



INSTITUTE OF
INTERNATIONAL
MONETARY RESEARCH

Analysis and insight into trends in money and banking,
and their impact on the world's leading economies

Putting the coronavirus pandemic in a long-run macroeconomic context

July 2020 presentation

by Professor Tim Congdon CBE,

*Chairman of the Institute of International Monetary Research
at the University of Buckingham*

WORLD ECONOMICS JOURNAL

- ‘Will the Current Money Growth Acceleration Increase Inflation?: An Analysis of the US Situation’

by Tim Congdon CBE

“The coronavirus pandemic has not only come as a profound shock to the major economies, but also exposed tensions between leading schools of thought. Uncertainty has arisen about the medium-term...”



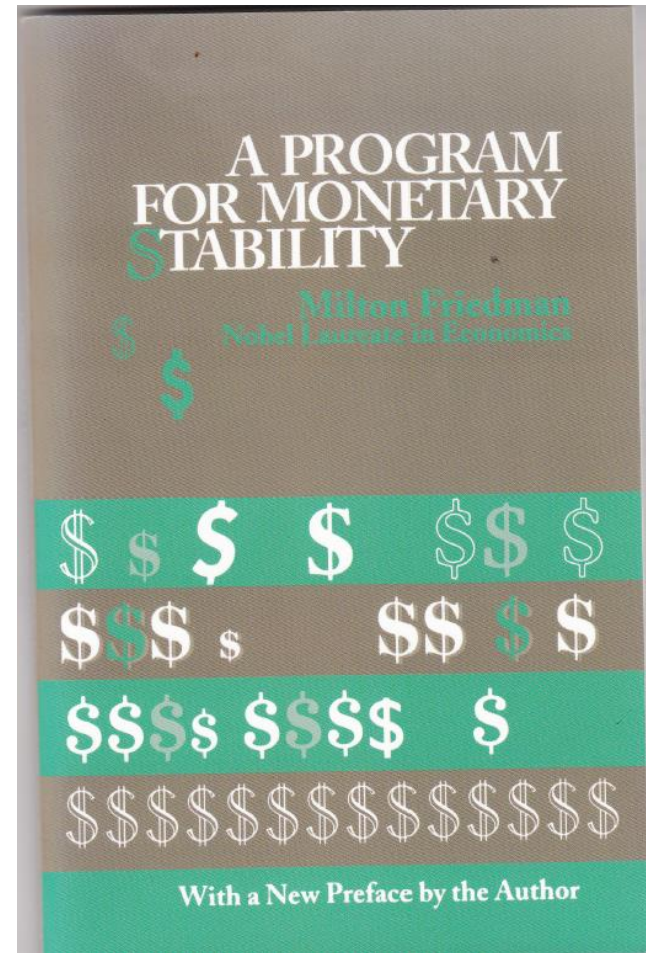
<https://www.world-economics-journal.com/>

Milton Friedman on monetary stability

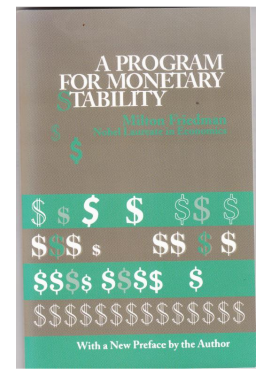
- Friedman believed in the monetary theory of the determination of national income and the price level. More specifically, he believed,
 - that in the long run the rates of change of nominal national income (or GDP) and of the quantity of money were similar, and
 - that changes in the velocity of money were small compared to either the changes in the quantity of money or nominal national income.



Friedman's policy ideas were set out in his 1959 Millar lectures, which became the 1960 book *A Program for Monetary Stability*



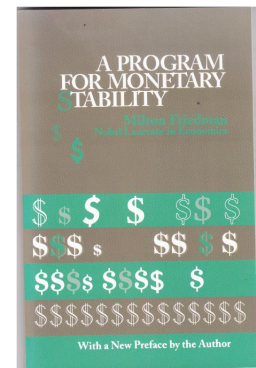
Milton Friedman on monetary stability: quotations
from 1960 *A Program for Monetary Stability*, based on
1959 Millar lectures at Fordham University



- His preferred rule was that, ‘...the stock of money be increased at a fixed rate year-in and year-out without any variation in the rate of increase to meet cyclical needs’. (p. 90)
- The notion of the stock of money is not self-evident. ‘In our own research we have found that the most useful concept to be one that includes currency held by the public plus adjusted demand deposits *plus time deposits* in commercial banks...’. (p. 90) Friedman favoured broad money.

