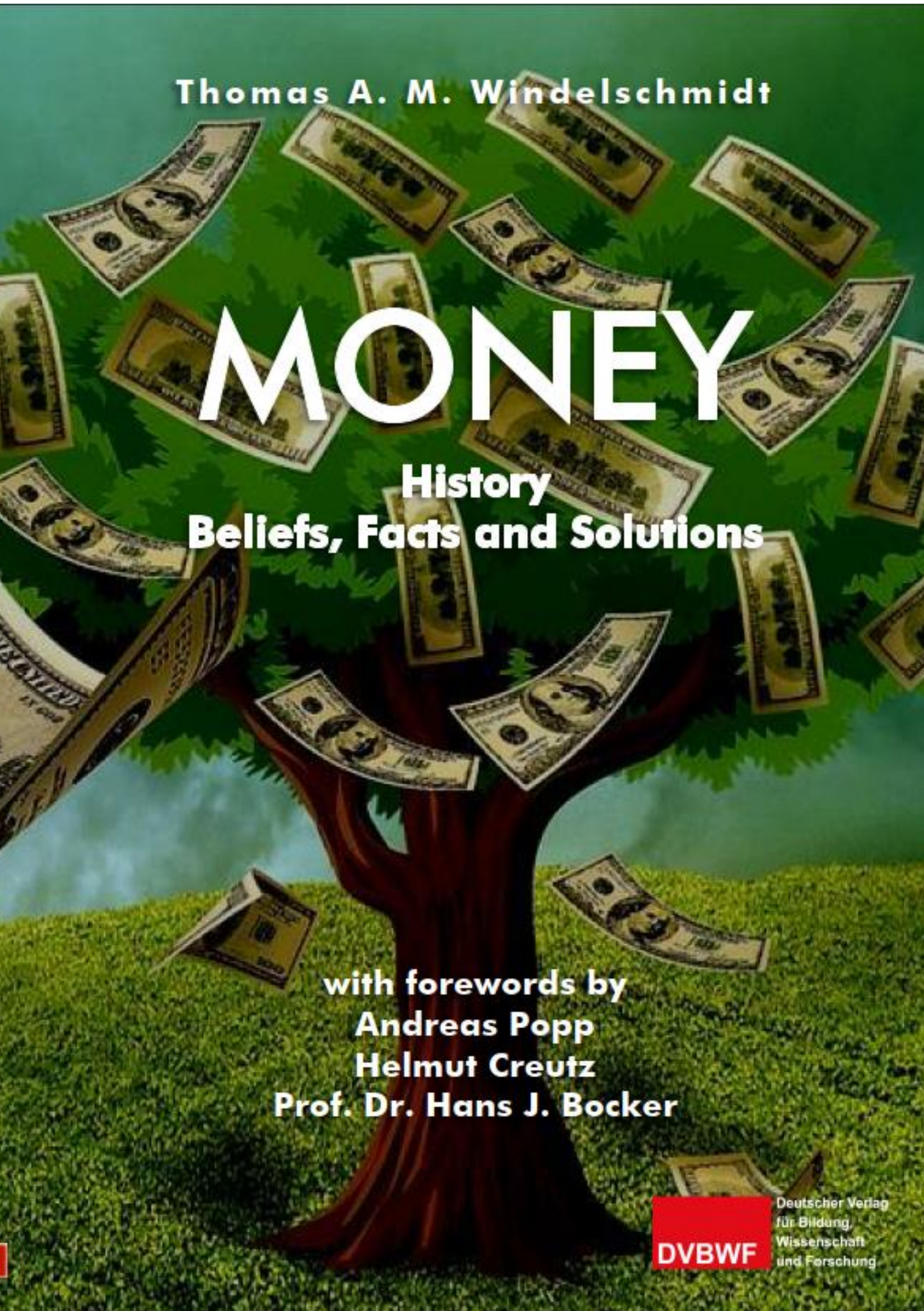

Thomas A. M. Windelschmidt

MONEY

History
Beliefs, Facts and Solutions

with forewords by
Andreas Popp
Helmut Creutz
Prof. Dr. Hans J. Bocker

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Deutscher Verlag für Bildung, Wissenschaft und Forschung

Thomas A. M. Windelschmidt

Money: History, Beliefs, Facts and Solutions

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For my wife Claudia, my angel on earth,

and Tim and Anna, my favorite children ...

IhEl...bzHuz...ui1SmaIm.

In memoriam

HELMUT CREUTZ

(* July 8, 1923; † October 10, 2017)

an analytical mastermind,

and helpful interlocutor,

a warm-hearted man

and truly dear friend ...

