

FUNDAMENTALS OF THE AUSTRIAN BUSINESS CYCLE THEORY

Hamburg, 29 May 2010

By Thorsten Polleit

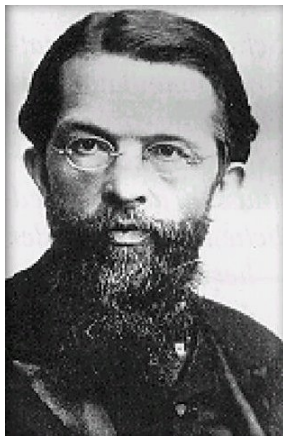
Talking the truth



”It is well enough that people of the nation do not understand our banking and monetary system, for if they did, I believe there would be a revolution before tomorrow morning.”

—Henry Ford (1863 – 1947)

Money and the purchasing power of money



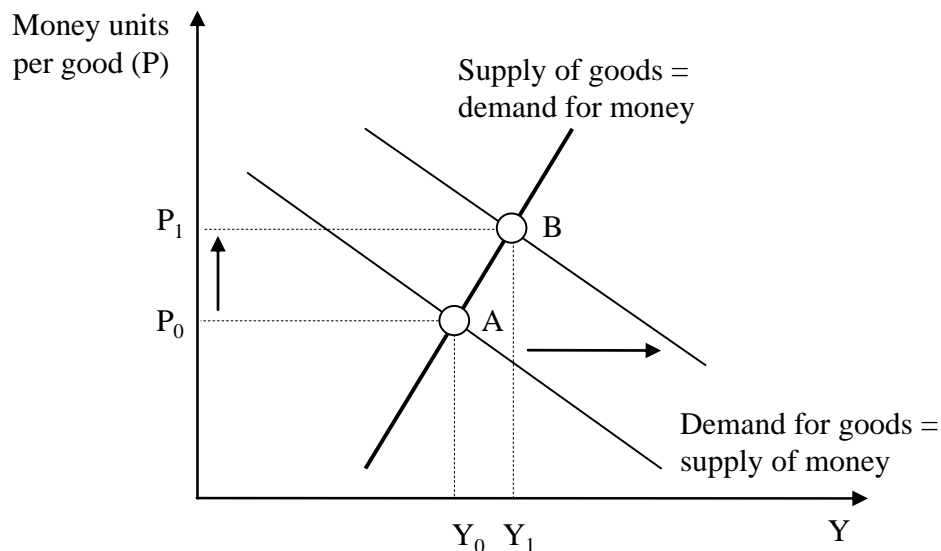
Carl Menger
(1840 – 1921)

- Money is the universally accepted means of exchange.

→ *The exchange function of money is the sole function of money. The store of value function, the unit of account function and the deferred payment function are sub-functions of the means of exchange function of money.*

- In a monetary economy, the *purchasing power of money* is determined by the supply of and demand for money.

The Purchasing Power of Money



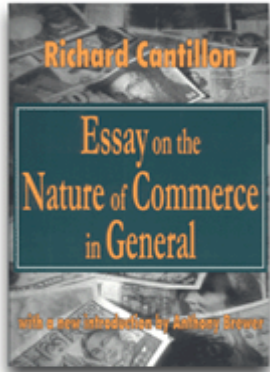
What inflation really is (I)



Irving Fisher
(1867 – 1947)

- Today, inflation is typically understood as an *ongoing rise in a (consumer) price index* (and thus a decline in the purchasing power of money).
- Such an interpretation of inflation rests on the *index regime* put forward by the US American economist Irving Fisher (1867 – 1947).
- However, the index regime can be criticised for a number of reasons (composition of the index, weightings, etc).
- More important, it should be noted that there are actually two effects that are typically associated with inflation, namely (i) a *visible effect* and (ii) an *invisible effect*.

What inflation really is (II)



Richard Cantillon
(1680 – 1734)

- The *visible effect of inflation* is the change in overall prices.
→ *A rise in prices resulting from an increase in the money supply exceeding (the rise in) money demand.*
- The *invisible effect of inflation* is the redistributive effect, which results from a rise in the money stock, *irrespective* of a change in the *price level*.
→ *First receivers of the new money benefit at the expense of late receivers („Cantillon Effect“).*

What inflation really is (III)



Ludwig von Mises
(1881 – 1973)

- The visible and invisible effects of inflation are actually captured by changes in the money stock:

→ *A rise in the money supply necessarily leads to a decline in the purchasing power of money – compared with a situation in which the money supply remains unchanged –, and it also has redistributive effects.*

→ *Rising prices are a (possible) symptom of a rise in the money stock.*

- So we can basically say that, economically speaking, *the rise in the money stock* is the proper interpretation of *inflation*.

