

**The same speech notes were used for Bucknell University on February 16, 1996, Vanderbilt University on February 21, 1996, and University of Missouri-Columbia on February 29, 1996.**

**Notes for the above speeches are filed in the University of Missouri-Columbia February 29, 1996, speech folder.**

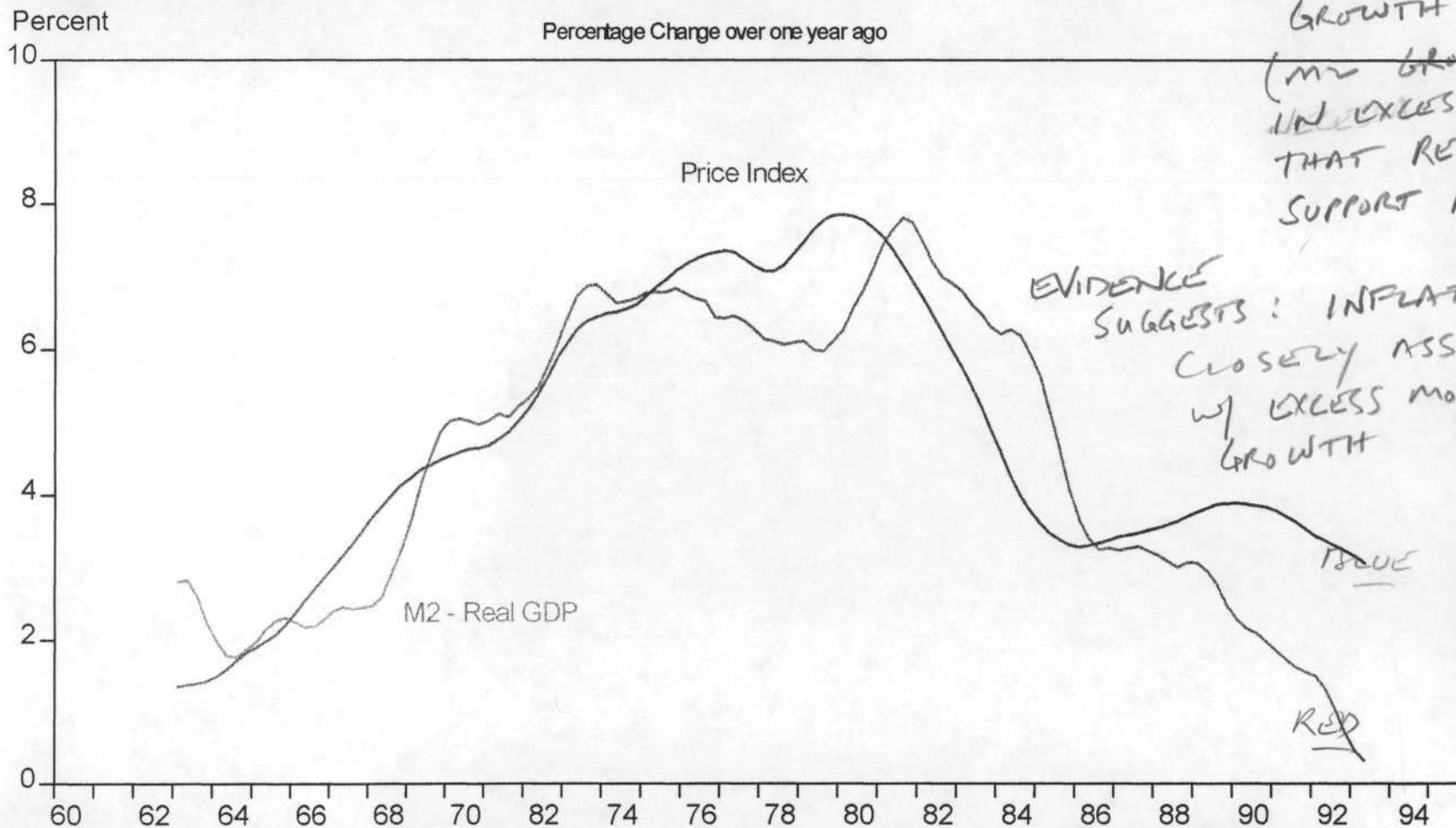
Myth: "Inflation is primarily caused by sudden increases in energy and other raw materials prices, and not by monetary policy."

SOUNDS REASONABLE :

INPUT PRICE GOES UP ; OUTPUT PRICE RAISED TO MAINTAIN PROFITS ; SIMILAR REACTIONS THROUGHOUT SYSTEM ; RESULT - INFLATION

# M2 and Chain-Weighted Price Index Growth Rates

Quarterly Data, Seasonally Adjusted



HOR — YRS  
 VER — PCT GROWTH RATE  
 BL — IMPL GDP DEFLATOR  
 RD — EXCESSIVE MONEY GROWTH

(M2 GROWTH IN EXCESS OF THAT REQ'D TO SUPPORT REAL GDP)

EVIDENCE SUGGESTS: INFLATION CLOSELY ASSOCIATED W/ EXCESS MONEY GROWTH

BOOM  
RECY

AS MONEY GROWTH ROSE IN 60'S + 70'S, INFLATION ACCELER.  
 AS MONEY GROWTH FELL IN 80'S + 90'S, INFLATION DECELER.

Reality: "Over time, excessive money supply growth is the fundamental cause of inflation."

INFLATION IS EVERYWHERE AND ALWAYS A MONETARY PHENOMENON

INDEED, PRICE SHOCKS OCCUR WHICH HAVE SHORT-TERM IMPACT ON GENERAL PRICE LEVEL

BUT INFLATION CANNOT BE SUSTAINED OVER TIME UNLESS ACCOMMODATED BY MONEY GROWTH

(OIL PRICE SHOCKS IN 70's)

REMINDS ABOUT LINKAGE BETWEEN MONETARY POLICY ACTIONS AND MONEY GROWTH, MONEY GROWTH AND INFLATION

Myth: "The Fed is too concerned with inflation, and not concerned enough about unemployment or real growth."

