

Money and Capital – Some Proposals for Economic Theory in the 21st Century

**Presentation at the
PSG INSTITUTE OF MANAGEMENT, Coimbatore, India,
on July 23/24, 2026
at the occasion of the
INTERNATIONAL CONFERENCE ON
CONTEMPORARY RESEARCH
IN MANAGEMENT AND TECHNOLOGY (CRMT 2026)**

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The same economic system,



Berlin,
1989/90



("If the Deutschmark comes to us, we stay, if it does not, we follow her and go away!")



Zuccotti Park, New
York, 2011 ("Occupy
Wall Street")



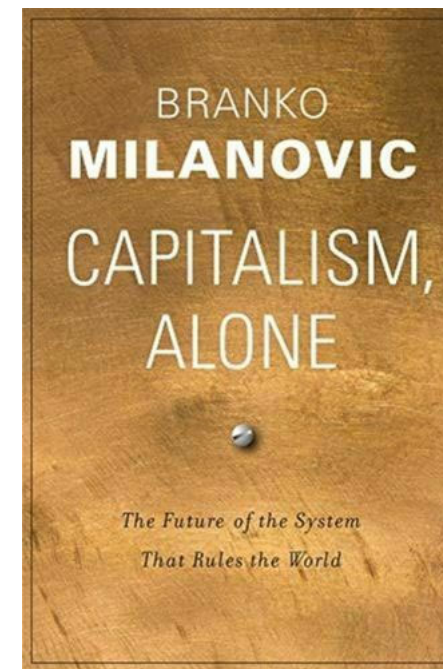
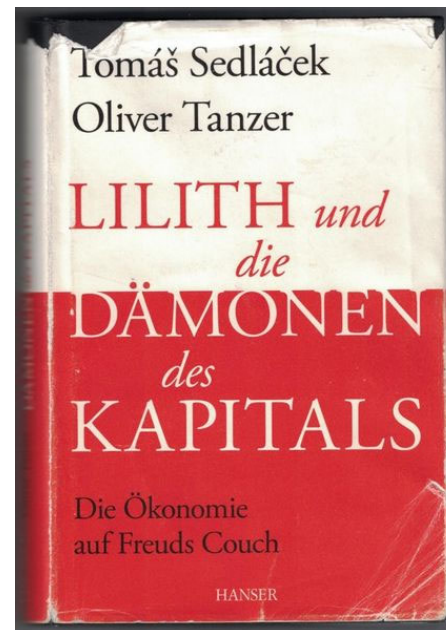
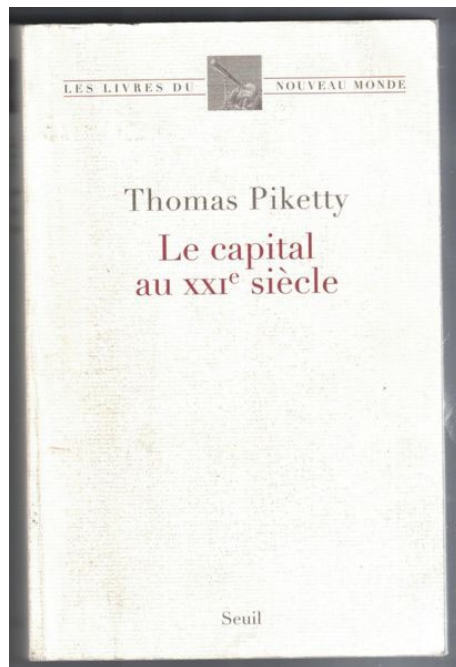
("The name of the crisis
is 'capitalism'")



Somewhere in the world,
2019/2020

but the emotions have changed to the opposite.

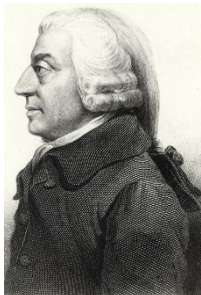
In scientific economics, too.