Free market money (I)

DEPOSITING UNDER A MONEY WAREHOUSE REGIME

Fig. 1a

Assets	Balance sheet of A	Liabilities
Gold stock (ounces)	100	
	-100	
Money warehouse receipts	+100	
	<hr/> Σ 100	<hr/> Σ 100

Fig. 1b

Money warehouse	
Custody: Gold ounces	+100
<i>(Warehouse receipt issued)</i>	<i>+100)</i>

Free market money (II)

PURCHASING GOODS AND SERVICES

Fig. 1a

Assets	Balance sheet of A		Liabilities
Warehouse receipt	100		
	-100		
Goods	+100		
	<hr/>		<hr/>
	Σ 100		Σ 100

Fig. 1b

Assets	Balance sheet of B		Liabilities
Goods	100		
	-100		
Warehouse receipt	+100		
	<hr/>		<hr/>
	Σ 100		Σ 100

Fig. 1c

Money warehouse		
Custody: Gold ounces		+100
<i>(Warehouse receipt issued)</i>		<i>+100)</i>

Free market money (III)

LENDING UNDER A MONEY WAREHOUSE REGIME

(b) *Indirect lending*

Fig. 1a

Assets	Balance sheet of A		Liabilities
Warehouse receipt	100		
	-100		
Long-term claim on bank	+100		
	<hr/>		<hr/>
	Σ 100		Σ 100

Fig. 1b

Assets	Balance sheet of B		Liabilities
Warehouse receipt	+100	Liability vis-a-vis bank	+100
	<hr/>		<hr/>
	Σ 100		Σ 100

Fig. 1c

Assets	Bank		Liabilities
Warehouse receipt	+100	Liability vis-à-vis A	+100
	-100		
Loan to B	+100		
	<hr/>		<hr/>
	Σ 100		Σ 100

Fig. 1d

Money warehouse		
Custody: Gold ounces		+100
(Warehouse receipt issued)		+100

Free market money (IV)

MONEY CREATION UNDER FRACTIONAL RESERVE BANKING

Fig. 1a

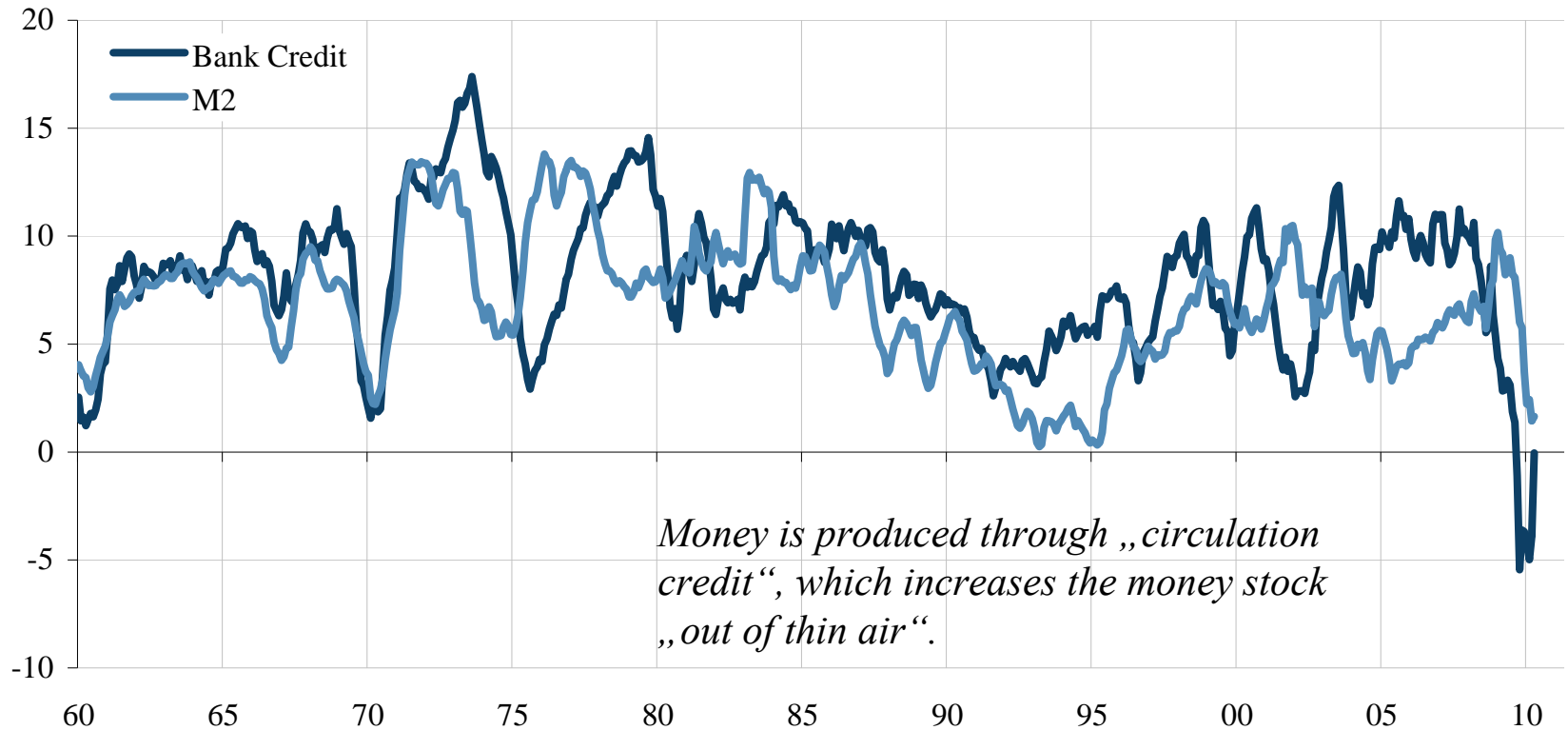
Assets	Balance sheet of A		Liabilities
Gold stock (ounces)	100		
	-100		
Money substitute	+100		
	Σ 100		Σ 100