Milton Friedman on monetary stability:

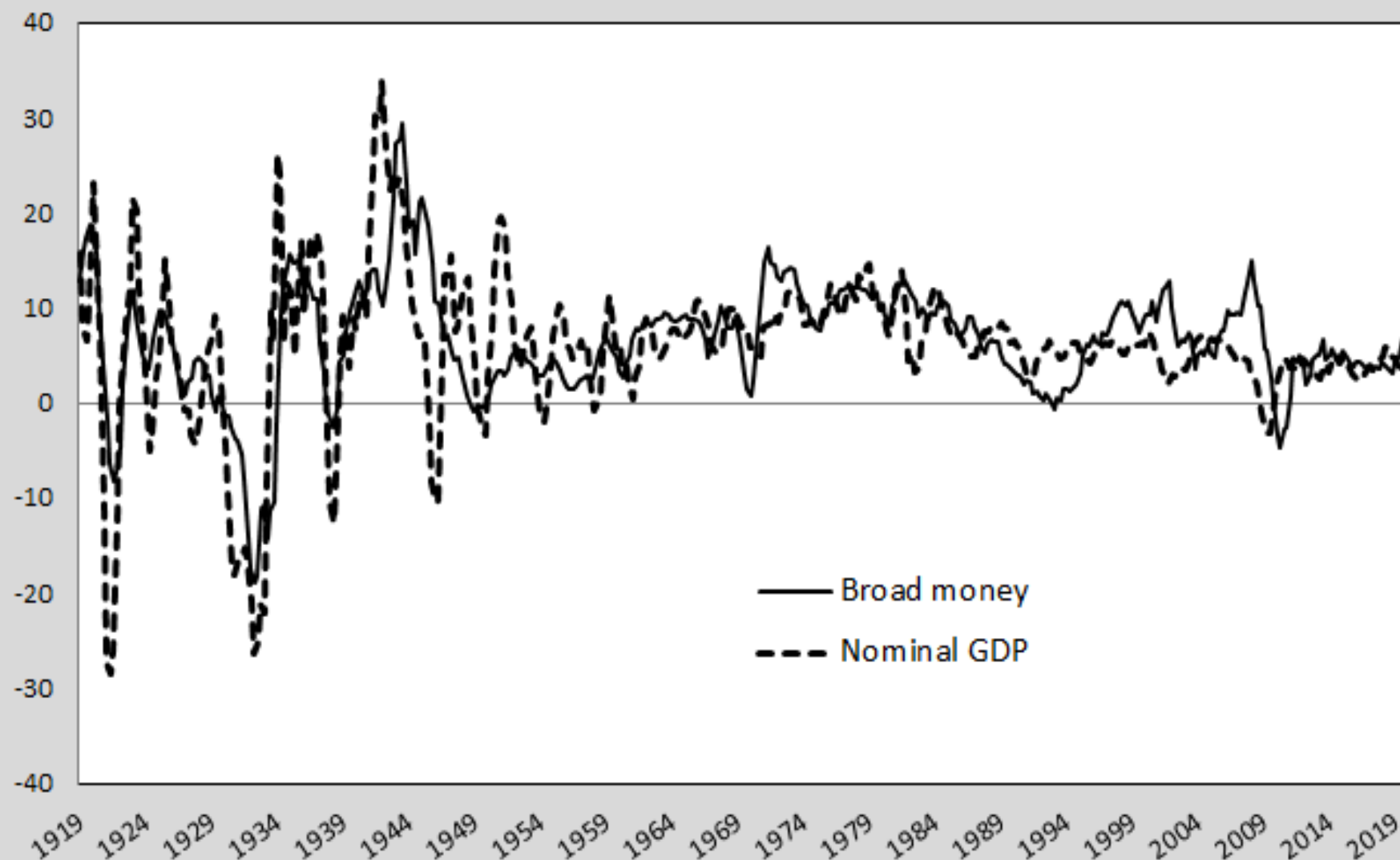
quotations from 1960 *A Program for Monetary Stability*, based on 1959 Millar lectures at Fordham University



- ‘The rate of increase [in the quantity of money] should be chosen so that on average it could be expected to correspond with the roughly stable long-run level of final product prices.’ (p. 91)
- ‘For the concept of money just recommended, namely currency plus all commercial bank deposits, **this would have required a rate of growth of slightly over 4% per year on the average over the past 90 years – something over 3% to allow for growth in output and 1% to allow for the secular decrease in velocity.**’ (p. 91)

