How to Tame Money?

Systemic Analysis of the Present Economic Situation

Josef Drahorád

Food Research Institute Prague, Radiová 1285/7

102 31 Praha 10 – Hostivař, Czech Republic,

Abstract

In this work I analysed the present economic system. I formulated the systemic differences between industrial production and manufacture. I defined the duties and potential of the present State and confronted them with reality. In this way I created a model of functional economics and State.

The proposed model is based on respecting the real economic relationships and flows of goods. Introduction of this new model will remove the artificial problems of fictive lack of finances and problems with their obtaining. The State will then be able to concentrate on the real problems instead of the artificial ones, even when, maybe, these problems have not been created intentionally.

The newly proposed model eliminates the problems with the State budget, as well as the issue of ‘debt burden’. This model with controlled financial flows is clearly arranged and effectively eliminates deformations of the present economies – corruption, abuse of power, lobbying, etc. All these changes would be accompanied by essential social changes and improvement of the overall social climate.

Keywords: economics, system, money, state, banks
GLOSSARY AND LIST OF ABBREVIATIONS: ................................................................. - 4 -

1. Introduction, Basic Terms and Philosophy of the Basic Scheme................................................. - 5 -
   1.1. State 1 and Economics 1 .................................................................................................... - 5 -
   1.2. The Role of State 1............................................................................................................. - 8 -
       1.2.1 Barriers ...................................................................................................................... - 8 -
       1.2.2 Emission of Money ..................................................................................................... - 10 -
       1.2.3 Tax Collection ........................................................................................................... - 10 -

2. Method...................................................................................................................................... - 11 -

3. Theory: R-State 2 and R-Economics 2 ...................................................................................... - 11 -
   3.1. R-Economics 2 – General................................................................................................. - 11 -
       3.1.1 Segmentation of Processes ........................................................................................ - 12 -
       3.1.2 Assembly of Elements ............................................................................................... - 12 -
       3.1.3 Motorization of the Process ......................................................................................... - 13 -
       3.1.4 Consequences ............................................................................................................. - 13 -
       3.1.5 Pseudo-Animation ........................................................................................................ - 14 -
       3.1.6 Analysis of Economics 2 – Basic Flows ..................................................................... - 14 -
   3.2. Real Functioning of the Present Economics: R-Economics............................................. - 15 -
       3.2.1 Two Types of Money in R-Economics ....................................................................... - 15 -
       3.2.2 Deposit Multiplicator .................................................................................................. - 15 -
       3.2.3 Non-Bank Emitters ..................................................................................................... - 16 -
       3.2.4 Two Types of Money (Samuelsson and Nordhaus, 2007) .......................................... - 16 -
       3.2.5 Difference between Emitted and Credit Money (EM and CM)................................. - 17 -
   3.3. R-State and Its Potential for the Barrier Removal.............................................................. - 18 -
       3.3.1 Introduction ................................................................................................................ - 18 -
       3.3.2 Direct Emission of Money .......................................................................................... - 18 -
       3.3.3 Tax .............................................................................................................................. - 19 -
       3.3.4 Credit Monetary Emission ........................................................................................... - 19 -
       3.3.5 Conclusion of R-Economics ....................................................................................... - 20 -

4. Results ...................................................................................................................................... - 21 -
   4.1. Theory of Systemic Economics........................................................................................... - 21 -
       4.1.1 The Elements and Relationships in the Two Systems............................................... - 21 -
       4.1.2 Lower System of People (LSP) and Upper System of Companies (USC) – Flows.......................................................................................................................... - 21 -
       4.1.3 Transformation Units .................................................................................................. - 25 -
   4.2. S-State.................................................................................................................................. - 28 -
       4.2.1 Barriers ........................................................................................................................ - 28 -
       4.2.2 Tools of State 2 ........................................................................................................... - 30 -
5. Discussion .................................................................................................................................................. - 32 -
   5.1 Introduction of a Functional System of Two Systemic Currencies .............................................. - 32 -
   5.2 Expectable Positive Consequences of the Transformation ............................................................ - 32 -
   5.3 Different Variants of Possible Development ............................................................................... - 33 -
6. Conclusion ................................................................................................................................................. - 38 -

References: .................................................................................................................................................. - 39 -
GLOSSARY AND LIST OF ABBREVIATIONS:

CEB – central bank
CB(s) – commercial bank(s)
CM – credit money
DLV – delivered labour value
DM – deposit multiplicator
EM – emitted money
GSHN – goods for satisfying human needs
GSHNT – trade with goods for satisfying human needs
LFV – labour force value – total sum of time expendable in work by an individual or a team in particular conditions
LSP – lower system of people
M1 - Money 1
M2 – Money 2
R-Economics, R-State, R- Economy – real, existing Economics, State and Economy
S-Economics - Systemic economics = discipline bringing a systemic view on the solution of economic organization
S-Economy – economic organization ruled by the principles of S-economics
S-State - hypothetical State employing S-Economy
USC – upper system of companies
VDC – value delivered to companies

Many new abbreviations were used in this work – corresponding to a large number of new expressions. The necessity of this step is explained in Chapter 2 – Method.
1. Introduction,

Basic Terms and Philosophy of the Basic Scheme

1.1. State 1 and Economics 1

State 1 is the type of State the character of which is determined by Economics 1.

As a starting point I used the following basic fact:

**Man satisfies his needs with goods that he produces by working.**

This general postulation is not sufficient *per se*. To be able to influence processes in human society, we must know all the principal activities and their essence, interactions and possible interferences. Altogether, these factors form an economic model.

In this work I describe two economic models. I refer to these models as Economics 1 and Economics 2. Beside its own economic background, each model as a whole also requires different organization – i.e. the State. Economics 1 corresponds to State 1 and Economics 2 to State 2. The principles of Economics 1 are well-known and have been described, and I am referring to them here with the purpose of unifying formulations. At the same time, I am trying to point out the processes I consider of key impact – in Economics 1 and subsequently in Economics 2.

1.1.1. Definition of basic terms:

Economics 1 is characterized by agricultural production and developing manufacture. Its principles, derived from specialization of work, were originally formulated by Adam Smith, who provided detailed description of the main processes and principles of Economics 1 (Smith 1776). However, Smith was not able to distinguish the nature of work in State 1 from that in State 2, let alone formulate their differences.

By postulating that man satisfies all his needs by working I have implicitly defined two entities that I am going to employ throughout the following description.

The first entity defines the **duration of human activity devoted to work**. This is an individual characteristic. We must respect this entity being determined by time, personal (rational and voluntary) capacities, physiological needs and possibilities, and other factors. I will refer to this entity as **labour force value (LFV)**.

The second entity is defined by the total value of produced goods – I will refer to it as **delivered labour value (DLV)**. DLV corresponds to the capacity of the products to satisfy human life needs.

Both these entities can be defined in parallel for individuals, small groups, or the entire society.

These two entities are in relationship

\[
DLV = FctX (LFV)
\]

The function “Fct” is dependent on the knowledge, abilities, motivation, organization, individual human capacities, equipment, natural conditions, organization of work, hierarchy, etc. Index X or other, expressed by a particular number, defines its different course in various systems.

**Specialization of work** started when the existence of nomadic groups transformed itself into the sedate – agricultural – way of life. People feeding on fruit of self-regenerating nature in the previous stage started to transform nature by their own
work. Gradually, they became dependent on this work, i.e. on its results – the dependence lied in the fact that the number of people living on agriculture (active change of the environment) exceeded the capacity of self-regenerating nature.

Specialization of work enabled increasing productivity – effectiveness – of work. Craftsmen, who focused on production of a particular kind of goods only, possessed better tools and knowledge, were more experienced, and the productivity of their work was therefore higher. However, specialization of work was only feasible in groups because to satisfy needs the goods had to be exchanged.

On the other hand, such specialization brought problems at the level of the whole entity – i.e. group, or even at a higher level. These problems were associated with the exchange of goods and their sale in the group, and they could easily be solved within the group. More significant increases in production resulted in higher quantities of goods. Also, the groups had to trade among themselves. Thus, a number of new problems had arisen. The groups may have differed in customs, ways of exchange, including different exchange equivalents, language, habits. There may have been animosities between groups. There may not have been routes between groups, or these routes may have been dangerous. Production of particular goods required higher quantity of source material, etc. All this I refer to as barriers to development of the effectiveness of efforts or work. All these barriers have to be overcome. Their abolishment can and must be done by an authority respected by all the groups, and this authority possesses the means and capacity to overcome these barriers. I will call this authority the State. In the case of Economics 1, the corresponding authority should be the State 1.

At this point I would like to emphasize one essential fact. An individual, or a family, is not identical to a business company. Life and work are two separate matters for the individual.