Fig. 1b

Assets	Balance sheet of the money warehouse		Liabilities
Gold stock A (ounces)	+100	Warehouse receipts	+100
Loan	+80		+80
	Σ 180		Σ 180

Credit and money production

US Bank Credit and M2 (% y/y)



Money is produced through „circulation credit“, which increases the money stock „out of thin air“.

Source: Thomson Financial, own calculations.

A theory of the crisis

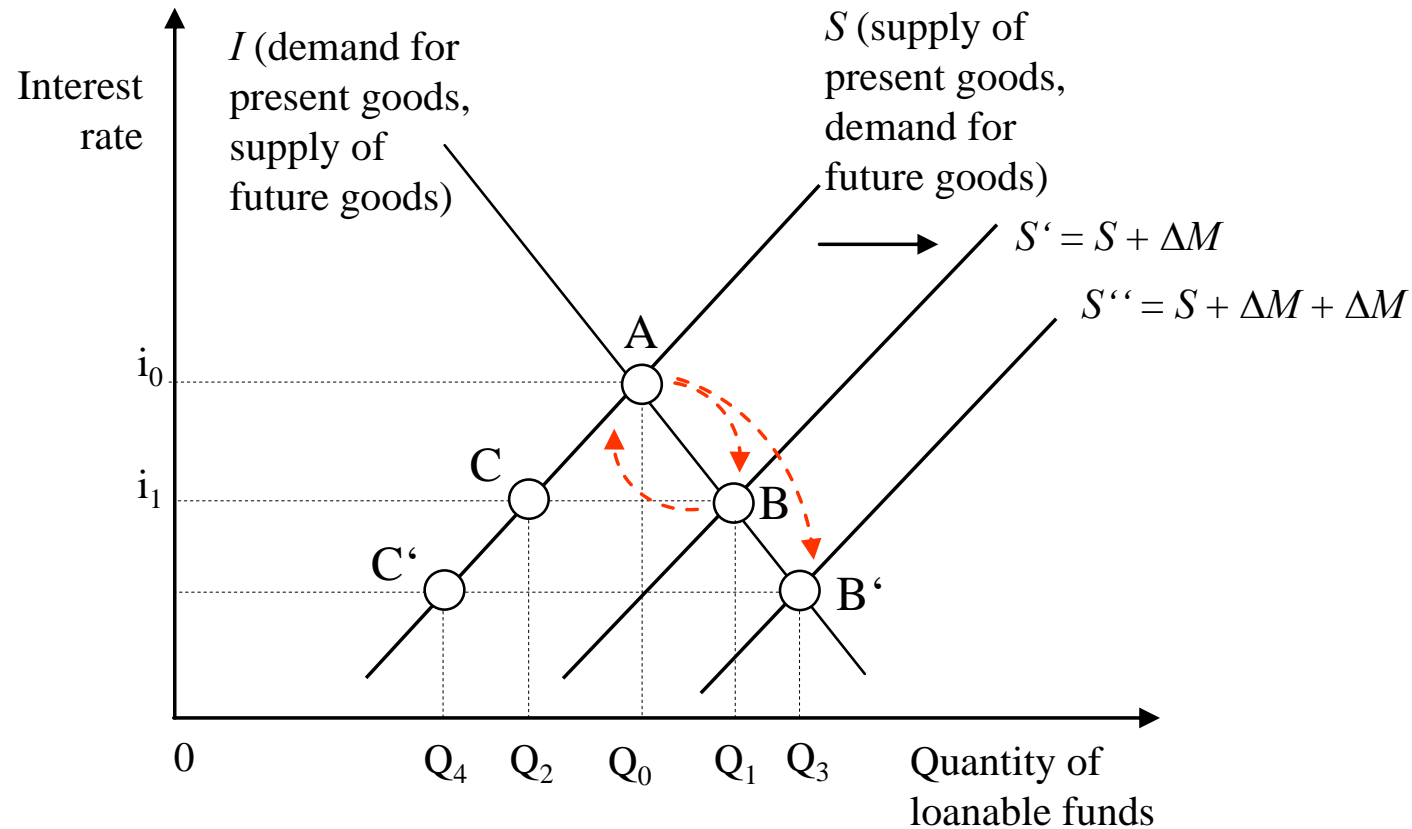


Ludwig von Mises