LOGICAL OUTGROWTH OF FED'S LEGISLATED OBJECTIVES:

- STABLE PRICES
- LOW UNEMPLOYMENT
- MAX. SUSTAIN. GROWTH

PERCEIVED TRADEOFF BETWEEN PRICE STABILITY AND UNEMPL, GROWTH

CERTAINLY CANNOT PURSUE RESTRICTIVE POLICY AIMED AT PRICE STABILITY AND BE ENCOURAGING LOW UNEMPL, MAX SUSTAIN GROWTH

IN FACT, RIGHT NOW FED IS BEING ACCUSED OF FIGHTING A NONEXISTENT INFLATION AT EXPENSE OF UNEMPL, GROWTH

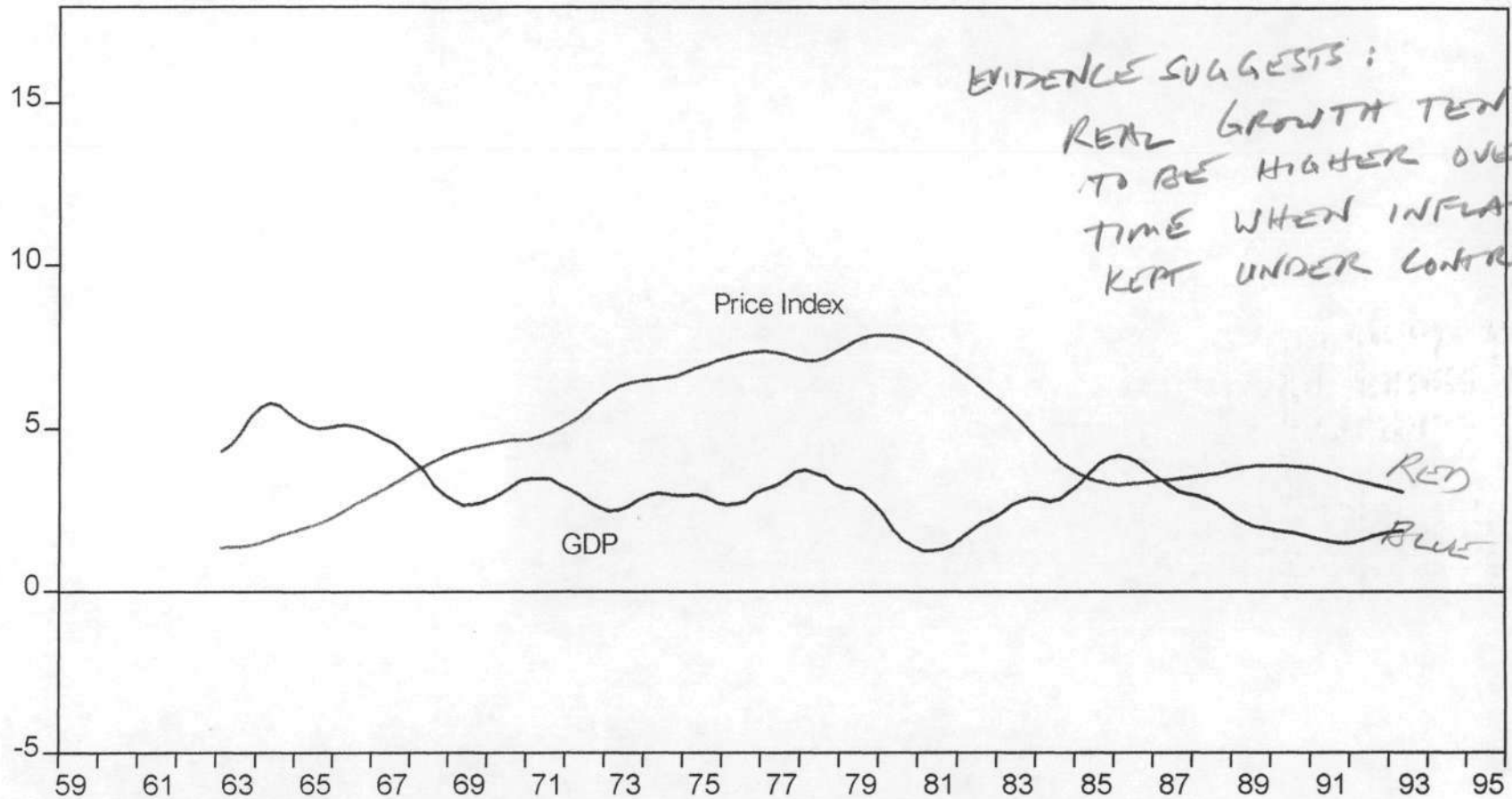
# Chain-Weighted GDP and Price Index Growth Rates

Quarterly Data, Seasonally Adjusted

Percent

Percentage Change over one year ago

HOR - YRS  
 VER - PCT GROWTH RATE  
 BL - REAL GDP DEFLATOR  
 RED - IMPL. GDP DEFLATOR



EVIDENCE SUGGESTS:  
 REAL GROWTH TENDS  
 TO BE HIGHER OVER  
 TIME WHEN INFLATION  
 KEPT UNDER CONTROL

AS INFLATION ROSE IN  
 60'S + 70'S, REAL GROWTH  
 DECLINED

AS INFLATION FELL IN  
 80'S, REAL GROWTH ROSE

L

Reality: "The Fed can best support full employment and maximum sustainable growth by pursuing price stability."

KEY INSIGHT: KNOW FED CAN CONTROL INFLATION THROUGH ITS INFLUENCE ON MONEY SUPPLY OVER TIME  
ALSO KNOW LOWER INFLATION GENERALLY ASSOC W/ HIGHER GROWTH  
ONE WAY FED CAN MEET ITS SEVERAL OBJECTIVES IS BY PURSUING PRICE STABILITY

IN FACT, ONLY WAY: REAL GROWTH DETERMINED BY REAL RESOURCES AND PRODUCTIVITY, NEITHER OF WHICH FED CAN DIRECTLY AFFECT

ASIDE: WHY IS HIGHER INFL ASSOC. W/ LOWER GROWTH?  
DISTORTS PRICE SIGNALS (E.G., BUILDER)  
ADDS TO UNCERTAINTY (E.G., LONG-TERM RATES)

THIS IMPINGES ON SMOOTH FUNCTIONING OF MARKETS. EFFIC USE OF RESOURCES

Myth: "The Fed can reduce unemployment in the short-run by accepting a higher rate of inflation."