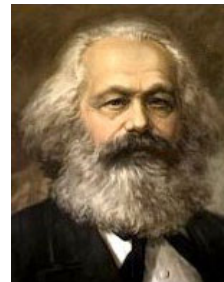
Let us begin with the term “capital” in classic economic theory.

“materials” for production

monetary paid-in contributions on “stock”



Adam Smith, 1723-1790



Karl Marx, 1818-1883

“irrigation systems... functional buildings etc.”

“own capital” and “borrowed capital”



David Ricardo, 1773-1823

“buildings”, “implements” used in production

“money, which is employed in discounting bills, or in loans”

Ab origine, the term “capital” is hence far from unique in economic theory. Roughly speaking, it is about...

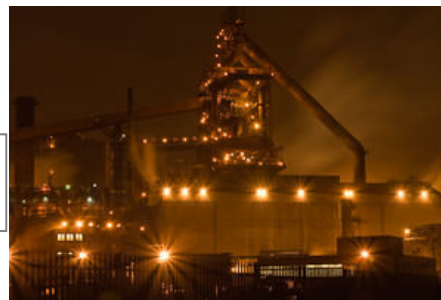
... transactions attributable to the GOOD MARKETS on the one hand...

(in the pure form: “goods vs. money“, bought and paid on the spot, asset side of the corporate balance sheet, production factor)

... and transactions attributable to the FINANCIAL MARKETS on the other.

(in the pure form: “money vs. money“, timely difference between consideration and quid pro quo, liability side, no production factor)

Furnace of a
steel producer



Shares in a
steel producer

Then, however, it comes as no surprise that the term “capitalist” is today put to use in (at least) as many ways as the term “capital”:

First of all:



Furthermore:



It should be added:

Many companies are today governed by managers.



What is the current debate about then? Companies (owners of the production factor)? Large-scale investors (owners of the companies)? Managers (decision makers of the companies)? Small savers (also, in a certain way, owners of the companies)?

Moreover, “capital” – at least in the upper goods sense – was or is deployed in many other economic systems then ours:

Bronze age



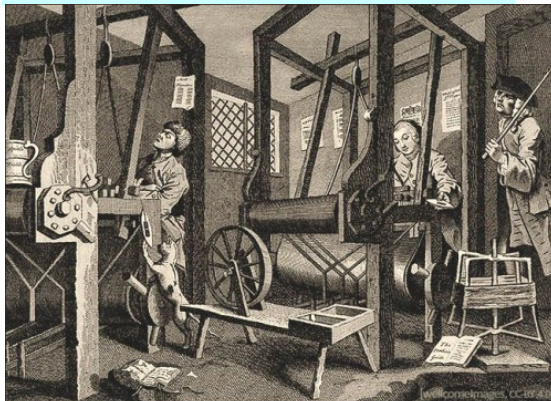
Industrialization



Communism



Mercantilism



1749, GB - 'Seidenweberstube in London-Spitafields' [William Hogarth]

Is the “CRITICISM OF CAPITALISM” directed against bronze age crop farmers or the communist planned economy?

Hardly likely.

But what is it all about then?

Proposal 1

Whether in economic theory, the politico-economic topical talk of the day or elsewhere – the terms “CAPITAL“, “CAPITALIST“ and “CAPITALISM“ call for a usage that is conscious of their meaning(s).

Alternatively, one might also refrain from these terms completely and replace them by what was actually meant.

„Finance“ is the procurement of money rather than capital.

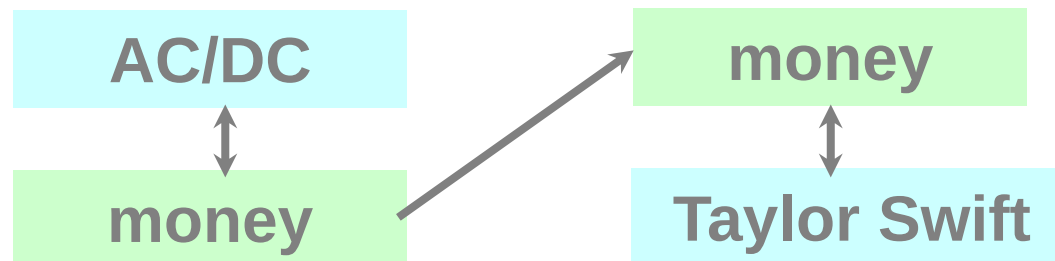


Johann Wolfgang von
Goethe, 1749-1832

**“Toward gold throng all. //
To gold cling all. // Yes all!”**

(Faust I)