1881 – 1973

„There is no means of avoiding the final collapse of a boom brought about by credit expansion. The alternative is only whether the crisis should come sooner as the result of a voluntary abandonment of further credit expansion, or later as a final and total catastrophe of the currency system involved.“

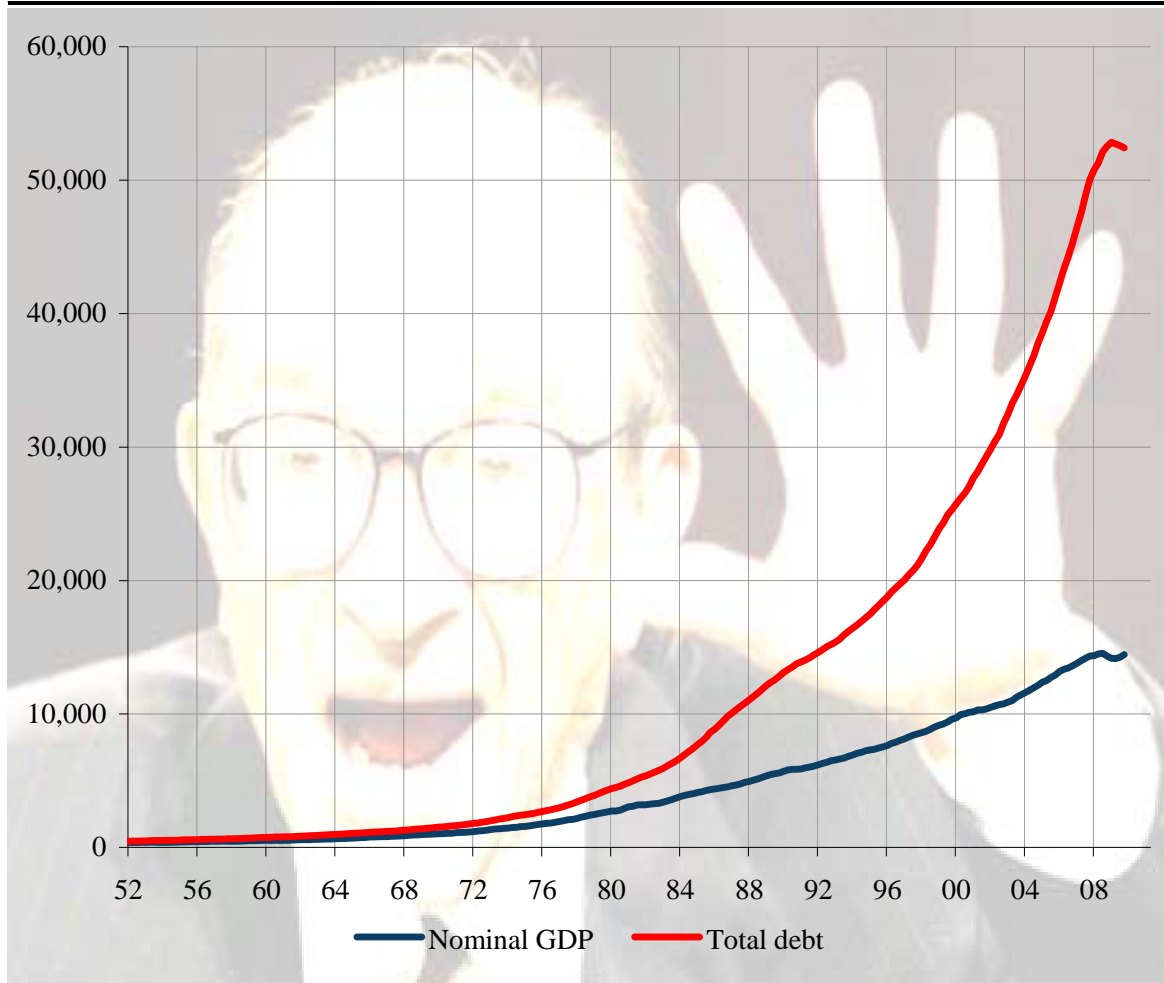
Ludwig von Mises (1996), *Human Action*, 4th ed., Fox & Wilkes, San Francisco, p. 572.