... and for Barbara, his wonderful wife!

Henry Ford (1863-1947)

„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."

Foreword by Andreas Popp

We live in an economic and financial system which requires eternal growth and therefore the proceeding destruction of the world and its inhabitants (whether human beings, animals or plants) in order to avoid economic crises. The „normal citizen“, who lives at least partly in harmony with his soul, mind and body, has already intuitively conceived this quandary. Why, however, do politics and science pitilessly fail?

A few centuries ago, every human being „knew“ that the earth was the centre of the universe and all other celestial bodies circled around it. As we all know, Copernicus was not welcomed with open arms when he investigated and declared heliocentrism. It had always been difficult for the dogmatically led, scientific world to part with happy paradigms.

This becomes more than clear in the current so-called financial crisis. The term „financial dilemma“ is actually better, as the term crisis describes a system thrown out of balance, which is basically not questioned (and that is the crux). The consequences are completely useless, crisis-intensifying bailout packages and other nonsense in order to straighten out the „system without any alternatives“. Only if we question the systematic reasons we will be able to recognise the hopeless deadlock, I refer to as dilemma. Exactly this offers the historic chance for a complete realignment.

The book on hand by Thomas A. M. Windelschmidt *creates knowledge* in accordance with *open-ended science*. Far away from the standardised, often unquestioned syllabus of the universities, the author dares a fundamental historic and objective discussion of the financial order.

An essential basis of the causally quandary can be historically recognised when it comes to the rejection of the former utility industry, which served all people, to a commercial and profit economy, which basically harms the general public.

Furthermore, the monetary system based on debts exponentially amounts to constantly recurring breakdowns. The reasons for an apparent impoverishment of the mass, for the dramatically increasing destruction of the environment, for many pointless wars etc. can be found there.

The permanently demanded mania of growth which is the result of the interest-paying monetary system and only caddies for a small „elitist“ part of the population is responsible for that. A financial system which only harms almost the whole population and from which only a few profit „without having to work” has to be „radically“ tested.

However, we can only change something, if the oppressed majority wakes up and actively deals with this „order“. If this does not happen, all population majorities of this world will end with mathematical presision in a dramatic impoverishment.

Interested people, also those without scientific background, will find many stimulating impulses of knowledge in this book and experts can gather a lot of new information as well.

I appreciate the directness and the backbone of the author Thomas A. M. Windelschmidt who could have placed another milestone for a fairer world with this book.

Cape Breton, Canada 1 June 2012

Andreas Popp
Wissensmanufaktur
Institut für Wirtschaftsforschung und Gesellschaftspolitik
www.wissensmanufaktur.net

Andreas Popp (born in 1961) very early earned a great reputation as CEO of a very successful group of companies. He became well-known due to his constructive criticism of order. After withdrawing from the life as a manager he wrote several best-selling books such as „Brot und Spiele“, „Das Matrix-Syndrom“ or „Der Währungs-Countdown“. Nowadays he is amongst others responsible for the scientific advisory committee of the Wissensmanufaktur and the known Institut für Wirtschaftsordnung und Gesellschaftspolitik. His expression is well-known due to various TV interviews (e. g. n-tv). The demand for a complete realignment of the systems led to a jolt in many researching faculties worldwide.

Foreword by Prof Dr Hans Jürgen Bocker

Those who intensively experienced the times before, during and after WW II can nowadays almost be considered as „old stager“. Therefore, certain serenity appears quite understandable as welcome late bounty of nature. Hasty judgements are therefore „out“, but the capacity for enthusiasm is still alive and „in“.

The book of Thomas A. M. Windelschmidt with the title „Money: History, Problems regarding the status quo & Solutions“, which does precisely not promise boredom and is absolutely up-to-date due to a worldwide staggering financial system, awakened more than just my vivid interest, but such an enthusiasm. This book has the finger on the pulse. It gave me therefore great pleasure to comply with his wish to write a preface.

The author impresses with his clear language and the refreshing ability to simplify highly complex facts, which are only understood by insiders and are common in the monetary and financial world, and makes them completely understandable for lay people. The world of money and credit (meaning debts) is explained in detail according to origin, character, way and function.

The author illustrates terms, contents, procedures and coherencies in a systematic way in 24 chapters. After having read this exciting reading, the reader cannot make excuses – to himself and to others – that he *„did not know about all this“.* This is insofar impossible, as profound knowledge is transmitted here. The horizon is widely pitched.

In particular it is about fundamental terms such as: origin of money, background, history, functions and traditions, the development of economic and monetary systems, the worldwide banking system along with account types, the conjunctions of assets and debts, types of credits as well as special funding.