EVEN IF NO LONG-TERM TRADEOFF BETWEEN INFLATION AND GROWTH, MAY BE ABLE TO TAKE ADVAN. OF SHORT-TERM TRADEOFF (i.e., IF MONETARY STIMULUS INITIALLY REFLECTED IN HIGHER OUTPUT)

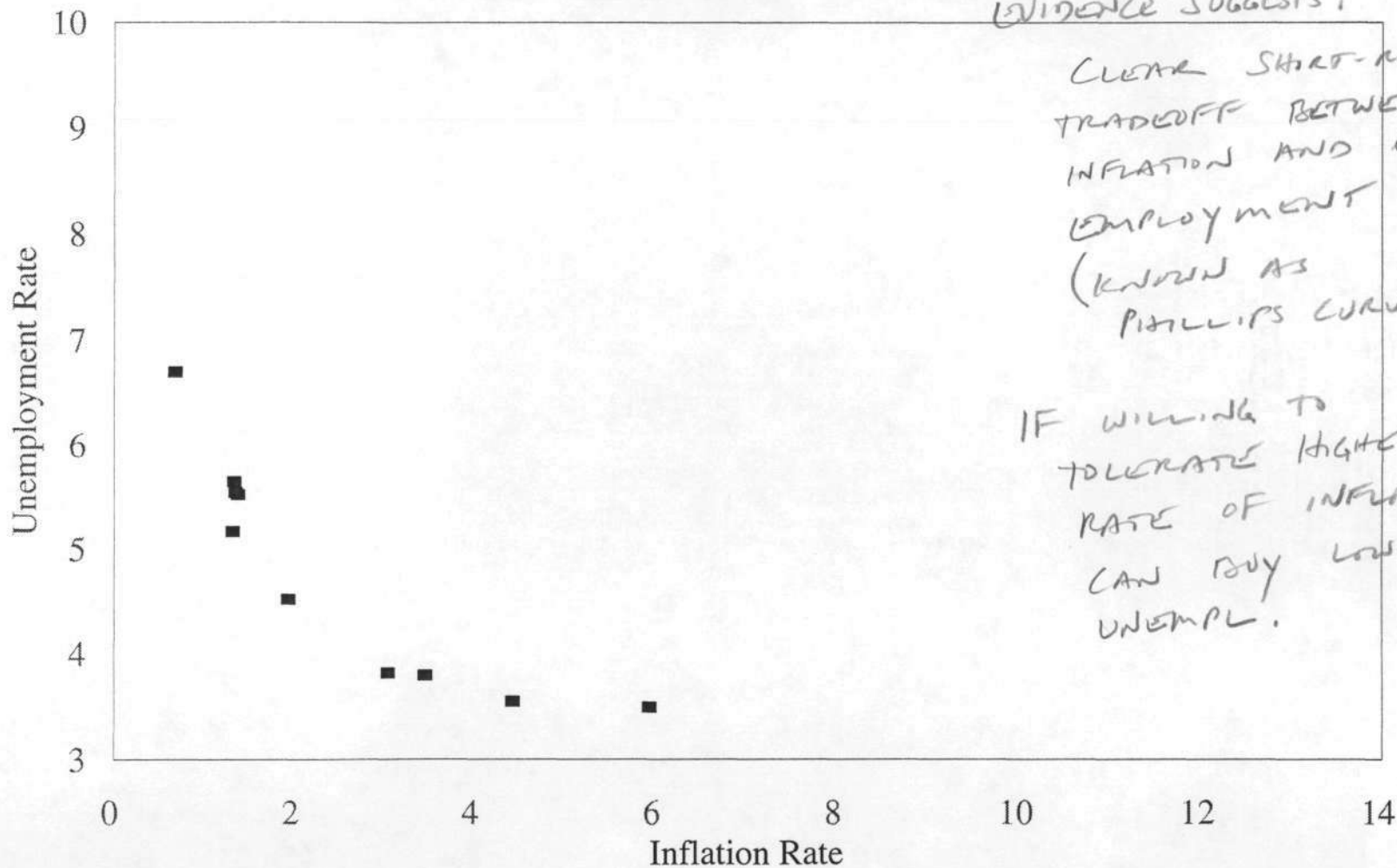
TEMPTING IN CURRENT CIRCUMSTANCES: INFL. APPARENTLY UNDER CONTROL, AND SIGNS ON REAL ECON MIXED  
SO WHY NOT RUN SOME INFLATION RISK AND BUY SOME REAL GROWTH, EVEN IF ONLY TEMPORARY?