Manipulating the interest rate



Debt pyramid

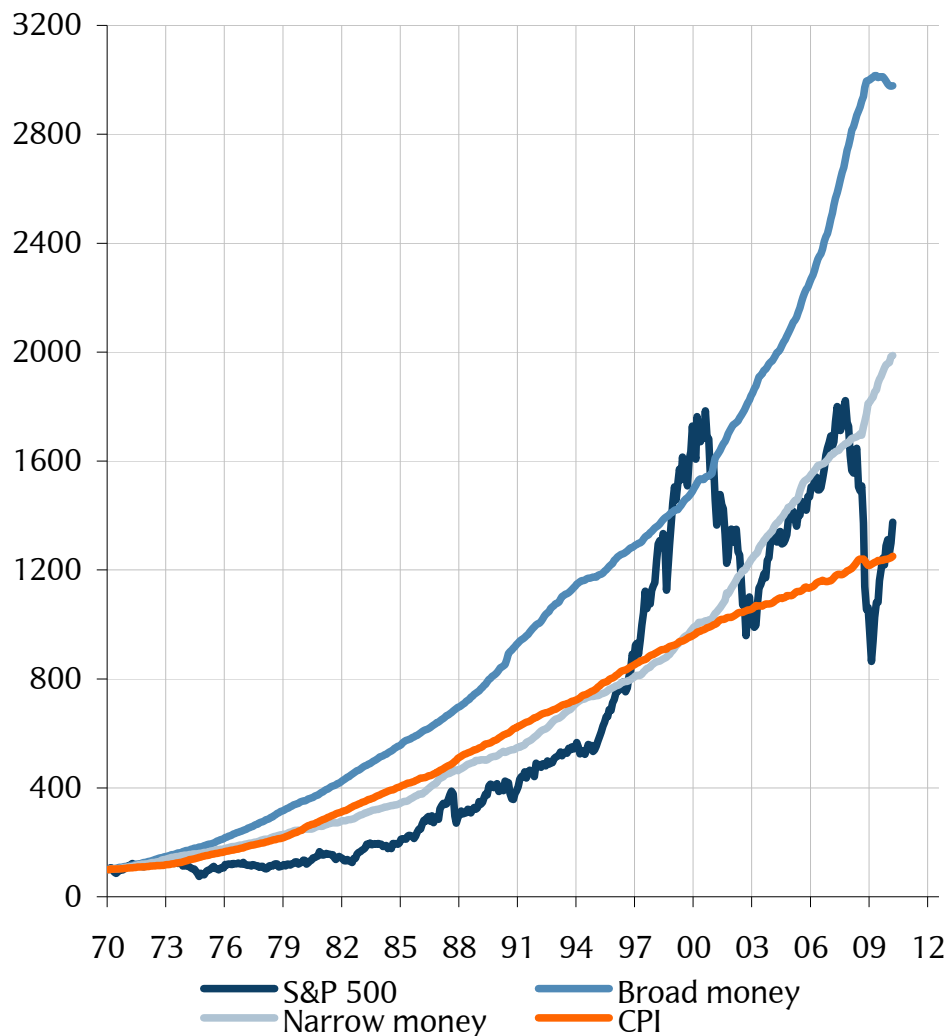
US nominal GDP and total debt, US\$bn



Source : Thomson Financial. - Nominal GDP annualized quarterly data. - Domestic nonfinancial sector (households, business, and