Furthermore, special as well as apparently usual terms and topics receive a clear, considered illumination. This includes for instance the world of securities and stock exchanges, fiscal paradises, credit rating agencies, money supply controls, the connection between money and price development, the link between interest and debts, the economic, banking, euro and debt crisis, which has been going on for five years, including the supranational ESM.

Of course, various solutions are offered such as Attac, the suggestion by Herman Daly, the full-money reform, monetary approaches, the demurrage by Silvio Gesell (the „Miracle of Wörgl“) and plan B including flowing money, land reform and more.

It speaks for Thomas A. M. Windelschmidt that he also addresses delicate and controversial issues and problems which are unpleasant for the elite leaders. The real and actual reasons of the current, still existing permanent crisis are cut right to the chase of the matter. He does not linger over the fighting of the system, which is common in established circles, where the conducting wire from the transducer in the tank to the dashboard is secretly cut through in order to always have the needle pointing to „full“ when the tank is almost empty, but dauntlessly shows real, cause-oriented solutions. As even Buddha reproved, the toothache will not „get better“ when it is always numbed, but only if the root of the pain is eradicated in order to permanently prevent a return. These constructive suggestions lead to a basic reform of the monetary system as such.

The author might surprise and amaze the reader with some passages, even frighten them. The tone, however, stays beneficially objective, polemics does not exist and professional donnishness of „know-it-alls“ are missing as well.

Reading this book is not only exciting but is also a very pleasant experience, free from trivialities. The definitions, circumstances and explanations stay – clearly illustrated – in the field of science. In doing so, the world of money is detailed and understandably exposed and its other worlds are competently displayed, however in short from.

I read about a new and mathematically correct description of the Joseph’s Penny for the first time ever. At the latest when it comes to the interlacing of those examples it becomes clear to the reader that Thomas A. M. Windelschmidt does not only have reliable economic but also natural scientific knowledge due to his studies in the field of physics. This double background runs as signature feature of the author through the whole book like a special leitmotif.

After the release of this book it has to be apparent, even for critical readers, that Thomas A. M. Windelschmidt will also spring positive surprises in the future. Without doubt, the demonstrated clarity and transparency of interesting and current topics of some brisance others might try to illustrate with only little knowledge and which are emotionally coloured and offer coherencies with a lot of polemic and often with lacking expertise – he will be able to attract potential readers and completely convince them in days to come.

It is and was a pleasure to me to have been one of the first people to have held this book in hands. Completely inspired by this delightful reading, I can only recommend it warmly.

If this book was a share and I was one of the top-analysts of a leading financial group, my evaluation or recommendation would be: *„Strong Buy“!*

Alpnach, 26 August 2012

Prof Dr Hans Jürgen Bocker
Dip.-Ing., Dipl.-Wirtsch.-Ing.

Prof Dr Hans Jürgen Bocker has his main residences in Central Switzerland and in Pacific Canada. He is a double professor in business administration, is a qualified international financial and economic journalist for leading publications and is active in many fields (amongst others lecture series and seminars). Professorships at numerous elitist business schools and universities on three continents, two years Deutsche Treuhand Berlin, international activities as consultant, author, financial and economic journalist as well as columnist are his trademarks. His tasks and interests lead his path in 54 countries, including the Middle and Far East, Africa, Europe and North America. With his publications, he passed the 2,000 mark (150 academic and 1,850 „other“) and can be found amongst „B“ in all issues of WHO IS WHO IN THE WORLD from 1990 – 2000. He does work in PR and IR, supervises a number of raw material and mining companies, has own companies and is a member of Rotary International. His latest book „Freiheit durch Gold" was published in the third edition in German and in seven languages. Hobby: Mozart.

Foreword by Helmut Creutz

This book is a rich source for everyone who wants to inform himself comprehensively and understandingly about our money.

If it had been on the market 30 years ago, I probably would not have had to write my own titles. At the very least, this book by Thomas A. M. Windelschmidt as comprehensive guidance would have been very convenient for me, an aid I was looking for unsuccessfully and whose versatility is already conveyed with the twelve-sided index!

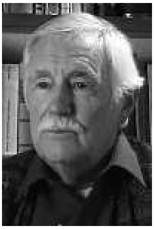
Especially pleasant is that the author, who has two degrees in different subject areas namely physics and economics, wrote this book free from every scientific technical jargon and its content can therefore be understood by those readers for whom the topic money is in many respects still a mystery.