Broad money and nominal GDP in the USA, 1919 - 2019

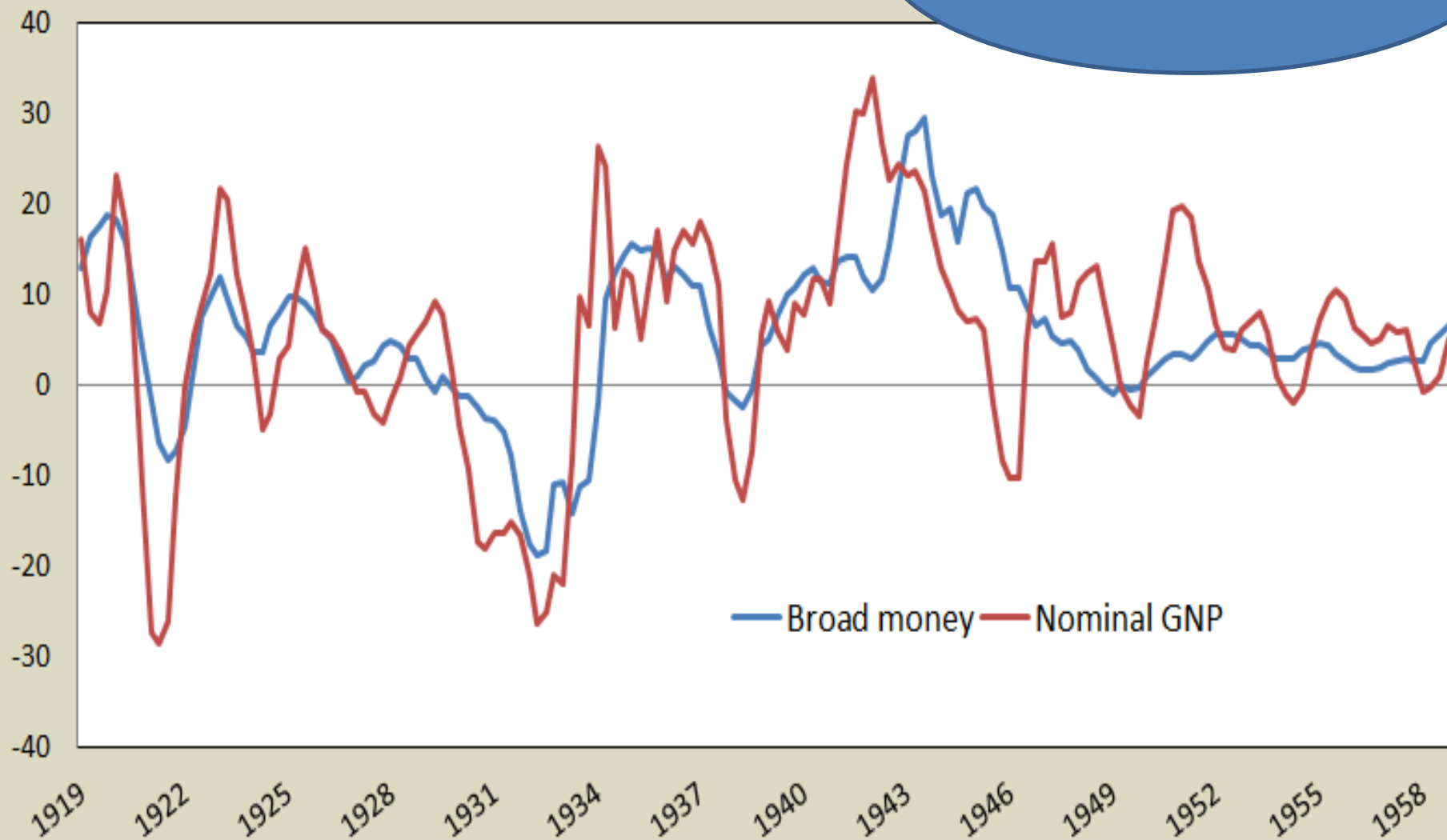
- % annual rates of change, quarterly data