The company is an independent subject accomplishing production.

The family is a social unit creating needs to be satisfied – a unit exploiting LFV to satisfy these needs, and sending its representatives to work in the company and in this way satisfy the family’s needs – needs to survive, reproduce, or other. In Economics 1, or Society 1, both units overlap in persons – the craft is accomplished in the family, is associated with its life, its position, and is inherited. This endows the family with a particular structure and specific significance.
Legend to Figure 1:
At the place of work, people render their energy, knowledge, invention – their labour force (left side ). For this work they obtain an exchange equivalent, which they then exchange for “goods”. With the goods they satisfy their life needs. The diagram shows that specialization requires an exchange equivalent – the notoriously well-known conclusion is discussed in any basic economy manual.
1.2 The Role of State 1

What is the State contribution to the optimization of economy? In this concern, there is only one option for the State. It can and must positively influence FctX. This influence consists in increasing the slope of the FctX function (i.e., the value of the constant if the function is linear and “LFV” is a constant).

Examples and illustrations

We know that for this purpose states adopted e.g. the following steps:

- Introduced the Penal Code (legislation)
- Introduced and organized executive organs – police, courts, prisons and executioners to enforce the legislation;
- Introduced a unified currency;
- Introduced a unified language, and later schools – i.e. supported education;
- Constructed roads and communications.

All these particular steps mean removal of the barriers – technological, social, intellectual, geographical, etc. The barriers prevent companies – “producers” – to produce at a larger scale, to develop technologies; they reduce human activity and potential for solving technological issues. These barriers emerge with technological progress and have to be solved at the level of the whole – i.e. the State. They are ever present.

No other activity than the removal of barriers is and can be done by the State for its citizens. No activity other than the removal of barriers constitutes the legitimate activity of the State.

At the same time, the removal of barriers is the basic, and probably the only legitimate one, duty of the State. This duty cannot be fulfilled by any other subject because activities associated with production pertain to all subjects living in the State – both individuals and companies.

Human potential is inexhaustible – at least, no limits have been defined for it so far (and the possibility of such definition is questionable). According to our experience, development of knowledge can only be impeded by technical, geographical, or hierarchical limitations.

1.2.1 Barriers

The past section was devoted to the existence of barriers and to the State activity in their removal. However, I have not defined these barriers in detail, which I am going to do now:

Barriers represent the differences between the real and the optimal solutions to the application of knowledge aiming to satisfy human needs. In other words – they represent the barriers preventing optimal application of technological potential to satisfaction of human needs. These barriers are determined by a number of circumstances and are growing with knowledge and with technological advances in economics. To a significant extent they are the product of the technological level of the State.

It is the task of the State to support all processes facilitating creation of new knowledge (represented today by science), its dissemination (education), to enable the existence of companies in general (legislation, its enforcement, security), to enable traders to import goods and raw material (communication), etc., to provide education – extending possibilities to disseminate new technologies, to build the infrastructure (see Figure 2).
Figure 2: Mechanism of the State 1 effect on the productivity of Economy 1 (model Economics 1).

Legend to Figure 2:
State 1 removes the barriers occurring mainly during the transition of products to goods – i.e. from the companies via traders to people. This activity of the State is illustrated by the yellow arrow directed towards the barriers.
The process of State foundation itself is a critical point because the existence of barriers is manifested immediately – while their removal is often manifested years or decades after their removal or reduction. The removal of barriers, however, means immediate reduction of the labour force previously devoted to satisfying the needs of society. Moreover, this reduction occurs in one fast step. Part of labour force must be employed for that purpose – the barriers cannot be removed in any other way than by working. At the same time, people assigned to the removal of barriers cannot produce goods – i.e. directly contribute to satisfaction of human needs. However, they must also satisfy their own needs – and there is no other way for them to do so than use other people’s work.

The State can only function on the sole condition that the removal of barriers has such significant impact on the effectiveness of human activity that the remaining labour force (i.e. not employed for the removal of barriers) satisfies human needs better.

What is the particular way in which the barriers are removed, what are the means of the State serving this purpose? As mentioned above, to remove the barriers, labour force has to be withdrawn from the direct production sphere. People employed by removal of barriers have no possibility of exchange – they don’t produce any products. The only way to employ them and satisfy their basic needs is connected with introduction of currency, money – in place of the exchange equivalent. People assigned to removal of barriers are then recompensed with the new currency, and the currency is thus easily and naturally introduced among the producing labour force.