Therefore, this book provides an opportunity for everyone to obtain a considerable amount of perspective: no matter if it is about the origin of money or the development of the economic systems, about banks, accounts, types of credits, stock exchanges, shares and securities or about the connection between monetary assets and debts including the backgrounds of national bankruptcies as well as the current economic, banking and euro crises: Thomas A. M. Windelschmidt is always close to the core when it comes to his explanations and he understands how to illustrate the complex issues and historic connections vividly and transparently.

I am very happy that I take part with my own graphics!

Aachen, September 2012

Helmut Creutz
www.helmut-creutz.de



Helmut Creutz, born 1923 in Aachen, professional aim engineer, instead fatigue duty, training to become a pilot and flight instructor, Russian imprisonment and two-year illness. 1949 half-time job in a company for interior construction, later leader of the planning office, occasionally company director. From 1972 on freelance architect and author, since 1982 business analyst and publicist. Socio-politically active since the 1960s, amongst others in anti-war, environment, third-world and ballot initiative, contributor of the campaign „Humane Schule". End of 1979/80 co-founder of the Alternativen Liste and the GRÜNEN in Aachen and North Rhine-Westphalia, four years active as executive, candidatures for the city council and the Landtag, 1984 give-up of the active political work. Besides increasing lecturing (since 1980 more than 750 events) more than hundred articles in magazines especially regarding the field money reform such as „HUMANE WIRTSCHAFT", „fairconomy", „Zeitschrift für Sozialökonomie", „Fragen der Freiheit", and „Alternatives" as well as amongst others „CONTRASTE" and „Sozialismus". Helmut Creutz published numerous books amongst others „Gehen oder kaputtgehen – ein Betriebstagebuch" (1973), „Haken krümmt man beizeiten – Schultagebuch eines Vaters" (1977), „Wachstum bis zur Krise" (1986), „Das Geld-Syndrom – Wege zu einer krisenfreien Wirtschaftsordnung" (1993) and „Die 29 Irrtümer rund ums Geld" (2004). Refer to www.helmut-creutz.de

Prologue

Henry Ford (1863 – 1947)

> *„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.“*

Prof Dr Christian Kreiß, Hochschule Aalen, wrote in March 2011 in the magazine *„horizonte“:*

> *„Im Grunde genommen hat fast die gesamte Main-Stream-Ökonomie, die auf rational-logisches, mathematisch-technisches modell-getriebenes Denken aufbaut und meist der neoklassischen Marktideologie verhaftet ist, bei der Vorhersage und Analyse der derzeitigen Finanzkrise komplett versagt. Man könnte selbst die Frage aufwerfen, ob es sich bei der Volkswirtschaftslehre in ihrer derzeitigen Form überhaupt um eine Wissenschaft handelt, also u. a. um nachprüfbare, objektive Wahrheiten, auf die man sich interpersonell einigen kann, oder um ein Potpourri von Meinungen, Weltanschauungen und Emotionen, die in wissenschaftlich exzellent ausgearbeiteter Form vorgetragen werden.“*[1]

Are Henry Ford and Prof Dr Kreiß right? Where are the reasons for these estimations? Are there rationally verifiable „truths“ which make the development of money and the economic systems until the current crisis comprehensibly understandable for everyone? Where are the causes for the undesirable development and problems, how can solutions look like? Why is there no „real truth“ or, if it exists, why is it not revealed?

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[1] Fundamentally, almost the whole mainstream economy which is based on rationally logic, mathematically technical, model-driven thinking and usually clings to the neoclassical market ideology failed when it comes to the prediction and analysis of the current economic crisis. Even the question could be brought up, if science is really concerned when it comes to economics in the current form, therefore if it is about verifiable, objective truths on which it can be agreed on interpersonally or if a potpourri of opinions, ideologies and emotions is concerned which are represented in scientifically excellent form.

The following book deals with the fundamentals of the topic money. The following main fields will be explained and described:

- Origin and history of money
- Function of money
- Historical development of economic systems
- International development of monetary systems of modern times
- The international banking system
- The European system
- The German banking system
- Types of accounts
- Money - loans/credit - assets
- Credits and types of credits
- Special funding
- Stock exchanges
- Shares and securities
- Tax havens
- Credit rating agencies
- Monetary policy and money supply tax
- Money development and pricing
- What is interest?
- What are debts?
- Is the interest the central problem?
- The impacts of interest-paying debts on the nation?
- Current economic, banking, euro and debt crisis
- Solutions and perspectives

The aim of the book is to give an overview over the most important characteristics of money, the history of money, the financial and banking system as well as over the impacts of the interest-paying monetary system on the economy and society and an explanation of the current crisis together with solutions.