What Friedman knew in the late 1950s

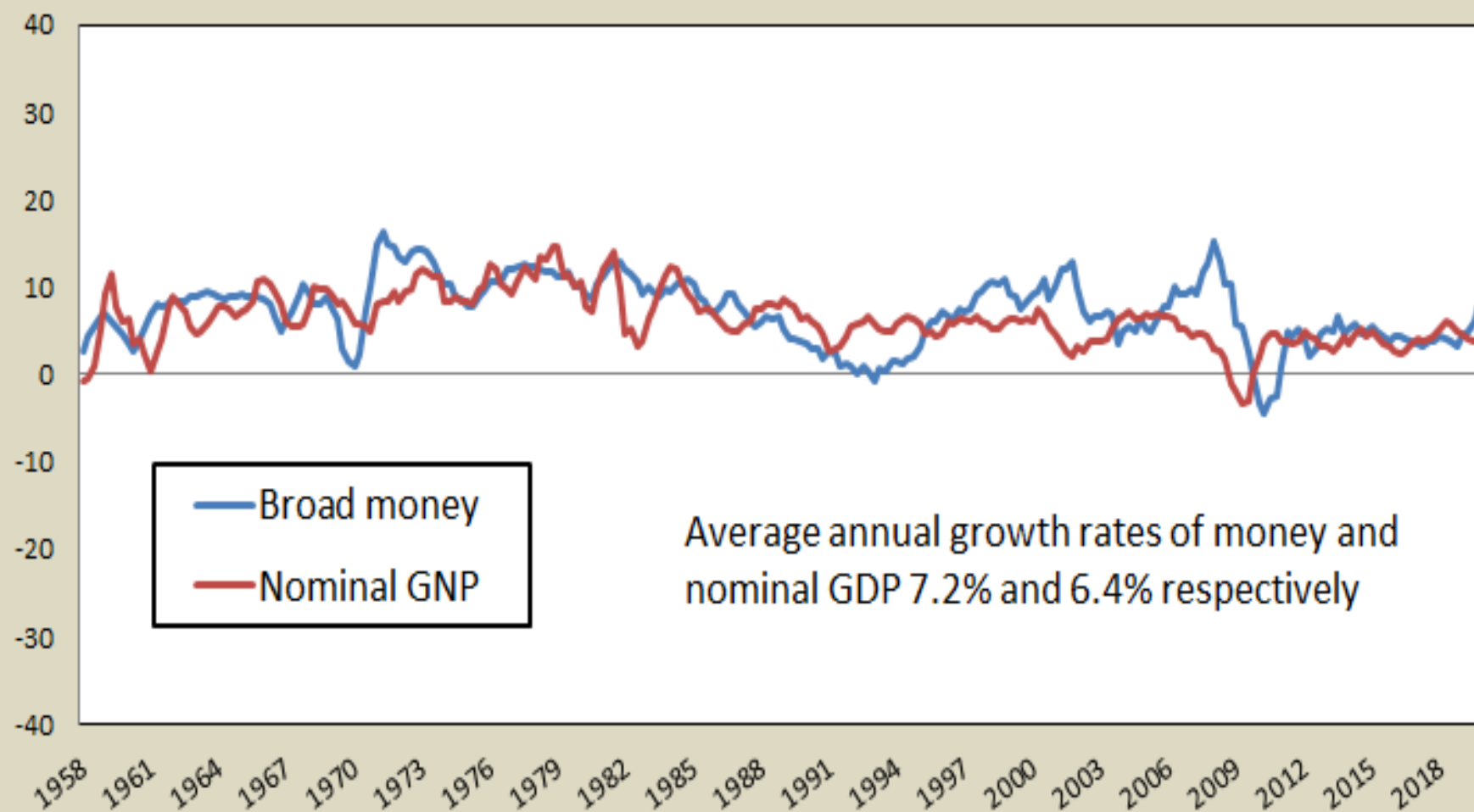
- % annual rates of change, quarterly data

Average annual rates of growth of broad money and nominal GNP 5.6% and 5.3% respectively

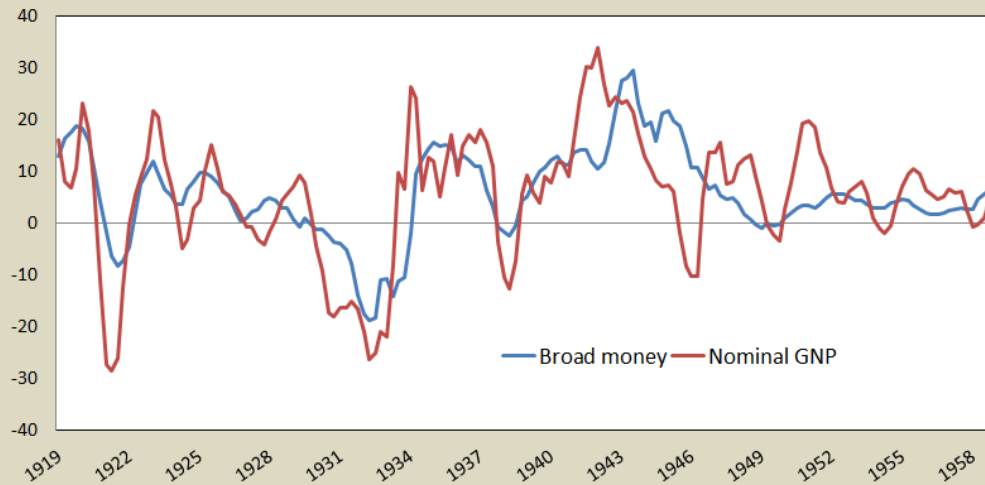


Money and nominal GDP in the USA since 1958, just ahead of Friedman's 1959 Fordham lectures

- % annual growth rates, quarterly data



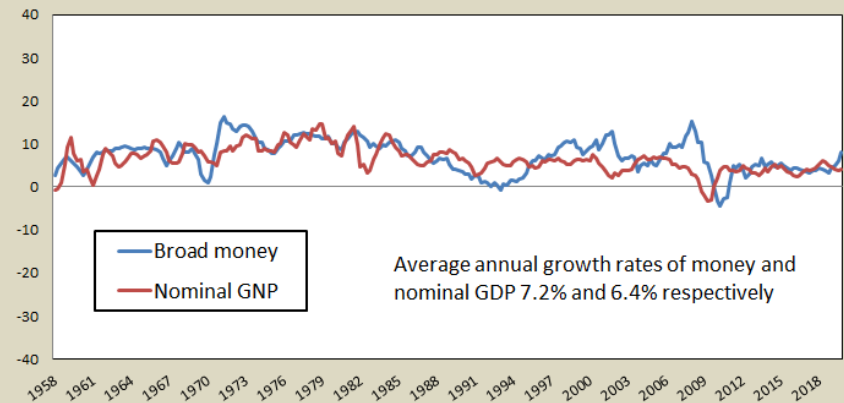
What Friedman knew in the late 1950s
 - % annual rates of change, quarterly data