# Inflation/Unemployment Tradeoff

1960s

IR - INFL RATE  
UER - UNEMPL RATE  
SQS - EA REPRESENTS  
AYR IN '60'S



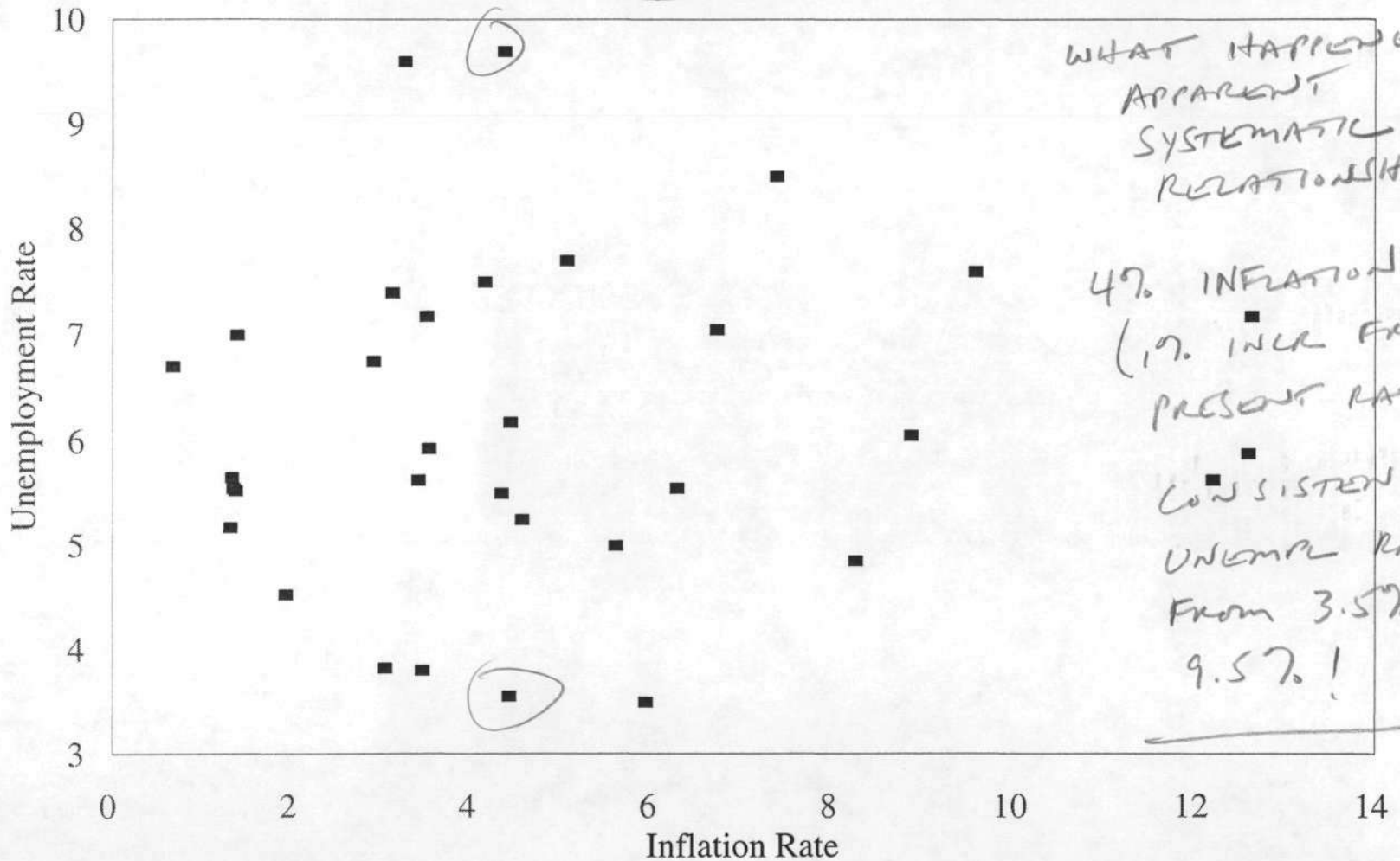
EVIDENCE SUGGESTS:

CLEAR SHORT-RUN  
TRADEOFF BETWEEN  
INFLATION AND ON  
EMPLOYMENT  
(KNOWN AS  
PHILLIPS CURVE)

IF WILLING TO  
TOLERATE HIGHER  
RATE OF INFLATION,  
CAN BUY LOWER  
UNEMPL.

# Inflation/Unemployment Tradeoff

1960-1992



ADD 70's, 80's + 90's  
AXES: SAME  
SAS: SAME

WHAT HAPPENED TO APPARENT SYSTEMATIC RELATIONSHIP?

4% INFLATION (1% INCR FROM PRESENT RATE)  
CONSISTENT W/ UNEMPL RANKING FROM 3.5% TO 9.5%!

Reality: "There is no persistent trade-off between unemployment and inflation."

SURPRISE BURST OF INFLATION MIGHT TEMPORARILY RAISE OUTPUT AND LOWER UNEMPL.

BECAUSE OF UNCERTAINTY SURROUNDING INCR IN PRICES (CF, BUILDER EXAMPLE) GENERAL

ONCE REALIZE PRICE LEVEL HAS RISEN, IMPACT VANISHES - HAVEN'T INCR

(EASIER TO FOOL PEOPLE IN 60'S)

REAL RESOURCES OR PRODUCT.

DESPITE LACK OF TRADEOFF, MANY (INCL. SOME POLICYMAKERS) STILL ADVOCATE SHORT-TERM FINE TUNING

# Myth: "The Fed controls interest rates."

ONE OF MOST COMMON

AFTER MOST RECENT MTG IN LATE JAN, HOW MANY HEARD OR READ STATEMENT, "THE FED LOWERED INT. RATES TODAY?"

FED DOES DIRECTLY INFLUENCE ONE MARKET RATE - FED FUNDS RATE

(DEFINE)