**Money is the second economic
key issue of today's
presentation. What is money?**



**Money is the general medium of exchange, the means
of indirect exchange.**

**Would it be allowed to transfer Goethe's mindset one-
on-one to the modern economic systems of our time
and the means of exchange used by them?**

For the provision of the medium of exchange, various arrangements have in monetary history arisen; here are some particularly distinctive examples:

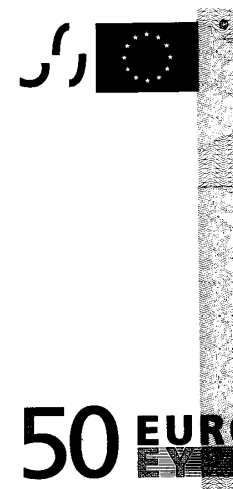
Shell money



Traditional bank notes



Fiat money



Currency money



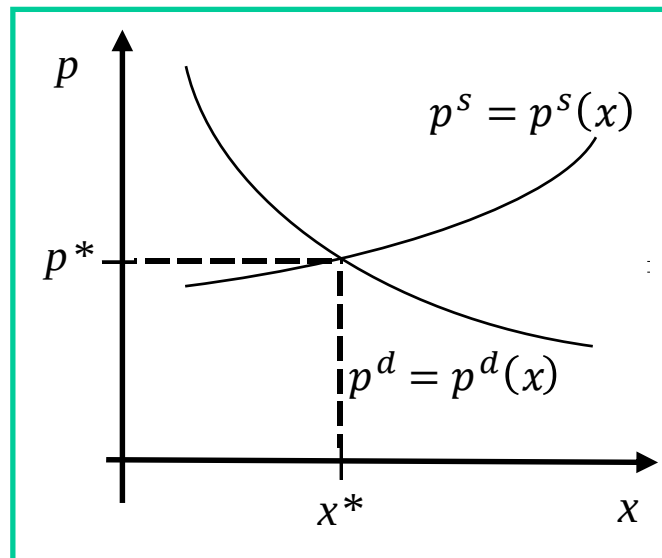
positive intrinsic value (iws)

intrinsically worthless



Léon Walras,
1834-1910

Beginning with Léon Walras, economic thought is, in theory and practice, today very strongly permeated by the guiding principle of the supply-demand diagram.



Is it theoretically justifiable to transfer this pattern of thinking (which is a pleasure to use in presentations and may serve as the perfect platform for elegant mathematical elaboration) from goods to money?

In the case of CURRENCY MONEY, this transfer is no theoretic problem at all:

Due to the decorative (and further expedient) properties of precious metals, it yields UTILITY in the traditional way; one might otherwise utilize the gold for different purposes ($\Rightarrow$ 17th century; “Kipper and Wipper“ period); accordingly, one arrives easily at a DEMAND in the walrasian sense.



Extractive metallurgy or the production of shell money induce COSTS, currency money is hence scarce. A SUPPLY may therefore easily be deduced from an optimization problem, too.

But how do the matters stand with FIAT MONEY, i.e. money which is intrinsically worthless?

Decorative or comparable utility providing properties cannot be attributed to these ultimately worthless paper slips. ⇒ A “MONEY DEMAND“ in terms of Walras does not make sense for fiat money.

Fiat money may be provided in arbitrary amounts. It is not scarce. ⇒ A “MONEY SUPPLY“ in terms of Walras does not make sense either.

Nevertheless, leading economic theorists, the European Central Bank etc. as natural resort to the guiding principle of the “money market“.



Milton
Friedman,
1912-2006



(„The Dream of Helicopter Money“)

The notion of the “money market” should also have contributed decisively to us still considering money – just like Goethe did for gold – as the scarcest resource of them all.