state, local and federal government), domestic financial sector and foreign sector.

World wide money expansion

S&P 500, OECD "narrow" and "broad" money and CPI

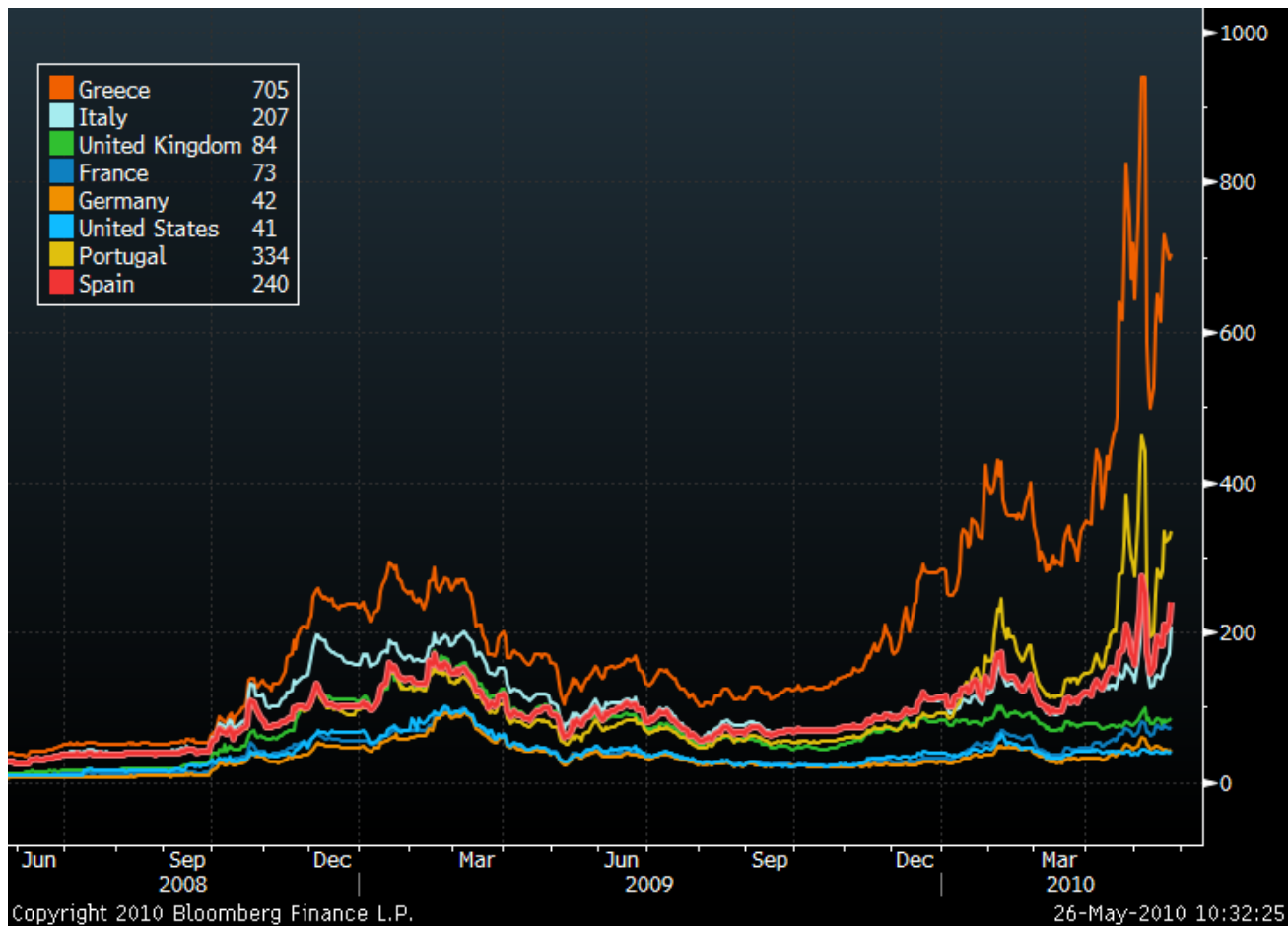


Source: Thomson Financial, own calculations.