1.2.2 Emission of Money

Emission of money is a key step in the barrier removal. The emission by itself represents removal of some primary barriers (facilitating the exchange of goods), and it also helps remove other kinds of barriers.

Emission of money must always reflect the following essential rule:

The value of money (price level) is a function of DLV, and the amount of money in circulation must correlate with the value (DLV) produced by work.

The sum of liquid money should be in a defined ratio to the value of goods produced by the entire society. Any changes in money value are undesirable – for the economy (State) or for the productivity of work.

The State should always have at its disposal such amount of money as to be able to remove the current barriers.

To fulfill the above-mentioned rules, the State can use the following tools:

– emission of new money,
– suitable selection of barriers (i.e. selection of the most easily removable barriers with highest effect), and
– selection of the optimal way of removing the barriers.

There is no general definition of the way of barrier removal or their selection. This is the responsibility of every individual “taking in charge” the management of the State.

1.2.3 Tax collection

The investment costs can be very well managed by a monetary strategy, without tax collection and consequent weakening of society. In the vast majority of countries tax has been routinely collected. Collection of tax by State 1 is a step that has a negative economic impact on the barrier removal because it creates other barriers. However, the major reasons for the tax collection seem to be hierarchic – i.e. to obtain or to enforce
the dominance of one group over the others.

The present economic situation in a large part of the world differs from the situation in the original State 1, which was typical of Medieval and antique states, and which is to a large extent similar to the situation in some undeveloped countries in Africa, Asia and Latin America. However, in no country it corresponds to the situation described for State 1. Most economies are now in the transition phase to another stage, although not directly to State 2.

2. Method

By education, I am a natural scientist focused on systems analysis. To analyze the economic systems, I used newly defined parameters, which for practice reasons were clear and well arranged. In the end, this yielded an important result that I decided to publish. While preparing the manuscript I found out that to describe the processes I cannot use the parameters routinely employed in current economy. For these reasons I used original, very simple parameters. Their definition may have a non-scientific or even naive effect. However, these parameters are basic, systemically pure, albeit sometimes elaborately defined. As a result, a rather extensive list of new parameters and abbreviations is given at the beginning of the manuscript. Some of the parameters were already used in the Introduction describing generally well-known economic relationships. It is clear that they are not complicated.

The general methodology was following:

I investigated the key processes and flows in current economics. I formulated the reason (propulsion powers) for production of goods intended for their users – people (and families, as socio-biological units). I followed the flows of goods – their stepwise production, routes, and final utilization. I also followed the flows of money, their sources and utilization. I followed the activities of the State and defined the ways in which the State influences production of goods and satisfaction of needs of its inhabitants. I studied the State sources. I described the manner and consequences of execution of the State activities, including their relationship with the obtained sources.

I compared the flows of money with flows of goods and work. The goal of this work was to create an economic model that would best satisfy the present human needs, without principal changes in power. This goal was successfully fulfilled.

3. Theory: Economics 2 and State 2

3.1 Economics 2

Similarly as was the existence of State 1 justified only in the case of effective barrier removal in Economics 1, we may expect that the existence of State 2 will be meaningful and legitimate only in the case of barrier removal in Economics 2. To discover the barriers of Economics 1 was not very difficult, so let’s now have a look at the situation in Economics 2.

Economics 2 is not based on specialization of work described by the classical economists, but on the level by which a set of three relatively independent processes
may be characterized. These three processes are:

- segmentation of technological processes
- assembly of elements
- motorization

Completion of all these three processes leads to Economics 2. To fully describe the situation, I should mention that Economics 2 is accompanied by a special effect that influences its course, and understanding this effect facilitates understanding the principle of Economics 2. I will call this effect 'pseudo-animation'.

Pseudo-animation represents another description of Economy 2 with a number of significant side effects – and therefore not another, fourth step.

These three processes may remind in some of their aspects the conclusions associated with Fordism or Taylorism (and Postfordism, Toyotism, etc.). This paper has no connection whatsoever with these philosophies. Similar aspects (mass production or segmentation, motorization) are explained in a totally different way, and so the principle of these terms is also different.