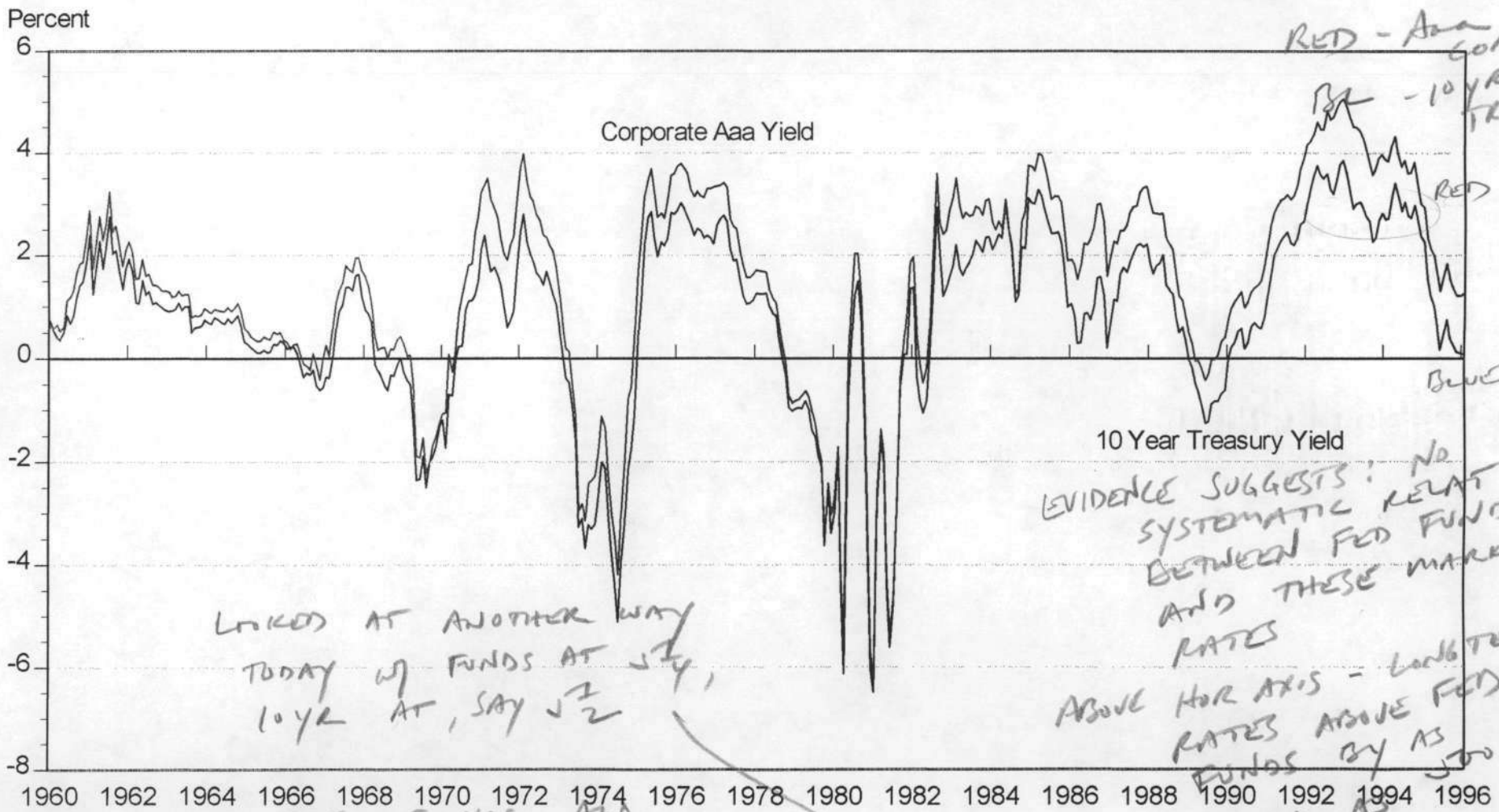
HERE WE HAVE RELAT.  
BETWEEN THE LONG-TERM  
MARKET RATES AND  
FED FUNDS RATE

# Differences Between Market Yields and the Federal Funds Rate

January 1960 - January 1996

HOR - YES  
VER - PLT  
YIELD  
DIFFER

RED - AAA  
CORP  
10 YR  
TREAS



LOOKED AT ANOTHER WAY  
TODAY W/ FUNDS AT 5 1/4,  
10 YR AT, SAY 5 1/2

EVIDENCE SUGGESTS: NO  
SYSTEMATIC RELAT  
BETWEEN FED FUNDS  
AND THESE MARKET  
RATES

ABOVE HOR AXIS - LONG TERM  
RATES ABOVE FED  
FUNDS BY AS  
MUCH AS  
5 TO 8 P

COUPLE OF YRS AGO  
W/ FUNDS RATE AT  
ABOUT SAME LEVEL,  
10 YR ALMOST 8%

BELOW - OPPOSITE

Reality: "The Fed has considerable short-run impact on the federal funds rate, but little direct influence on other market interest rates."

INTEREST RATES SET BY MARKET FORCES OF SUPPLY AND DEMAND INCLUDE PREMIUM TO ACCOUNT FOR FUTURE INFLATION EXPECT. AND UNCERTAINTY ABOUT THAT EST. PREMIUM CAN BE QUOTE LARGE IN LONGER-TERM RATES