*Series are indexed (Jan '73 = 100).

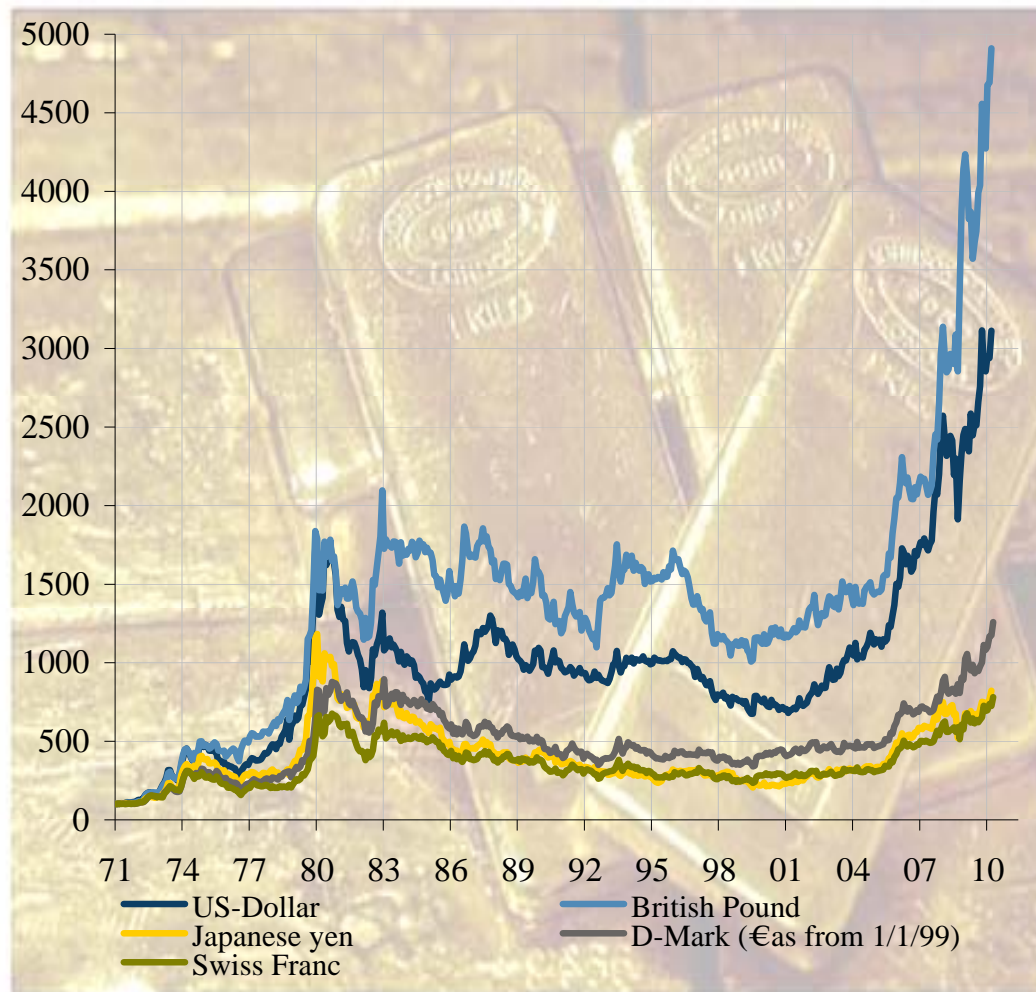
Government credit

CDS 5 years, sovereigns, basis points



The ultimate means of payment

Gold ounce in national currency*



Source : Bloomberg, own calculations.

*Series are indexed: January 1971 = 100.