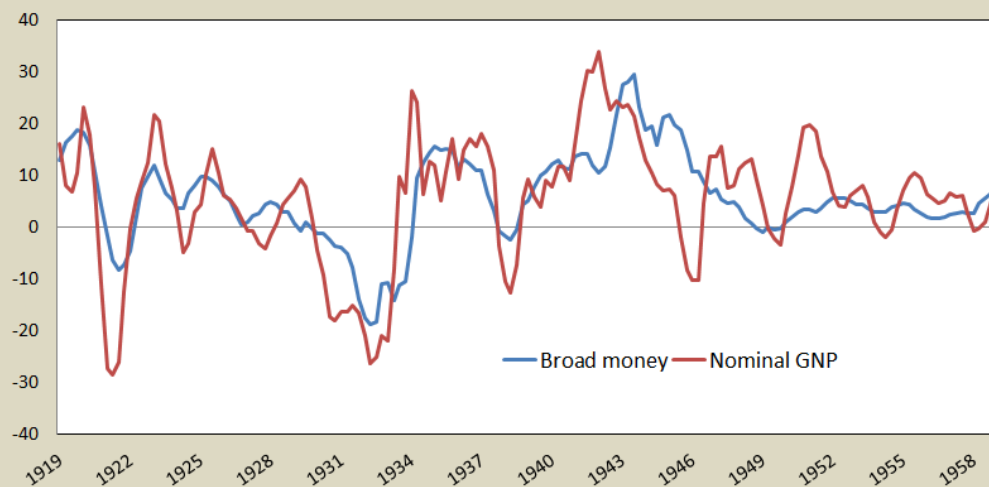
**The two charts have
the same scale.**

**Money and nominal GDP in the USA since 1958, just
ahead of Friedman's 1959 Fordham lectures**

- % annual growth rates, quarterly data



What Friedman knew in the late 1950s
 - % annual rates of change, quarterly data



Isn't it reasonable to see a causal connection between money growth instability and nominal output volatility pre-1958, and then between greater stability in the two series afterwards?

Money and nominal GDP in the USA since 1958, just ahead of Friedman's 1959 Fordham lectures