3.1.1 Segmentation of Processes

Segmentation of technological processes represents a higher degree of specialization. Specialization means that producers focus on a particular kind of product, i.e. processing particular material. There were specialists working with iron – blacksmiths, there were goldsmiths, rope producers, carpenters, cloth producers, leather dressers, etc. Originally, carpenters cut trees by themselves and processed wood until completing the final products. Later on, their activities were gradually divided between lumbermen, carpenters processing rough wood, joiners, or later carvers, furniture producers, or even violin-makers. All other professions developed in the same way. Only the latest stage of segmentation represented production of goods for satisfying human needs (GSHN). The results of the majority of 'segmented' sub-processes were semi-products, which could not have been used for satisfying human needs. These semi-products entered other segmented processes as raw material. Only the latter sub-process (or operations) of the segmented chain gave rise to GSHN.

Segmentation can be gradually intensified – and is still part of developing Economics 1, until it descends to the level of basic operations.

Basic operation means any individual movement – shift, turn, cut, etc. Notably, all basic operations can be transformed to a circular movement, or they are themselves a circular movement. This unification of the basic movement and its universality, which is typical of circular movement, enables industrialization, another decisive step of Economics 2. Industrialization, however, also requires assembly of elements.

3.1.2 Assembly of Elements

The assembly of elements is an independent process during which more complicated products are prepared from previously produced non-functional or functional semi-products or elements.

The assembly of elements starts in parallel with segmentation.

The simplest example of the element assembly is production of a simple tool – e.g. axe. We assemble two non-functional semi-products, a metal axe with a wooden handle, which were produced by two different processes. Each of these processes may also have consisted of several segmented processes.

More complicated products, composed of subunits, were in the past produced in all areas of production – namely building, agriculture and transportation, but also in fine
manufacture of e.g. jewels or watches. Mass development of subunit assembly was associated with the motorization process. The assembly of elements occurred in parallel with both of the other above-mentioned processes.

3.1.3 Motorization of the Process

Motorization of the process means including a `motor`. Including a motor is part of subunit assembly – except that the motor is a standard independent unit with the function and potency to substitute for individual – standardized – basic operations. Including a motor makes the basic operations very fast, accurate and practically independent in quantity; it enables processing extreme materials in extreme conditions (temperature, environment, position) and achieves extreme sizes of the processed objects both at a large and small scale.

The operations are primarily performed using a rotating movement, which is periodical, preferentially achieved using any source of energy. Motorization is possible only when the “segmentation of processes” has been completed.

3.1.4 Consequences

When summarizing the three previously completed processes, the situation may be characterized as follows:

- The majority of production operations are performed – driven – stepwise by a machine with an autonomous driving mechanism.
- Instrumentation enables completion of a large number of operations – with lower expenses, higher precision and complete reproducibility.
- The production equipment gradually becomes more complicated.
- Companies offer either single operations, or production of subcomponents that are already suitable for assembly into larger units.
- Production companies are part of a production chain – in effect, even the largest companies do not execute the entire processes from obtaining and processing raw materials to completing the final product.
- A large amount of human work is focused on the establishment, operation and independent existence of companies.
- Each company needs specialists in different fields – administration, commerce, technical, production, development, etc.
- Each company represents an independent unit that needs its own infrastructure – to get linked to the system of production, to the State, to ensure a market, etc. – each production company must therefore achieve a certain minimum size.
- Each company represents an independent unit, with its own life, history, focus, link to the system, characteristics.
- Each company has its own history, production methods and internal organization.
- The potential of this system is enormous and is far from being exhausted.
- Development of all the three above-mentioned principles leads to development of companies together with creating new barriers to the development – and thus a task for the State to remove them.
3.1.5 Pseudo-animation

Pseudo-animation is a phenomenon related to the production only distantly. The only reason I am mentioning it here is because it is important, or rather illustrative for understanding the entire topic. Pseudo-animation should mean the fact that new organisms – Companies 2 – arose, developed, reacted to the environment, could multiply, grow and get selected. Companies 2 are not generally considered as live organisms, although they display all their features. They have bodies, their own sources of energy, strategies, behaviours, information databases, etc. The behaviour and development of Companies 2 is governed by the same (parallel) rules as those valid for live organisms. Changes in the internal information system (technology, structure, knowledge of people – parallel to DNA mutations) are accompanied by changes in the behaviour of the whole unit and in a final change in its competitiveness. Companies 2, similarly as live organisms, compete for access to energy, nutrients, and information. Similarly as in the case of live organisms the main competition is for the source that is limiting – and probably also the most general. At present, this competition is mainly for finances. Finances allow access to all other sources – specialists, energy, raw materials, space, etc. With money Companies 2 can produce and restructure their own bodies, including all basic elements. The present limiting source is money – in future, it may even be something else.