# Myth: "The Fed's anti-inflation policy keeps interest rates high."

FOLLOWS FROM PREVIOUS MYTH

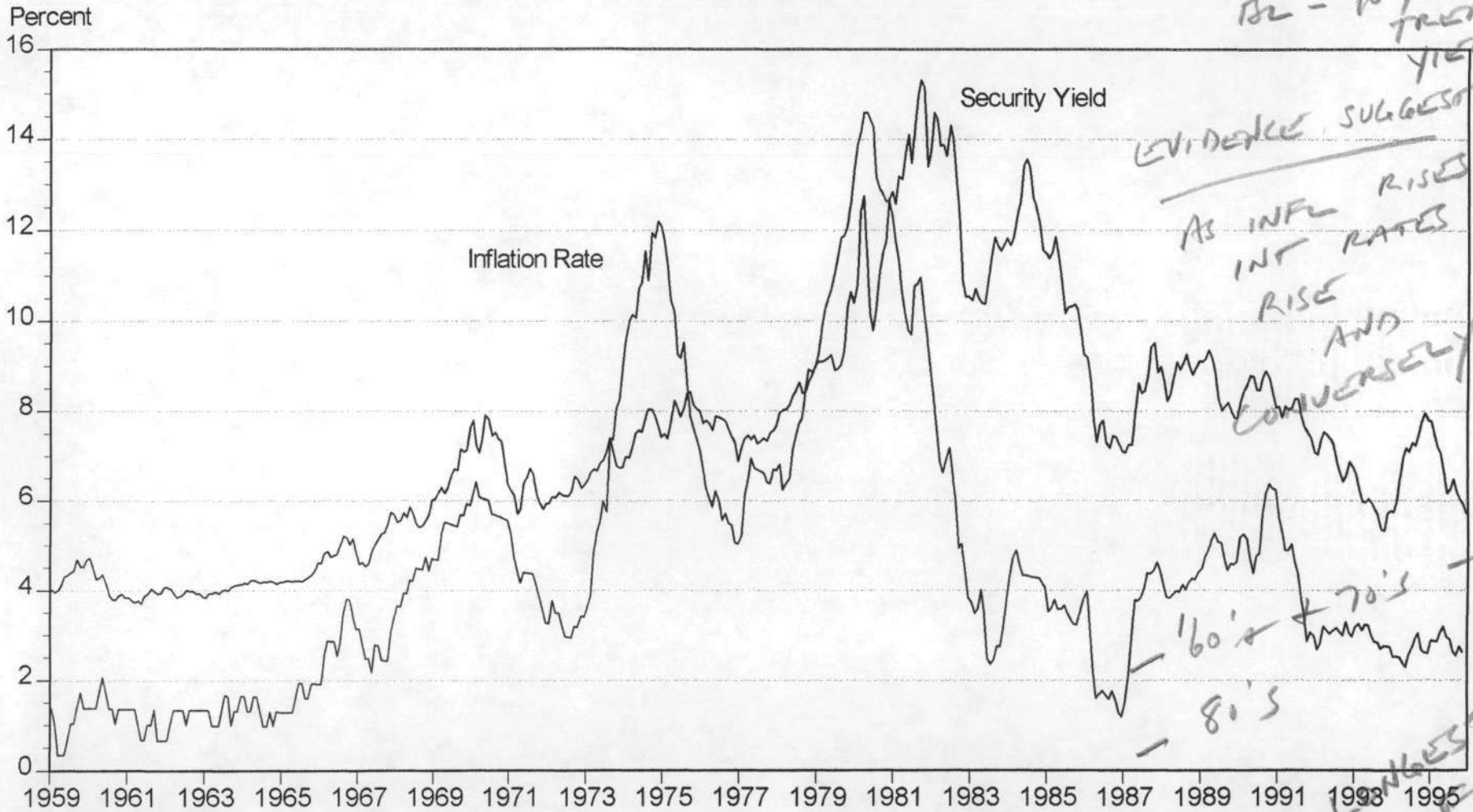
IF RESTRICTING RESERVE AVAILABILITY TO CONTAIN INFL PRESSURES OR REDUCE INFL., FED FUNDS RATE MIGHT RISE

THIS, SO THE STORY GOES, CAUSES ALL INT RATES TO RISE

# Ten Year Government Security Yield and Year-Over-Year CPI Inflation

January 1959 - December 1995

10YR - YRS  
 YER - PERCENT  
 RD - INFL RATE  
 10YR TRENDS YIELD



EVIDENCE SUGGESTS:  
 AS INFL RISES,  
 INT RATES  
 RISE  
 AND  
 CONVERSELY

60's + 70's  
 80's  
 BWE  
 RED

LOWEST 10YR  
 TRENDS  
 SINCE  
 LATE 60's  
 90's LONGEST  
 PERIOD OF LOW,  
 RELATIVELY  
 STABLE INFL  
 SINCE LATE  
 70's / EARLY  
 80's



Reality: "Interest rates are generally  
lower when inflation is low."

*SMALLER INFLATION PREMIUM*

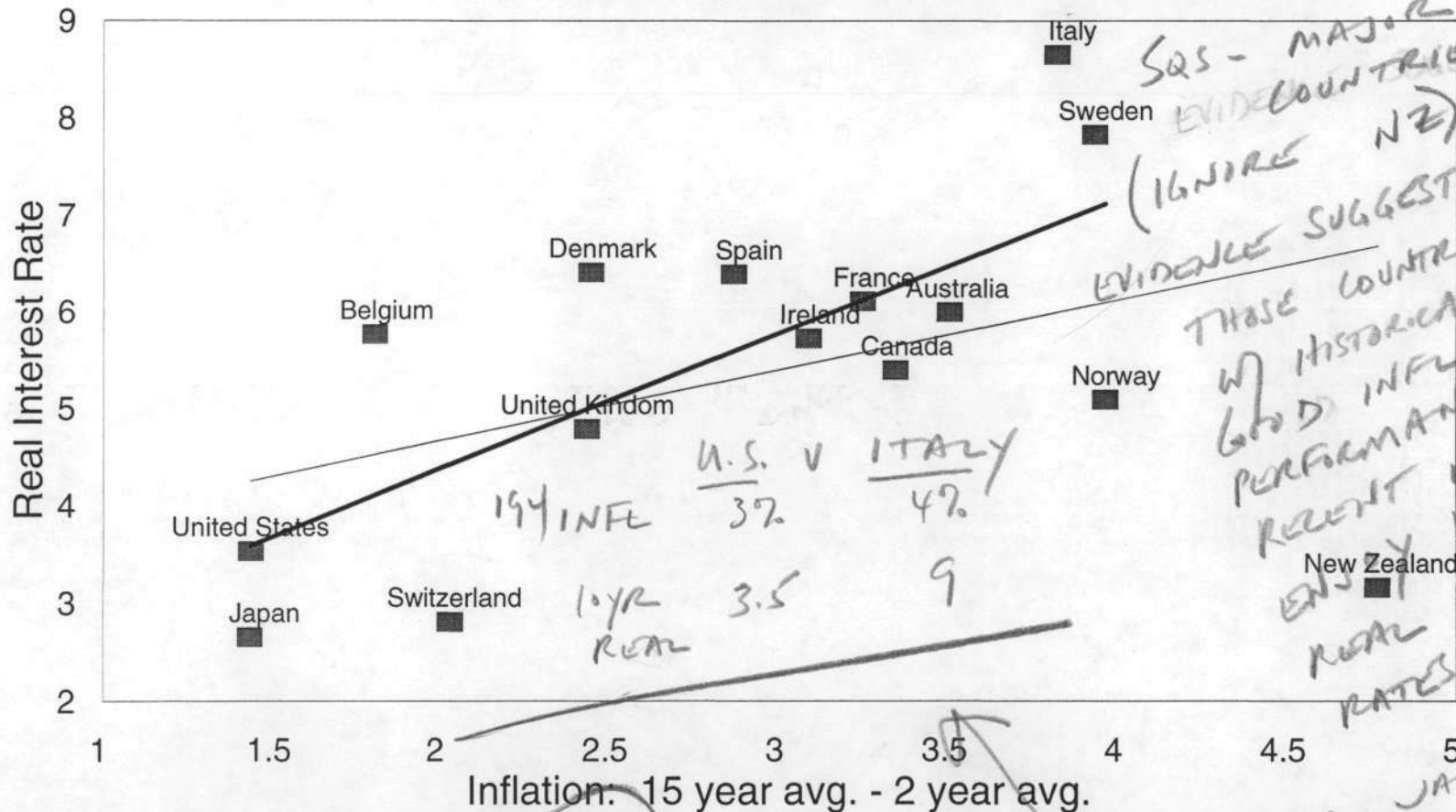
Myth: "Once controlled, inflation has no lasting consequences."