At the beginning of the causal chain, however, these poor and pitiable individuals miss income!

(“Many people lack money to pay for sufficient meals“)



Politik Deutschland

Vielen Bürgern fehlt Geld für vollwertige Mahlzeiten

Berlin | Fast jeder dritte Erwerbslose in Deutschland kann sich nicht regelmäßig eine vollwertige Mahlzeit leisten: Bei einer EU-Erhebung gaben 30,3 Prozent der Menschen ohne Job an, nicht genug Geld zu haben, um jeden zweiten Tag vollwertig zu essen. Das geht aus neuen Zahlen des Statistischen Bundesamtes hervor, über welche die „Neue Osnabrücker Zeitung“ berichtet. Insgesamt waren 5,14 Millionen Menschen ab 16 Jahren betroffen.

The one who disposes of sufficient income, even though not in the form of money, should even in a monetary exchange economy know how to come along in the end.

Proposal 2

Whether in economic theory, the politico-economic topical talk of the day or elsewhere – we should review our relation to money.

A money market-free integration of money into the system of Walras (general equilibrium theory) is possible. $\Rightarrow$ “Economic Theory in the 21st Century“

(see “references“ at the end)

Let us drive home what is really “scarce“ in human life.



To be sure, for constructive criticism of our current economic system, there is plenty of reason. Also on this, some proposals:

BO



Friedrich August von Hayek, 1899-1992



Walter Eucken, 1891-1950

One may assume that the denotation “degenerate market economy” is much closer to the object of criticism than the word “capitalism” from the times of the Cold War.

Let us (re-)start to think in terms of economic order. Is there currently an “economic order B”?

Market-dominating positions will always be a threat to the quality of the market-based outcome.

There is always the risk of an endogenization of the regulatory policy framework (“ordnungspolitischer Rahmen”) by “pressure groups”. ⇒ Particular interests

Property and liability are fundamental principles of regulatory policy. In their absence, economic activity is only for the account of third, often unknown parties.

Economic activity is globalizing, the regulatory policy framework has to keep pace.

Economizing of non-economic areas of life.

Important representatives of the AUSTRIAN SCHOOL and some of their central theoretic concepts:



Carl Menger, 1840 (Neu-Sandez)-1921 (Vienna)

**Marginal utility school,
Neoclassics**



Eugen von Böhm-Bawerk, 1851 (Brno)-1914 (Vienna)

**Capital theory,
Theory of productive roundabouts**



Friedrich August von Hayek, 1899 (Vienna)-1992 (Freiburg im Breisgau)

**Distribution of knowledge over people
and over time**

Some 100 years ago, already, Eugen von Böhm-Bawerk had illustrated the ambiguity of the notion of capital by use of his famous Robinson example and called for “clear thinking” in this matter.

THE
POSITIVE THEORY OF CAPITAL



BY
EUGEN V. BOHM-BAWERK
CHANCELLOR IN THE AUSTRIAN MINISTRY OF FINANCE, AND HONORARY PROFESSOR OF
POLITICAL ECONOMY IN THE UNIVERSITY OF VIENNA

TRANSLATED WITH A PREFACE AND ANALYSIS
BY
WILLIAM SMART, M.A.
LECTURER IN POLITICAL ECONOMY IN QUEEN'S COLLEGE, GLASGOW

It is clear that, while this circumstance may explain the striking divergence of opinions, it makes it, unfortunately, more difficult to decide between them. For in questions of nomenclature there is, strictly speaking, neither right nor wrong. There is, therefore, nothing to compel conviction; there is only an appeal to a greater or less appropriateness; and people may, to a considerable extent, remain of different opinions as to the appropriateness. All the same it is clear that our controversy must be settled. It is impossible that economic science can for all time allow its representatives liberty to call

¹ *Das Geld*, p. 5.