- % annual growth rates, quarterly data

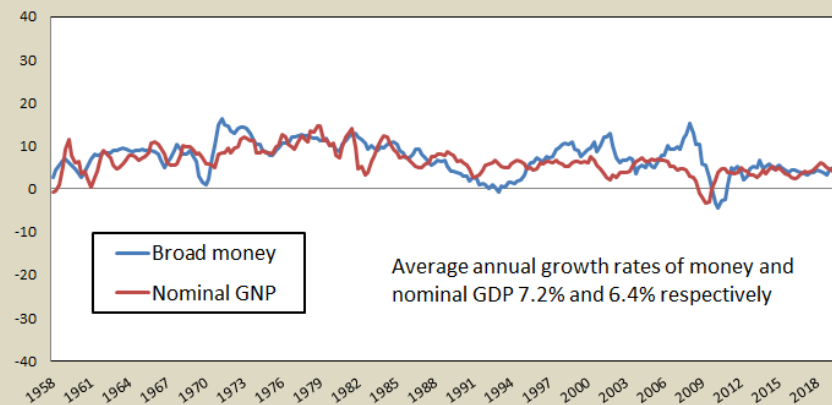
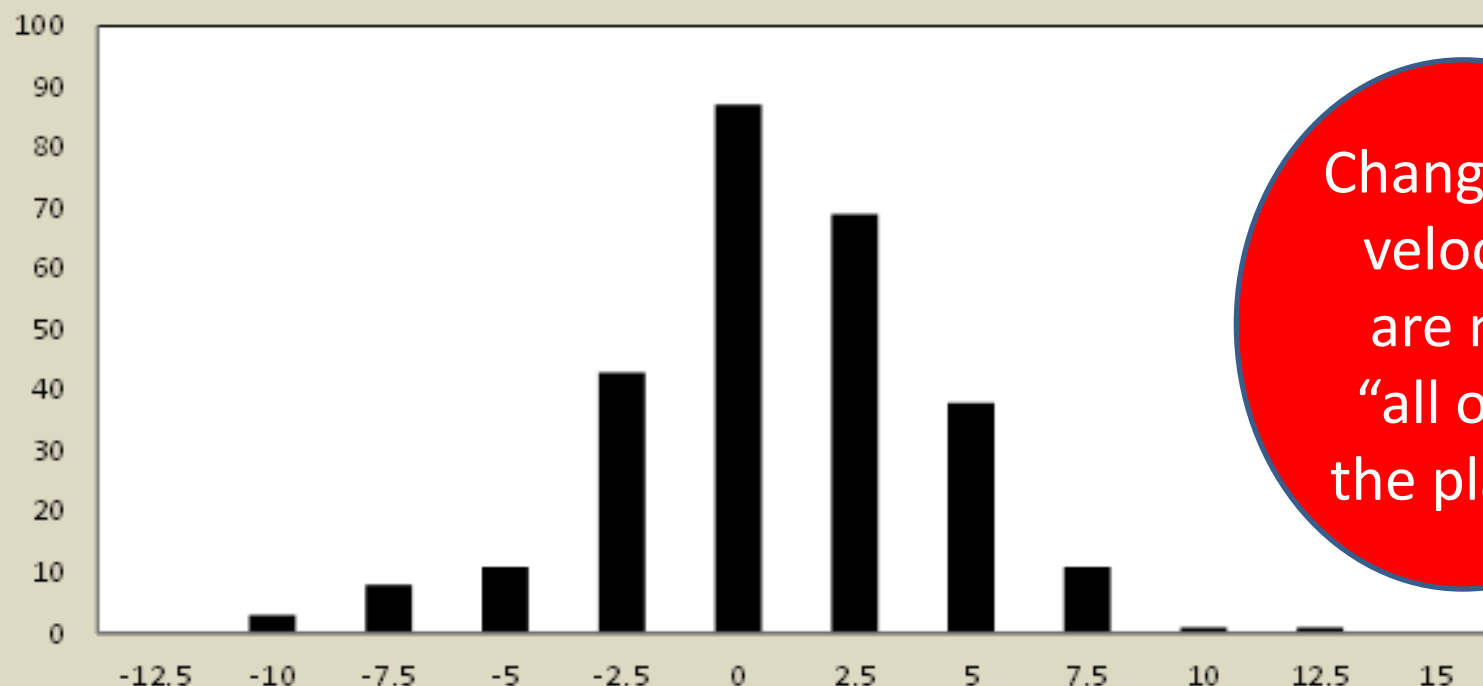


Figure 4: A histogram of changes in the velocity of broad money in the USA, since end-1951

- % annual changes, quarterly values; bars refer to number of values

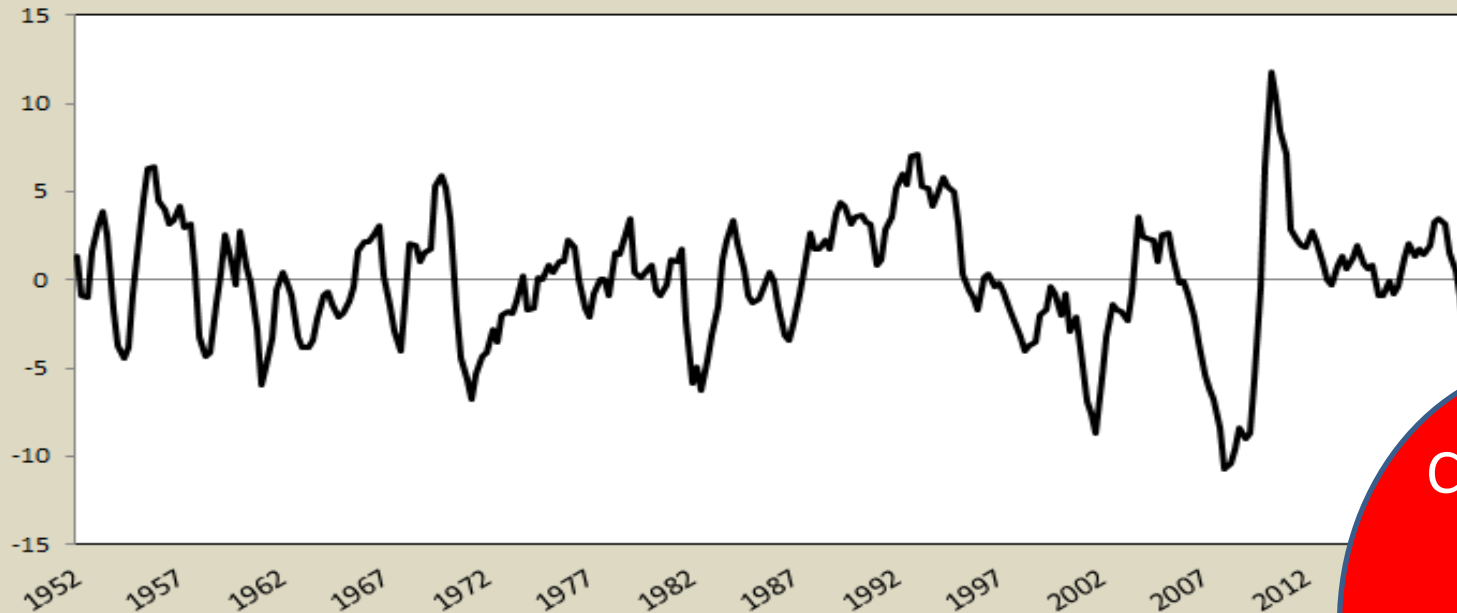


Changes in velocity are not “all over the place”

- from a paper in the next issue of *World Economics* journal

Figure 6: Is the change in velocity mean-reverting?