Some readers might experience an aha-moment when reading certain passages, some might be frightening. Altogether it appears important to me to pick up as much background information as possible in order to get an own personal idea as unstained as possible from the mainstream media, even if there is the danger of bucking against the trend with these new perceptions.

I wish you a lot of informative fun when reading.

Dr Dr Thomas A. M. Windelschmidt

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1 Development, actual situation and prospect

Everybody knows what money[2] is. Is this really true? Can this question actually be answered easily?

Has there always been money? Or did someone invent money? If so, how did these first inventions look like?

Is money bound to any form, e. g. in the form of coins or banknotes? Or can even items of barter be regarded as money in the broadest sense, e. g. shells?

Is money always tangible therefore haptic? What about assets on banking accounts or vouchers for instance?

Is it decisive who the issuer is in order that money has an inner value as well as legitimacy? Or is every person allowed to print and issue money? What about regional currencies for instance?

Does money need to have a secure counter-value, e. g. a gold coverage? Or can money also be virtually generated, e. g. by means of a book money creation?

How does money decide? Is there also money destruction? If so, where and how does it happen?

Is it possible that there is too much or too little money? What happens in the particular case? Who influences the amount of money? What influences does the amount of money have on the national economy? Does it also have significance for the companies and the human beings?

What happens if money is required? Is the borrowing of money different when it comes to states, companies and private persons? What is interest in this context?

Has there always been interest? Is interest really necessary? What are the consequences of interest? Would a monetary system also operate without interest?

What are the reasons for the current problems in the monetary system? Why can banks become insolvent? Why can states go broke? Do states as issuers of a currency not only have to be automatically debtless, but also have to generate incomes from interests by lending money?

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2 [Online] http://de.wikipedia.org/wiki/Geld.

This paper is in many aspects concerned with the topics money, monetary systems, the interest within the scope of the subject area theory of money and monetary policy as well as sociology and philosophy; and frames solutions for alternative money concepts regarding the prevention of problems determined by the system which have often lead to economic crises and wars.

2 Origin and history of money

2.1 A society without money – bartering

Is a society without money imaginable? Of course, as the part of the history of mankind where the exchange of products and services without money worked out, is by far the biggest. However, bartering of products and services without money is plodding and often not possible.

Indeed, a chicken can be exchanged for a sack of potatoes, but when it comes to an economy based on the division of labour it becomes gradually difficult. A shoemaker repairs a pair of shoes for a blacksmith, but if he does not require new horseshoes for his horse at the same time, the blacksmith will have trouble rewarding the shoemaker. Perhaps a baker needs a pair of horseshoes in that moment and is allowed to pay with a loaf of bread, but this is only helpful, if the blacksmith is hungry just now.

This is aggravated by the fact that the exchange of products and services has to be made more or less with the same value, as a horse dealer rather not like to sell a horse and only gets a loaf of bread.

Therefore, means of exchange accepted by all are important when it comes to an economy based on the division of labour, with which products and services can be evaluated and purchased.

2.1.1 First means of exchange

The first means of exchange were for instance cowries, bars of salt, feathers, cattle, rare spices or precious metals especially gold and silver.

Especially precious metals were appreciated as central means of exchange for many centuries, as they could not have been manufactured, did not rot and were everywhere accepted as value-preserving payment method. Even nowadays, precious metals are often accepted as payment method – besides gold and silver also platinum.

2.2 On which term can „money" be traced back to?

The Latin term for money is „pecunia". This word is linguistically traced back to the word „pecus", cattle. This derivation points to a sacred origin of money e. g. as replacement for the sacrificial animal which is imaged on a coin.[3]

2.3 What is money?

At first sight, this seems to be an easy question, as everybody knows what money is. If someone hears that somebody else is rich he knows that the other one has a lot of money and is able to buy a lot of things. However, is it really that easy?

In economics, the term „money" is defined as asset which makes it possible for those participating in a national economy to purchase products and services from others participating of a national economy. Especially cash in a purse is money, as one is able to buy something with it – provided that the currency is accepted.

However, a person can be regarded as rich, if he owns many shares of a company, real estate or other valuable things such as paintings of old masters. In this case, however, the person cannot buy anything, but has to transform the wealth into something else which is accepted regarding the exchange of goods.[4]

Money is generally regarded as being a good which can be used as means of exchange for products and services. An amount of money represents a right to a part of the national product of the state to which this currency belongs.

