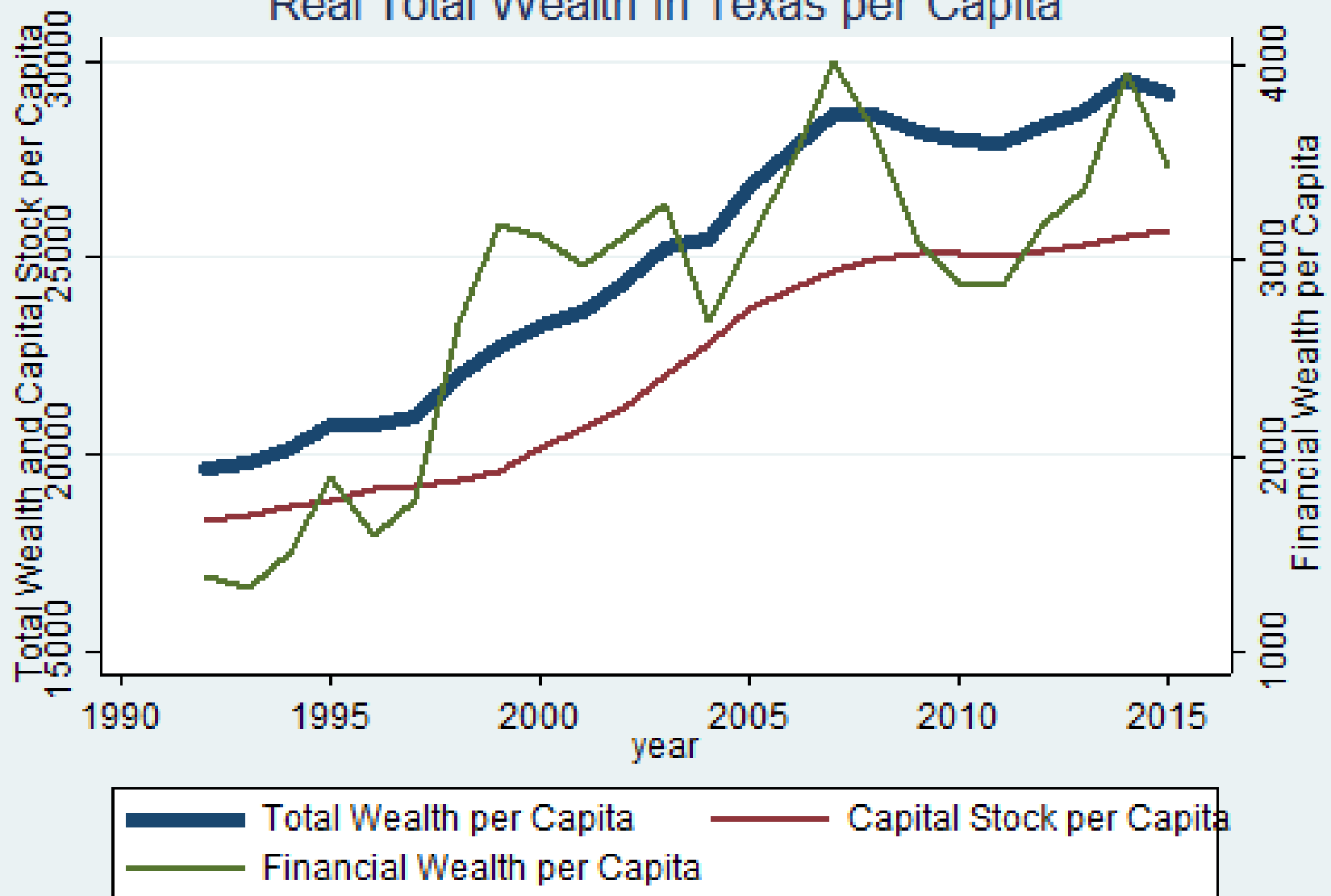
## Real Total Wealth in North Dakota per Capita