Residuals on best-fitting time-trend equation, see text for further explanation



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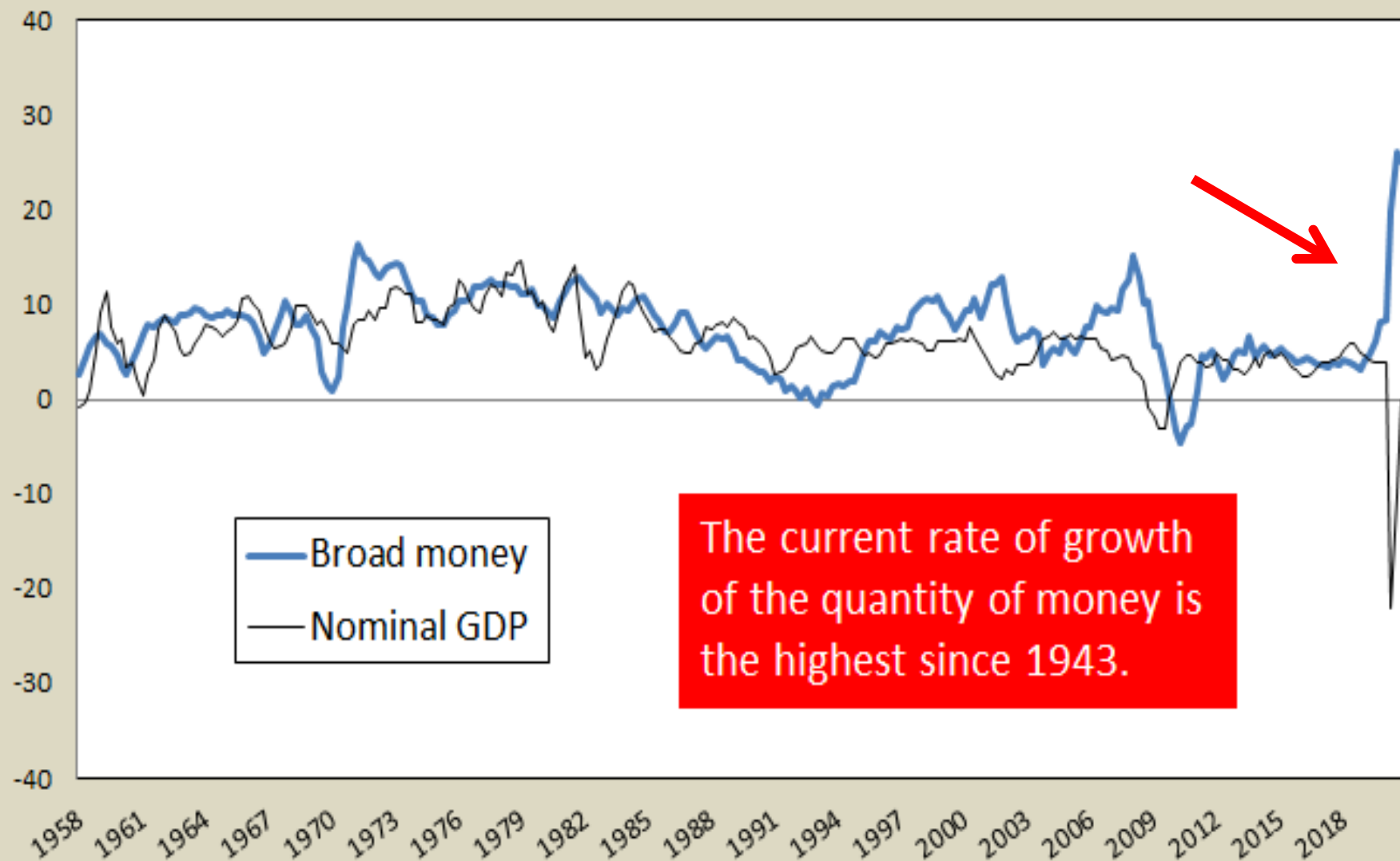
- from a paper in the next issue of *World Economics* journal

US households' income, wealth and money holdings, 1946 – 2016

	1946, \$b.	2016, \$b.	% compound annual increase
Personal disposable income	165.4	13,968.6	6.5
Net worth	881.1	91,692.5	6.9
Money holdings	117.1	11,192.3	6.7

What happens if we add 2020?