SO WHAT IF ENGAGE IN  
SHORT RUN FINE TUNING  
AND INFLATION MOVES  
HIGHER?

SIMPLY BRING BACK DOWN  
LATER

CENTRAL BANKERS ARE  
UNNECESSARILY PREOCCUPIED  
W/ INFLATION

# Inflation Performance and Real Interest Rates



RELAT. BETWEEN INFL PERFORM + REAL INT RATES  
 HOR - DIFFERENCE BETWEEN TREND INFL AND RECENT INFL IN PCT PTS  
 VER - REAL 10YR INT RATES FOR 1994

SQS - MAJOR IND EVIDENCE COUNTRIES (IGNORE NZ)  
 EVIDENCE SUGGESTS: THOSE COUNTRIES W/ HISTORICALLY GOOD INFL PERFORMANCE (LITTLE RECENT IMPR) ENJOY LOWER REAL INT RATES

NZ

— New Zealand included — New Zealand omitted

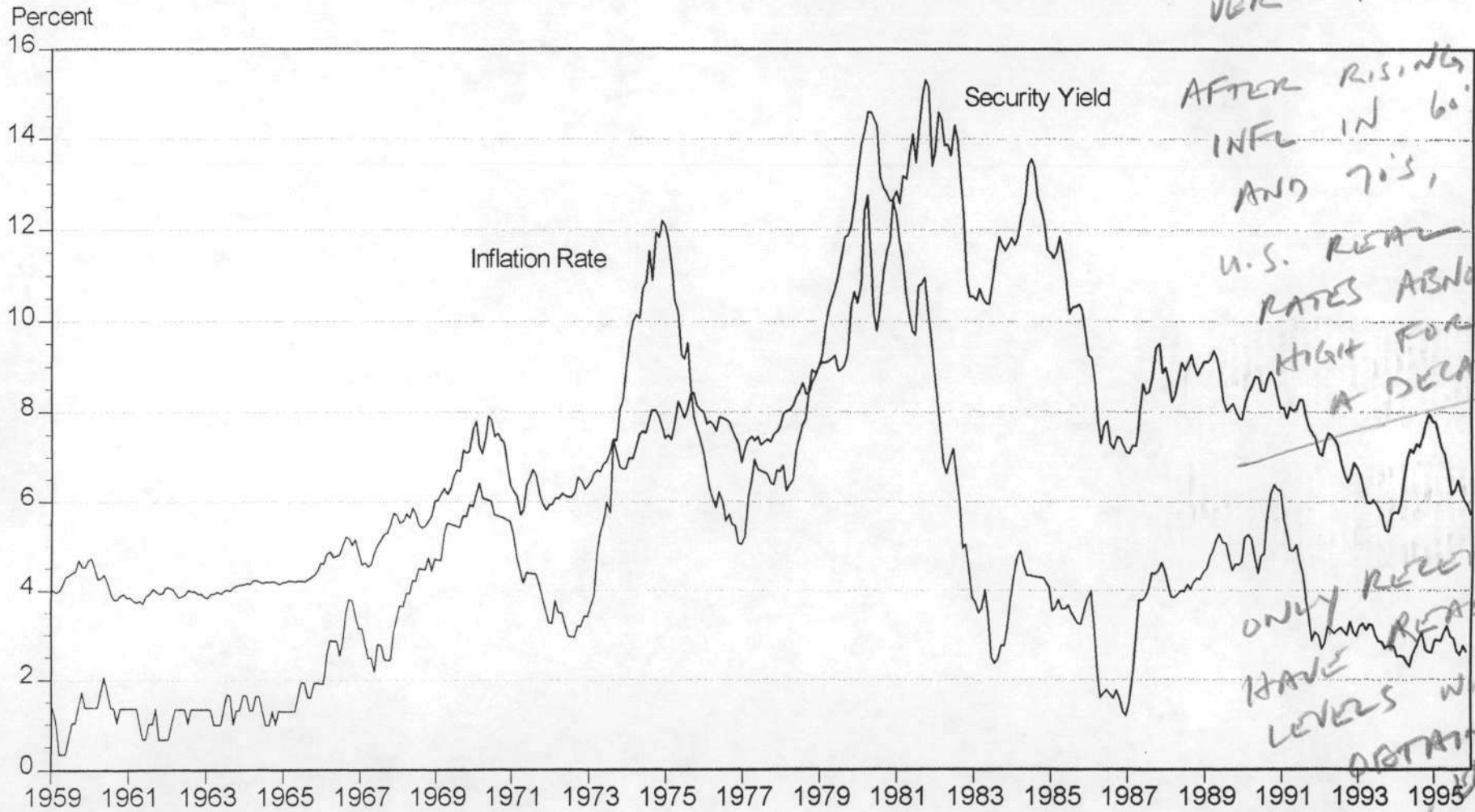
U.S., JAPAN, SWITZ v. ITALY, SWEDEN, AUST.