2.4 Gold as money

The advantage of precious metals such as gold and silver as means of exchange is apparent. The precious metals cannot be copied (faked), they exist to a limited amount, are divisible at will and do not rot. Especially gold

3 Duden, Der Euro: Das Lexikon zur Währungsunion, 1998, p. 153.
4 N. Gregory Mankiew, Schäfer-Poeschel-Verlag, Stuttgart, 1999, p. 644.

represents a great purchasing power due to its limited amount with the result that the transport in exchange for expensive goods had been associated with a manageable effort.

In order to minimise the effort of weighing, coins were minted from gold and silver, for the first time at about 700 B.C. in Lydia (nowadays West-Turkey) and Greece, whose value amounted to the minting. Thereby, the calculation or comparability as means of exchange became even easier.

2.5 The first coins

The benefits of gold and silver as a medium of exchange was successful, but it had a serious disadvantage. One would have to weigh the exchange, with the weighing in itself was a problem because it was inaccurate.

An early solution represented the minting of coins. Among the first minted coins were silver coins from Corinth which were used around the time of 386-307 BC in almost all of Greece:

Illustration 1: Silver Strater from Korinth

Embossed coins had the advantage to represent a high value in a small space and to be easily transportable.

The Roman currency Denarius was the basis for the steady development of the Roman Empire, began about 200 years before Christ, flourished roughly from the birth of Christ and lasted for about 200 years.

Illustration 2: Roman M. Baebius Tampilus Denarius, about 137 b.C. Head of Roma 1., Apollo in Quadriga

Illustration 3: Roman C. Egnatius Maximus Denarius, about 75 BD. Bust of Libertas, Roma and Venus, between Ruder and Pror

Illustration 4: Roman Elagabal Denarius, about 218-222 AD. Bust Roma on Throne.

2.5.1 Monetary crisis of Rome

The Roman heyday came to an abrupt end in the third century AD. A great currency devaluation meant that once again developed an in kind and bartering. Reasons for this devaluation were on the one hand the high war costs and on the other hand the high spendings for the Roman bureaucracy.

In order to pay the soldiers, there were only three options for the Roman rulers. Increase taxes, cut down spendings spending cuts during the Roman infrastructure (education, health) or the currency „devalue" by reducing the silver content. The latter was taken, but this subsequently led to a massive inflation.

Another reason for the decline of the Roman monetary system was the Roman system of interest. Impact of interest and compound interest will be discussed in a later part of this book.

2.6 How did money develop?

The very first „banknotes" were issued in China over 1,000 years ago. This paper money obtained its purchasing power by imperial degree, but did not reflect any intrinsic value and was not accepted by people in the long run. In 1402 that paper money was disposed of in China after several currency reforms.

At the end of 13th century King Gaichatu of Persia issued paper money to fill his treasury. He postulated on August 13th, 1294 that non-acceptance of paper money would inflict a death penalty. It was of no avail, however. This trial of paper money was terminated after two months.

In the Middle Ages, especially at the time of the Order of the Temple, gold was appreciated as means of exchange, but the transport was expensive and dangerous. As a way out, goldsmiths accepted this gold as deposit and issued a receipt. On production of this receipt, the goldsmiths obliged to return this gold. In the course of time, the receipts were regarded as payment method meaning it was not paid with the physical gold anymore, but the receipts were accepted as method of payment.

Based on this, the Order of the Temple created a payment system which went above and beyond the national borders. Traders deposited gold with the Templers and received a document which was not money itself, but only a promise to pay. In the country of destination, the trader could re-exchange this promise to pay in gold and in this way avoided the risks of gold transport.

Subsequently, the goldsmiths developed into banks which issued official receipts with the right to gold. As not all customers claimed the deposited gold at the same time, but rather used the easier means of exchange „gold receipt", the resulting banks issued more receipts than gold was available or, the other way round, sold gold without reducing the amount of the gold receipts.

Not until later the states took over the right to create money (issuance of receipts) and, for this purpose, founded (often private) central banks.

In Europe Spain tried to introduce paper money in 1483 to cover the war expenses, because there were not enough coins available at times.

The bank of Amsterdam issued paper money from 1609, however, paid attention to have a cover of the paper money by coins.

On July 16th, 1661 the first official bank notes in Europe were issued by the bank of Stockholm, a Swedish private bank.

King William permitted the Scottish businessman Paterson the foundation of the Bank of England. With this approval English bank notes were emitted, at that time signed still from hand.

The intrinsic value of this paper money was based on coins and could be exchanged for coins at any time, which was also printed on the bank notes, e.g., "Promise to pay the bearer on demand the sum of fifty pounds here or in London. 1913 July 2 Manchester" on the bank note of the Bank of England.