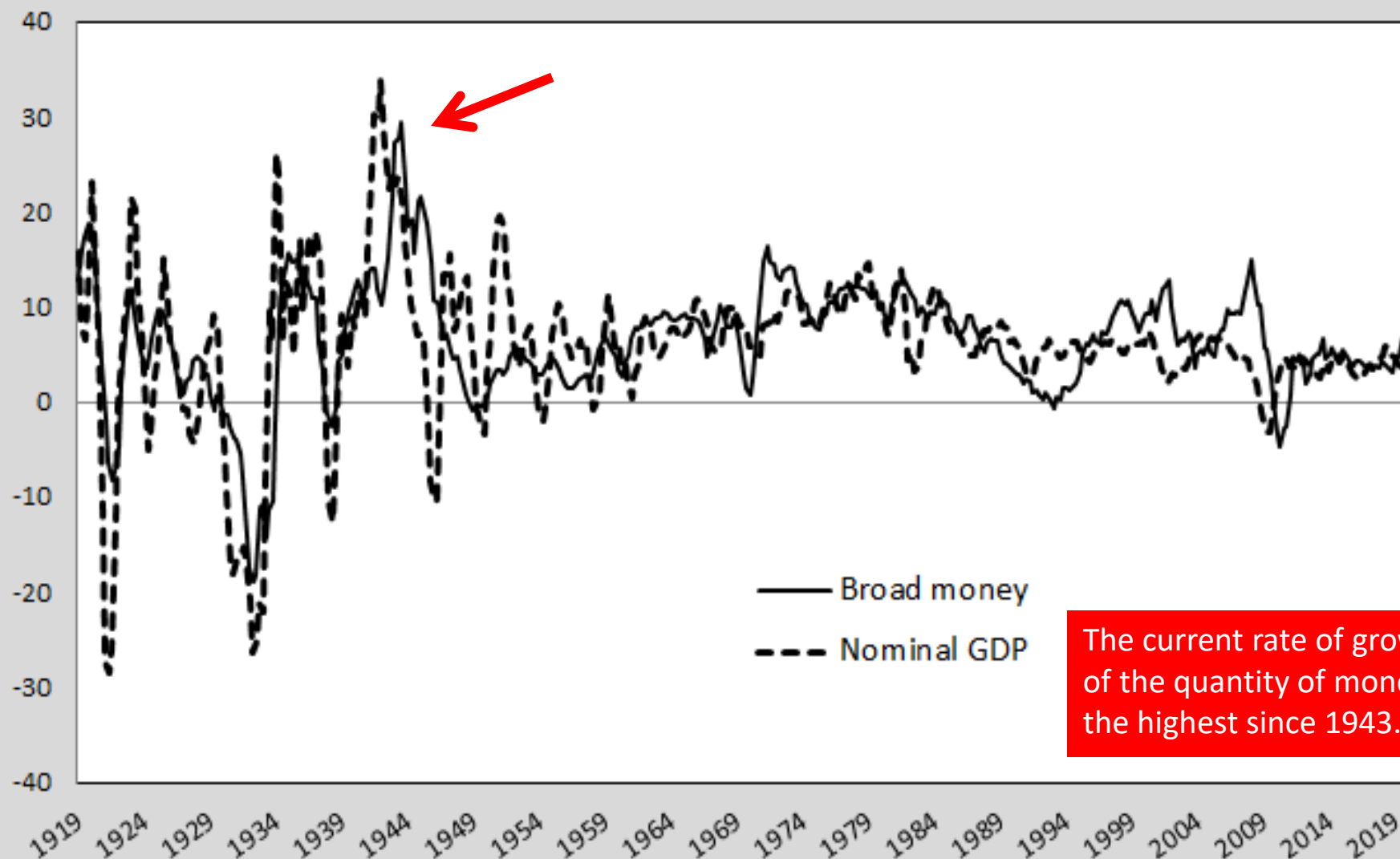
- % annual growth rates, quarterly data - late 2020 is projected



The current rate of growth of the quantity of money is the highest since 1943.

Broad money and nominal GDP in the USA, 1919 - 2019

- % annual rates of change, quarterly data



The current rate of growth of the quantity of money is the highest since 1943.

A quantity-theory/'monetarist' perspective

- Any quantity-theory analyst – looking at the data, and believing in the stability of underlying money-holding behaviour (for which the mean-reversion of changes in velocity, with a low mean value, is crucial evidence) – has to forecast a big rise in American inflation in 2021 and/or 2022.
- The standard macro model usually ignores money altogether, or at best adds it on as an afterthought.

A view from the Federal Reserve's Open Market Committee

- *From the Minutes of the 9 – 10 June meeting:*
“The [forward-looking] simulations [from the Fed’s research staff] suggested that the Committee would have to maintain highly accommodative financial conditions for many years to quicken meaningfully the recovery from the current severe downturn.”
- Notice the phrase ***“for many years”***.