# Ten Year Government Security Yield and Year-Over-Year CPI Inflation

January 1959 - December 1995

SAW EARLIER

HR - YRS  
 VER - PERCENT



AFTER RISING  
 INFL IN 60'S  
 AND 70'S,  
 U.S. REAL  
 RATES ABNORM  
 HIGH FOR  
 A DECADE

ONLY RECENTLY  
 HAVE REAL RATES  
 LEVELS OBTAINED  
 IN 60'S

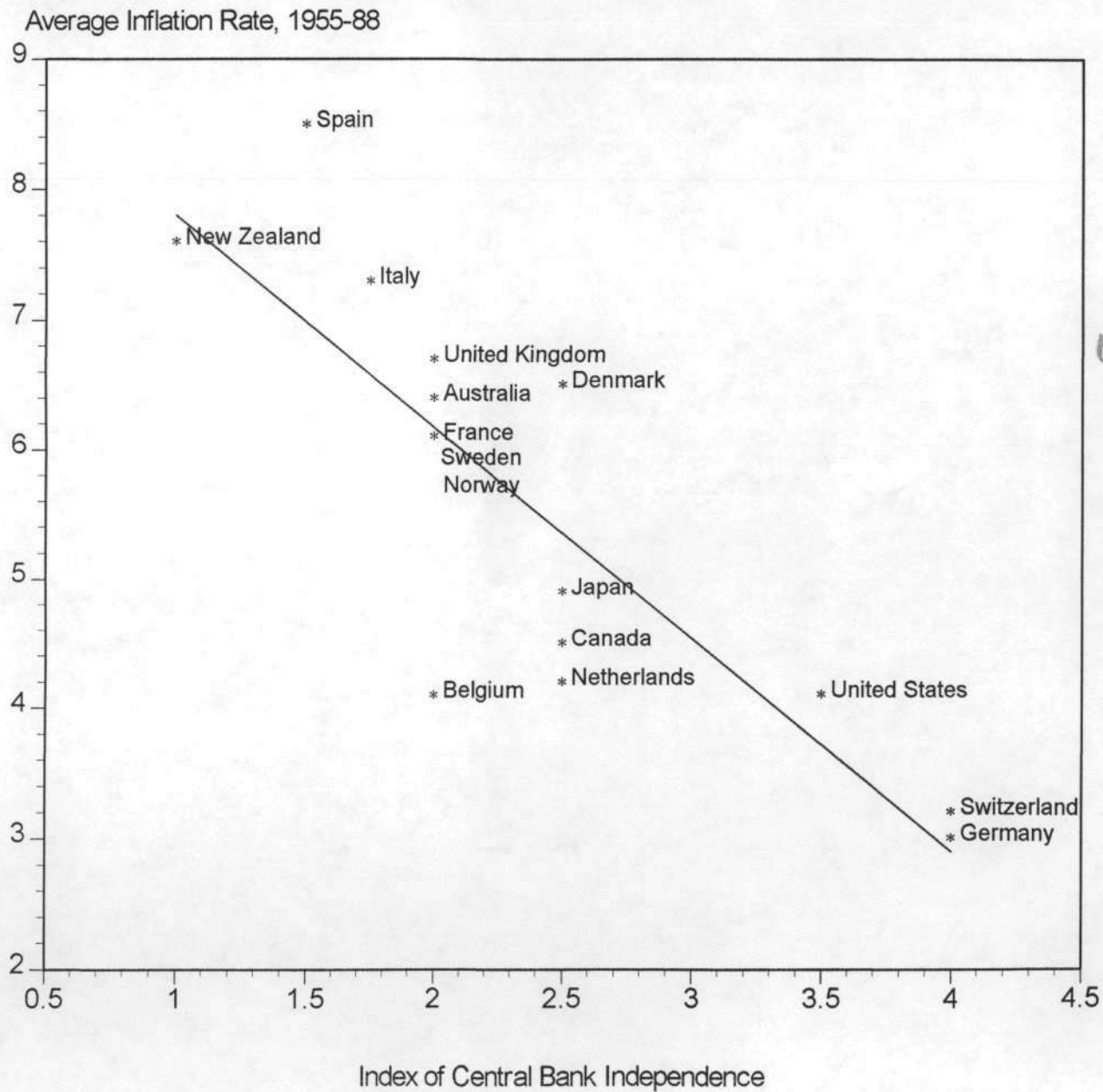
Reality: “Once lost, it takes time to regain the credibility of an anti-inflation monetary policy. The mere possibility of higher inflation can raise the real cost of borrowing.”

ENOUGH SAID!

Myth: "The Fed has too much independence."

FED CRITICIZED FOR BEING TOO INDEPENDENT - "ELECTED OFFICIALS SHOULD HAVE MORE CONTROL"

# Inflation and Central Bank Independence



Hor: INDEX OF INDEPENDENCE FROM AMERICA / SUMMERS  
 VER: AVG INFL RATE 1955-88

EVIDENCE SUGGESTS:  
 THOSE COUNTRIES  
 W/ MOST INDEPENDENT  
 CENTRAL BANKS  
 HAVE LOWEST  
 TREND INFL  
 RATES  
 (ALSO BEST CREDIBILITY)

22

Reality: "Inflation is lower in countries  
with independent central banks."

REMEMBER: LOWER INFLATION  
ASSOCIATED W/ HIGHER REAL  
GROWTH



Myth: "The Fed should be more accountable for its actions."

FOLLOWS FROM PREVIOUS MYTH

TOO INDEPENDENT -- NEEDS TO BE HELD MORE ACCOUNTABLE

USED AS AN EXCUSE TO PUT SHORT-TERM POLITICAL PRESSURE ON FED, INTERFERE W/ DECISION. PROCESS (E.G., HEARINGS IN EARLY 90'S)

Reality: "The Fed should be more accountable for its actions."

REALITY IS, I AGREE!

WAY TO ACHIEVE IS BY GIVING FED CLEAR, ACTION. OBJECTIVE AND THEN JUDGE PERFORMANCE AGST

(COMPARE TO EMPLOYER/EMPLOYEE RELAT)

BUT PROBLEM W/ CURRENT OBJECT - HOLD ACCOUNT FOR THINGS CANNOT DIRECTLY INFLUENCE

ONLY OBJECT THAT MAKES SENSE IS PRICE STABILITY OBJECT (MACK PILL)

A politically-independent central bank, with a clear mandate to focus on price stability as its sole objective, will produce the monetary policy that can best promote full employment output growth.