China: reforming the international monetary system



“The desirable goal of reforming the international monetary system ... is to create an **international reserve currency** that is disconnected from individual nations and is able to remain stable in the long run, thus **removing the inherent deficiencies caused by using credit-based national currencies.**”

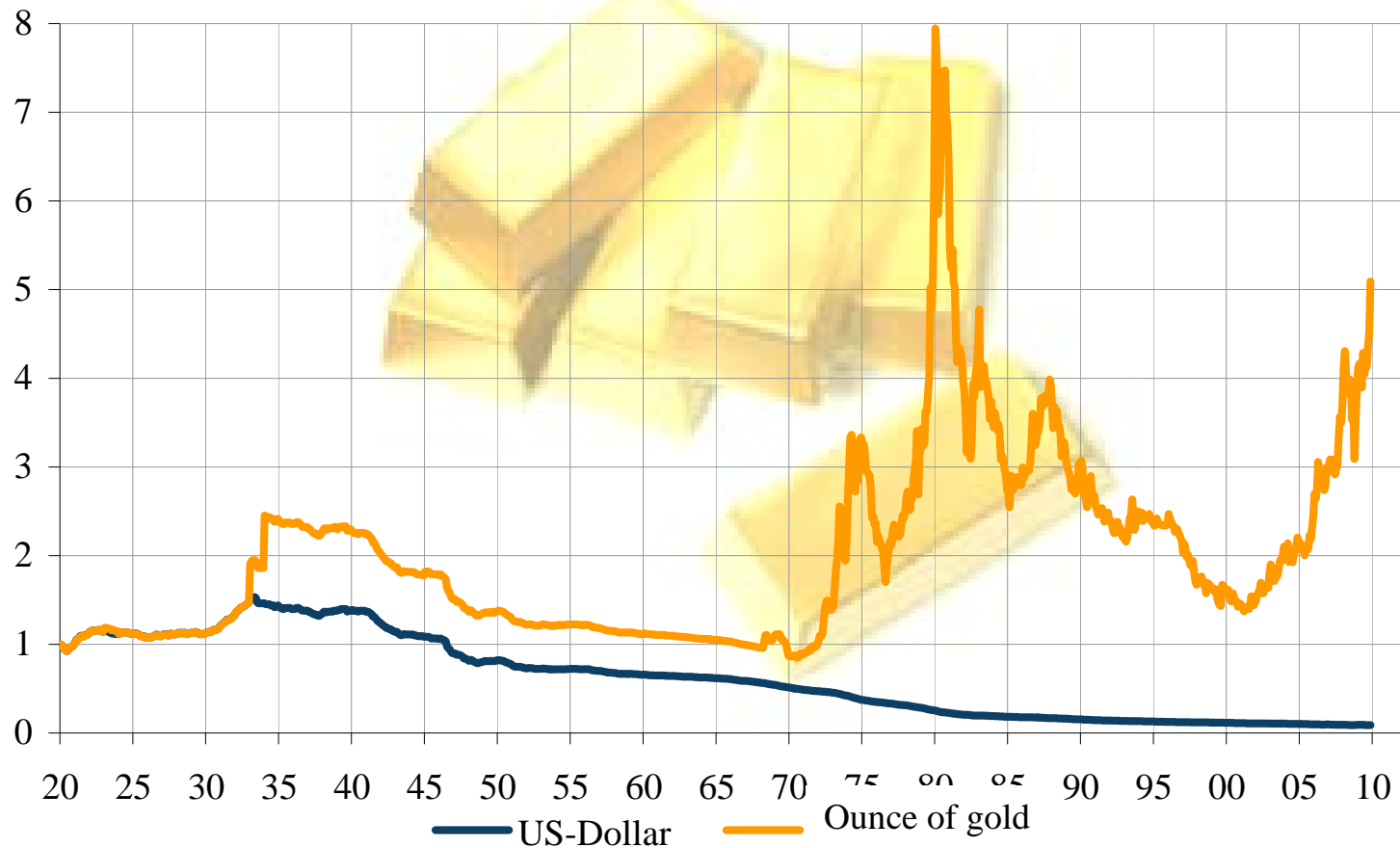
“Back in the 1940s, Keynes had already proposed to introduce an international currency unit named “Bancor”, based on the value of **30 representative commodities.**”

“The creation of an international currency unit, based on the **Keynesian proposal**, is a bold initiative that requires extraordinary political vision and courage.”

Source: Zhou Xiaochuan, Governor of The Peoples’ Bank of China, Reform the International Monetary System, 23 March 2009.

The ultimate means of payment (II)

Purchasing power of the US\$ and gold*



Quelle: Bloomberg.

*Number of consumer goods' baskets for one US\$ and one ounce of gold.

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