Illustration 5: Bank note of the Bank of England from 1913

3 Functions of money

3.1 The three functions of money are

- Means of exchange and method of payment
- Unit of account
- Store of purchasing power

Table 1: Functions of money

3.1.1 Money as means of exchange and method of payment

Everybody is aware of this function of money. Money can be exchanged for something or something can be paid with money. This happens every day, everywhere in the world. If somebody wants to purchase something, two legal actions are performed. On the one hand, the desired item is received and on the other hand the applicable amount of money is handed over. Usually, such a transaction is only possible with money, as a seller will normally decline an exchange with a non-pecuniary object.

3.1.2 Money as unit of account

In its function as unit of account, money is used in order to name the value of a product or of a service or to record a liability. If it is for instance known that a computer costs an amount of 1,000 CU (currency unit e. g. dollar, yen, euro, pound etc.) and a car costs 10,000 CU, nobody will say that the car is worth the equivalent of ten computers, but will take the currency unit as a standard of comparison. A credit is also recorded in the applicable currency unit and not in the counter-value of an amount of goods e. g. 20 cars for a property loan. In its function as unit of account, money takes on an important role in economics.

3.1.3 Money as store of purchasing power

A store of purchasing power is a „thing” which makes it possible to transfer a current value (purchasing power) into the future. Here, it is immaterial which form this thing has. There are therefore many strategies in order to secure current purchasing powers with the result that they can be used in the future. These are for instance investments in shares, bonds, real estate and precious metals, but also the purchase of art (e. g. paintings) and jewellery.

Money also has this function. If a seller sells an item and accepts money as means of exchange, he can be pretty certain that this means of exchange can be used the next day when it comes to the exchange with another user.

3.1.4 Dualism of money

As money possesses the task of being a means of exchange (and also a unit of account) as well as a store of purchasing power, this is referred to as dualism of the function of money, whereas the two functions are diametrically opposed to each other.

According to the task of being a means of exchange, it is important that the available amount of money „flows” as trouble-freely as possible and changes hands as often as possible. In the adverse case, money as being a store of purchasing power is hoarded and therefore withdrawn from the economic cycle. The two key functions of money contradict themselves which will inevitably lead to contradictions or opposed preferences.

3.2 Types of money

The following types of money exist

- Natural, material or commodity money
- Instruction, paper or fiat money

Table 2: types of money[5]

[5] N. Gregory Mankiew, Schäfer-Poeschel-Verlag, Stuttgart, 1999, p. 646.

3.2.1 Natural, material or commodity money

If money as means of exchange contains an inner value (intrinsic), this means of exchange contains a purchasing power, even without its function as money. The mostly known and used means of exchange which often also contain a money function as well as an inner value is gold. In history, gold was often used as monetary unit, as it is easily measurable, cannot be multiplied at will and was and still is accepted all over the world.

Besides that there are other forms of natural, material or commodity money, especially in times of crisis. In the Second World War for instance, cigarettes were accepted as „substitute currency”. It met the same requirements as money and was used as store of purchasing power, unit of account and means of exchange.[6]

3.2.2 Instruction, paper or fiat money

If money does not contain an inner value, it is referred to as instruction money, paper money without coverage or fiat money. The background is that the state makes this money to a method of payment by law. If this statutory „intrinsic value” is omitted, e. g. when it comes to a currency reform, this former legal means of payment loses its total value. It was only apparently money, therefore „apparent” money.

3.3 Cash and bank money, savings

Everybody knows what cash money is. It is the current legal means of payment in form of banknotes and coins. It is issued by the responsible central bank and is produced as forgery-proof as possible. This cash money can be found in the purse, in cash tills, at the bank and at the central bank.

Bank money in contrast is the visible monetary stock which is entered as available money and sight deposit on the cheque account and is at the economic participant’s disposal for a short period of time. It is usually used by means of bank transfer or with a cash card for example with which it can be paid in most shops.

6 N. Gregory Mankiew, Schäffer-Poeschel-Verlag, Stuttgart, 1999, p. 646.

With savings, however, one cannot pay or shop. In order to exercise purchasing power with the own savings they have to be made liquid, therefore they have to be changed into cash or bank money.

3.4 Currency

Currency in the broadest sense is the statutory valuta of a country including the determination of the coinage, the legal means of payment and the exchange relationship with foreign currencies.

More specifically, currency is the means of payment of a country.

3.5 Legal consideration of money

If money is considered from the legal point of view, it is regarded as:

- An anonymous evidence for a service rendered e. g. for an economic good or a service
- Evidence for a right to a share in the national product of this currency which can be anonymously transferred
- A legal means of payment with the constraint to accept it, independent from the condition of the means of payment

Table 3: Legal consideration of money

If the legal consideration of money is taken as a basis, money only consist of banknotes and coins, as all other „token money constructions" which are regarded as money do not meet all requirements, they cannot be transferred anonymously for instance.