CHAP. IV *REQUISITES OF A TRUE CONCEPTION* 37

ten or eleven fundamentally different things by the same name. Political Economy requires clear thinking, and for that the prerequisites are clear ideas and clear speech. We must come to an agreement, and it will be come to exactly as

CHAP. IV

SAVING AND PRODUCING

101

To put the matter, first of all, in its simplest conceivable terms. Suppose a recluse working absolutely without capital—say some Robinson Crusoe thrown on a lonely shore without either tools or weapons. Being without capital he must at first support life in the most primitive fashion, as, for instance, by gathering berries which grow wild. Now what must happen before he can get possession of his first capital, say a bow and arrow?

Let us put the first theory to the test. Is saving by itself sufficient to call capital into existence? Certainly not. With the one possession that he has—his wild fruits—our Crusoe may save and stint as much as he please; he will accumulate a store of berries—goods for consumption—but that will never give him a single bow or arrow. As we can easily see, these must be positively produced.

Is it sufficient, then, for the origination of capital that it be produced? Again, certainly not. Of course, once Crusoe has got the length of commencing to produce capital, the formation of capital is as good as accomplished. But before he gets that length, there is something else to be done, and that something is by no means self-evident. Productive powers are to be set free for the proposed formation of capital, and this can only be done, as we shall see, through saving.

**Just for its amazing simplicity,
the Robinson example by Eugen
von Böhm-Bawerk deserves a
second look:**

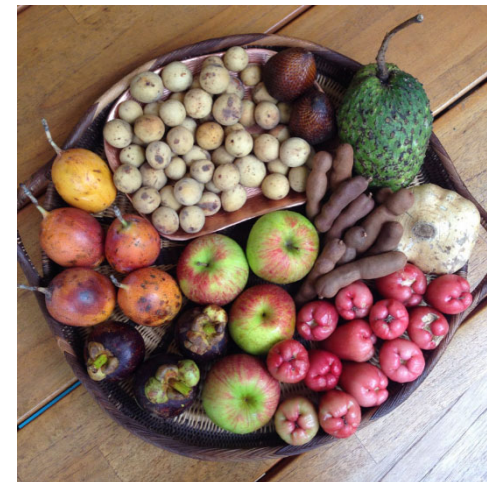
bow and arrow



Robinson Crusoe



wild berries



What are the main differences between the MODERN ECONOMIC SYSTEMS OF OUR TIME and the island of Robinson Crusoe? In particular, the following, superimportant social phenomena:

- 1) There are many economic agents, division of labor and exchange today. ⇒ It is Friday who advances the wild berries to Robinson, videlicet by way of CREDIT (by way of financial contract).**
- 2) Exchange is put into action indirectly by means of MONEY. ⇒ Friday advances money rather than wild berries to Robinson.**

If today “capital“ is talked about, it is more than often the “wild berries“ (the financial contract) that is thought of rather than “bow and arrow“ – even though the latter (cf. Eugen von Böhm-Bawerk!) are THE TRIGGER OF THE ENTIRE PROCESS.

**Thank you very much for
your kind attention.**

For very helpful preparatory research for this presentation and further precious support, I am indebted to my assistants, Messrs. Maximilian Lietz and Georg Gräb and Mrs. Inas Reddadi.

Key references:

Kaiser, D.: Economic Theory in the 21st Century. Towards a Renewed Understanding of Money and Capital from a System-wide Perspective, Wiesbaden: Springer Gabler (2020).

Kaiser, D.: The Equation of Exchange Revisited, Credit and Capital Markets 44 (2011), pp. 491-507.

Further reference:

Slide 3:

<https://www.ndr.de/geschichte/chronologie/Mauerfall-und-Deutsche-Einheit-30-Jahre-grenzenlos,mauerfall232.html>

<https://www.welt.de/wirtschaft/article141059079/Wirtschaftsweise-warnten-vor-der-D-Mark-fuer-die-DDR.html>

<https://www.faz.net/aktuell/politik/occupy-wall-street-frei-zur-adoption-11573492/vor-der-raeumung-der-11573957.html>

<https://capx.co/only-genuinely-free-markets-will-save-capitalism-from-the-far-left/>

<https://www.tagesspiegel.de/politik/kapitalismus-und-demokratie-warum-sie-einander-brauchen/25044820.html#>

Slide 4:

Piketty, T.: Le capital au XXI^e siècle, Paris: Seuil (2013).