## Real Total Wealth in South Dakota per Capita

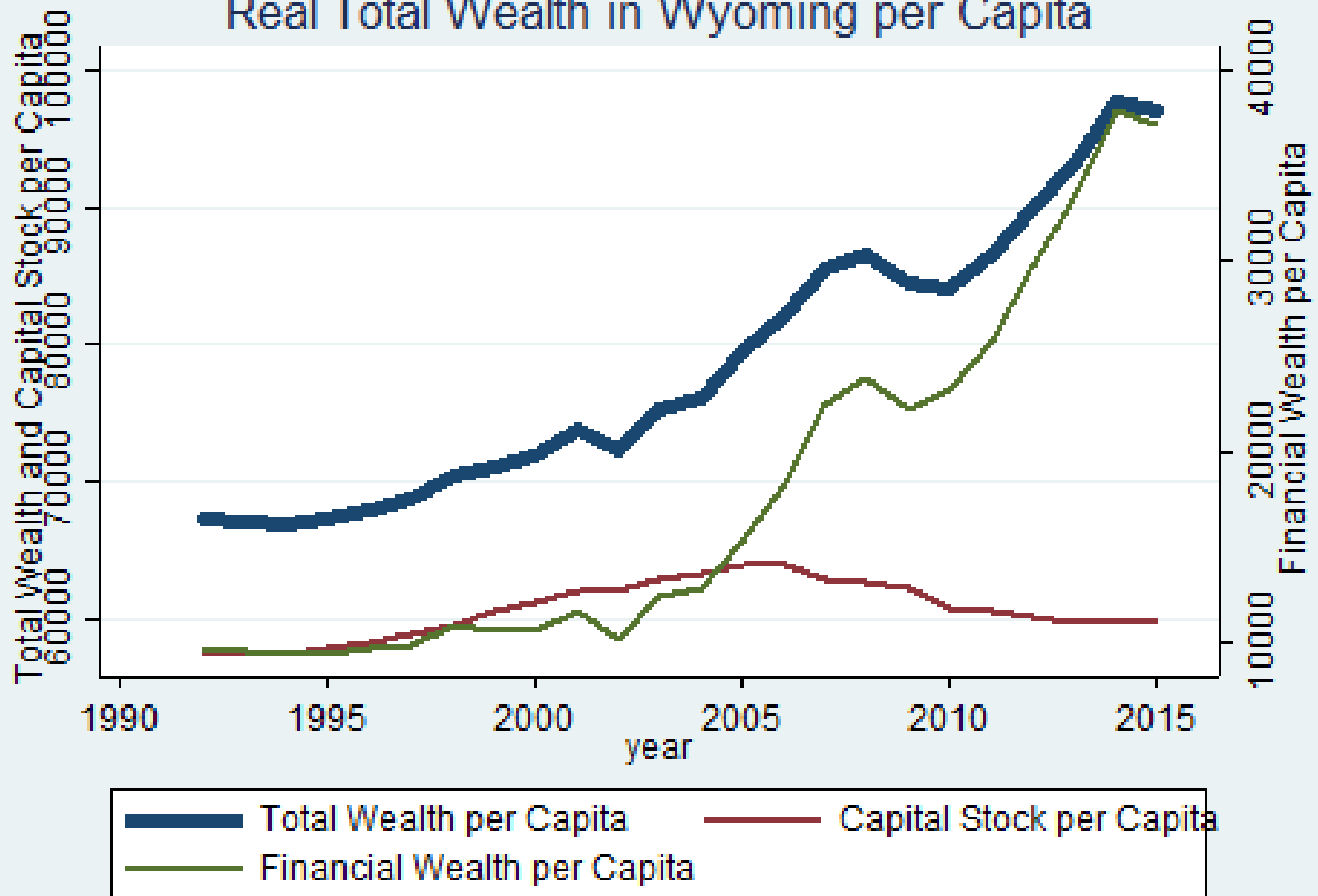


## Real Total Wealth in Texas per Capita





## Real Total Wealth in Wyoming per Capita



# SHOULD WE CARE? THE *CONSEQUENCES* OF FISCAL CRISES

## *DISTRIBUTIONAL CONSEQUENCES*

POTENTIAL WINNERS:

CURRENT TAXPAYERS RECEIVED SERVICES AT SUBSIDIZED “PRICES”

POTENTIAL LOSERS:

- ☞ FUTURE RESIDENT TAXPAYERS WHO NOW MUST COVER THE COSTS  
“AUSTERITY BUDGETS” WITH TAX INCREASES AND SERVICE CUTS
- ☞ BONDHOLDERS WHO ARE NOT FULLY REPAID
- ☞ RETIREES WHO LOSE THEIR SOME OR ALL OF THEIR PENSIONS
- ☞ FUTURE NON-RESIDENT TAXPAYERS IF “BAILOUT”

## ***EFFICIENCY CONSEQUENCES***

### ***STATIC INEFFICIENCY***

☞ SUBSIDIZED LABOR COSTS WITH PENSION UNDERFUNDING

EFFICIENCY LOSS  $\approx$  \$.20 FOR EACH DOLLAR OF LABOR SPENDING

☞ SUBSIDIZED SERVICE COSTS WITH “COMMON POOL” SPENDING

EFFICIENCY LOSS  $\approx$  \$.20 TO \$.40 IN CURRENT ACCOUNTS SPENDING

### ***DYNAMIC INEFFICIENCY***

☞ FISCAL CRISIS, UNEMPLOYMENT, and “AUSTERITY” BUDGETS

16 % DECLINE IN NATIONAL INCOME IN GREECE OVER 9 YEARS

☞ PUBLIC INFRASTRUCTURE AND LOST CONTRIBUTION TO GROWTH

## TO MANAGE DEFICIT FINANCING YOU NEED TO KNOW: *WHY?*

☞ *MOVERS*' MOTIVATION: LEAVE BEFORE DEFICITS ARE DUE

(Young, Renters, Unemployed, and Elderly)

☞ *COOPERATIVE STAYERS*' MOTIVATION:

EFFICIENT "TAX SMOOTHING" DEFICITS

☞ *NON-COOPERATIVE STAYERS*' MOTIVATION: EXTRACT A BAILOUT

(Financial Spillovers, Service Immiseration)

☞ *NON-COOPERATIVE STAYERS*' MOTIVATION: OWN POLITICS

WEAK PARTIES: THE "COMMON POOL"

STRONG PARTIES: CONSTRAIN COMPETITORS

## **KNOWING WHY, *WHAT SHOULD WE DO?***

☞ ***BETTER MARKETS: CREDIBLE INFORMATION OF  $\Delta NPW$  &  $NPW$***

ASSET MARKET CAPITALIZATION

REMOVE THE INCENTIVES FOR BAILOUTS

☞ ***BETTER POLITICS: CREDIBLE INFORMATION OF  $\Delta NPW$  &  $NPW$***

NOVY-MARX & RAUH (*Journal of Finance*, 2011); *STATE BUDGET TASK FORCE*

RATING AGENCIES

☞ ***BETTER REGULATION: CREDIBLE INFORMATION OF  $\Delta NPW$  &  $NPW$***

EX POST

$\Delta NPW$

“OUTSIDE” ENFORCERS

# WHAT'S THE SOLUTION?



## Real Total Wealth in Vermont per Capita