The sight deposits of cheque accounts are also no „real" money and are not classed with cash money. The term book money is therefore misleading and only in conformity with the law, if „book money" would be treated as equal with cash money and the book money creation would be added to the monopoly position of the central bank.[7]

3.6 Intrinsic value by law

Nowadays, money does not derive its value from an inner counter-value (intrinsic), but from the trust that a real equivalent e. g. a loaf of bread, can be obtained in exchange for a „bill". The state gives the printed money its „value" by law. Those who do not follow these laws are liable to prosecution. It is neither allowed to steal bills nor copy them nor „invent" a new currency. Pure legally created money is also called „fiat money" (Lat. let there be money).

3.7 Issue bank/central bank

The issue bank, nowadays rather referred to as central bank, issues the banknotes of a country and is responsible for the monetary policy of a country. The tasks of a central bank are:

- Issuance of the banknotes
- Monetary policy
- Supply of the economy with means of payment
- Facilitation of the processing of payment transactions
- Regulation of the amount of money in accordance with the requirements of the economy
- Protection of the stability of the inner and outer value of the currency
- Adjustment of the payment balance
- Administration of the monetary reserves

Table 4: Tasks of the central banks

[7] Helmut Creutz: Das Geld-Syndrom, Wirtschaftsverlag Langen Müller Herbig, 2003, p. 35.

3.8 Banknote

According to the historic definition, a banknote was a written remittance of an issue bank to itself. It was virtually an issue bank's promise to pay, if a banknote was presented.

The first European issue bank is said to be the „Stockholms Banco" which had minted copper plates as money as from 1644. As these plates, which could weigh up to 20 kg, were rather unhandy, a „Credityf-zedel" was handed over in exchange for them which could be exchanged anytime and therefore was the first European banknote.

Nowadays, banknotes are regarded as being a legal means of payment.

3.9 Are credit or debit cards money

As more and more economic participants use credit cards in order to pay, they can consequently be regarded as money or have to be added to the amount of money. This, however, is not the case, as one cannot pay with credit cards, but makes use of a short-term credit until the actual payment is made.

As opposed to that, debit cards (top-up cards) have to be added to the amount of money, as the economic participant accesses previously deposited money similar to an account in credit.

3.10 Liquidity

In economics, liquidity is the possibility to exchange an asset (store of purchasing money) into a means of exchange common at this moment, e. g. money. As money is the mostly used means of exchange, it is described as asset with the highest possible liquidity. All other assets take a back seat to money, as they have to be changed into an immediately usable means of exchange first.[8]

8 N. Gregory Mankiew, Schäffer-Poeschel-Verlag, Stuttgart, 1999, p. 645.

3.11 Fortune, money and liquidity considerations

In general, fortune is all assets no matter if monetary or non-monetary. This includes all stores or purchasing power which can be used to shift purchasing power into the future and can be changed into a current currency unit .

When it comes to the consideration in which form fortune should be secured for the future, liquidity considerations play a role regarding the choice of the used assets. Therefore it is for instance unrewarding to invest everything in an asset which brings a very small liquidity index with it, e. g. real estate, as it has to be reckoned that, in case of a sever demand for liquidity, those assets can only difficult or with losses be liquidated or even not at all.

Indeed, money is the most liquid store of purchasing money, but only suitable to a limited extent, as the liquid store of purchasing power cash money depreciates in case of inflation.

3.12 Mistakes of the money construction

If the money construction and its functions are considered more precisely, discrepancies can be determined regarding the tasks of money:

I Money is construed as public institution, but is at the same time private property.

II Money is imagined as means of exchange, but is used as store of purchasing power at the same time which is diametrically opposed to the function of exchange.

III A multiplication of money by means of copying or forging is forbidden, but the withholding (hoarding) and therefore the withdrawal from the economic cycle is allowed.

IV In accordance with point III, money is provided with a constraint to accept it, but not with a constraint to submit it and is therefore allowed to be withdrawn from the economic circle.

V	Money is the only legal means of payment, but is used as venture at the same time.
VI	Money is required and used as measure of value, but the inner value is not kept stabile (comparable to a situation where weight in kg or the length in m could be staggering daily).
VII	Money is related to an interest and compound interest system, although exponential growth cannot work out permanently and the destruction of the monetary system is anchored in the construction.

Table 5: Contradictions regarding the money construction