Sedláček, T./Tanzer, O.: Lilith und die Dämonen des Kapitals. Die Ökonomie auf Freuds Couch, München: Hanser (2015).

Milanović, B.: Capitalism, Alone. The Future of the System That Rules the World, Cambridge / London: Belknap (2019).

Slide 6:

<https://www.interstahl.com/stahl-wiki/roheisenproduktion>

<https://picclick.de/HOESCH-AG-Dortmund-histor-Stahl-Aktie-1943-Krupp-312835684467.html>

Slide 7:

http://www.scharf-links.de/48.0.html?&tx_ttnews%5Btt_news%5D=16667&cHash=7bb8236b33

<https://www.amazon.de/Buf fett-Making-American-Capitalist-English-ebook/dp/B00DPTL2F0>

<https://www.welt.de/finanzen/plus186702922/Aktien-und-ETFs-Mutige-Sparer-koennen-an-der-Boerse-einsteigen.html>

<https://www.handelsblatt.com/unternehmen/it-medien/bill-mcdermott-im-hoehenrausch-wie-der-sap-chef-den-softwarekonzern-auf-wachstum-trimmt/21263098.html?ticket=ST-7043117-ICGG1Yj1AuxuHvneWEUI-ap5>

Slide 8:

http://www.landschaftsmuseum.de/Bilder/Lappenb_Schaeft-2.jpg

<https://berufe-dieser-welt.de/seidenweber/>

<https://www.n-tv.de/wirtschaft/Watts-Dampfmaschine-wird-250-article20792825.html>

<https://www.n-tv.de/wirtschaft/Trabant-nutzt-Ost-Wirtschaft-noch-immer-article20116687.html>

Slide 10:

https://de.wikipedia.org/wiki/Johann_Wolfgang_von_Goethe

Slide 11:

<https://de.wikipedia.org/wiki/Muschelgeld>

https://en.wikipedia.org/wiki/Banknote#Paper_banknotes

<https://de.wikipedia.org/wiki/Taler>

Slide 12:

https://de.wikipedia.org/wiki/L%C3%A9on_Walras

Slide 13:

https://de.wikipedia.org/wiki/Kipper-_und_Wipperzeit

Slide 14:

<https://www.solinger-tageblatt.de/solingen/info/solingen-polizei-sucht-hubschrauber-nach-vermisster-frau-13711045.html>

Rheinische Post, March 10, 2020

https://de.wikipedia.org/wiki/Milton_Friedman

Slide 15:

<https://www.report-k.de/Politik-Nachrichten/Politik-Deutschland/Vielen-Buergern-fehlt-Geld-fuer-vollwertige-Mahlzeiten-110397>

Slide 16:

<https://www.stuttgarter-nachrichten.de/inhalt.dirk-mueller-premium-aktien-fonds-kraeftig-enttaeuscht-von-mr-dax.2aea0cb7-88a4-457b-85cc-dd636c465ea4.html>

Slide 17:

https://de.wikipedia.org/wiki/Friedrich_August_von_Hayek

https://de.wikipedia.org/wiki/Walter_Eucken

Slide 18:

https://de.wikipedia.org/wiki/Carl_Menger

<https://de.wikipedia.org/wiki/Datei:Bawerk.gif>

https://de.wikipedia.org/wiki/Friedrich_August_von_Hayek

Slide 19:

Böhm-Bawerk, E. v.: The Positive Theory of Capital. Translated with a Preface and Analysis by William Smart, London / New York: Macmillan (1891), front matter, pp. 36, 37, 101.

Slide 20:

https://de.wikipedia.org/wiki/Robinson_Crusoe#/media/Datei:Robinson_von_Offterdinger_und_Zweigle_Kap_3.jpg

<https://www.praetech.ch/verein/geschichte>

<https://www.ajourneybespoke.com/journey/food/tropical-fruits-of-indonesia>