The above-mentioned facts show clearly that together with Companies 2 emerged a new system that, although being dependent on people as individuals, lives its own life. The situation is the same as in the case of multi-cellular organisms.

Pseudo-animation is a phenomenon that started to act already in Economics 1 in the form of Companies 1, but was not so noticeable. Companies 1 were truly primitive, their energy was identical with LFV, they were practically unable to multiply, etc. Even so, in principle they represented live organisms.

3.1.6 Analysis of Economics 2 – Basic Flows

In Economics 2 the flows of value, work and money totally differ from the situation in Economics 1.

One part of the system has remained the same. People are employed at a regular basis for a certain period. This is a basic variable identical to variable LFV defined in Economics 1.

In the company, using knowledge, machines and external energy, all these people produce goods of a certain value. We have already encountered this parameter – DLV (delivered labour value). However, in the present situation DLV is not totally intended for production of GSHN – i.e. for people. Part of DLV is intended for the companies – for building their bodies, for their operation. This part of DLV we shall call VDC (Value Delivered to Companies).

Therefore, we can deduce the formula:

\[ DLV = GSHN + VDC \]

Both parameters (GSHN and VDC) essentially differ in their rate, volume and significance. The rate of their exchange is totally different from that of their flow. Both parameters must possess their own currency. Both currencies are interconnected by variables LFV and DLV, but are independent because VDC and GSHN are also mutually independent.

For establishment of Economics 2, a new currency system and new rules have been introduced. The currently existing system represents a deformed type of Economics 2 and I call it "Real Economics” (R-Economics). The model of (theoretical) non-deformed Economics 2 that I am describing below (and that should exist in future)
I designate “Systemic Economics” (S-Economics).

3.2 Real Functioning of the Economics 2: R-Economics

3.2.1 Two Types of Money in R-Economics

As I have already mentioned in the theoretical part presenting Economics 2, two types of money are required in it. One type serves for the exchange of work – i.e. of LFV (labour force value) for GSHN. This type of money will further be referred to as Money 1 (or M1). The second type of money (M2) serves for funding the company establishment and maintenance – i.e. for exchange of VDC (value delivered to companies). Both types of money must be mutually exchangeable, but the rate of their circulation and their amount are not dependent on the same parameters and do not have the same course. The money that had been introduced in Economics 1 corresponds in principle to M1 – its deviations existing at that time were negligible. The vast majority of the money was used for GSHN. Only a small part of money in Economics 1 was used to establish companies.

M1 and M2 represent a systemic designation which I am going to use for further discussion of money in Economics 2. Let’s have a look at the ways of emission and introduction of M2 into circulation – its transformation and emission. In R-Economics this is mediated by the deposit multiplicator, emission of shares, and direct transformation of M1 to M2 (and vice versa). In R-Economics, distinction between these two types of money is very difficult because they mutually overlap in this system, are exchangeable in a particular way, and can be generated in totally absurd circumstances, which highly complicates description of their function and their different circulations.

3.2.2 Deposit Multiplicator (Samuelsson and Nordhaus, 2007).

Deposit multiplicator (DM) represents a special power given to institutions called commercial banks (CBs). Its principle is to enable banks, on the basis of very problematically overlapping rights, to emit M2 (Samuelson and Nordhaus 2007).

The purpose of CBs is to receive money – for safe-keeping, simplifying manipulations, etc., and for the expected interest. CBs can, without decision and approval of the depositor (although with his awareness that banks manipulate with money), handle thus deposited money so that a certain percentage (which today is usually 90 %) can be lent to funding business loans (i.e. VDC). The businessman pays suppliers for raw material, services, work, technology, land, etc., and all of them deposit the money back into CBs. Different suppliers will very probably deposit their money into different CBs. This means that their deposits are again primary – while the money has already been once lent. All the banks can again handle this obtained money identically – i.e. re-lend it. The CBs cannot lend all their money but only 90 % of it – the remaining 10 % represents the ‘mandatory reserve’ (deposit). The extent of this reserve is determined by the central bank (further referred to as CEB). By lending money, the banks (CBs) create ‘credit money’ (further referred to as CM) amounting to the nine-fold sum of money emitted by the central bank. We can assume that all the money emitted (EM) by the central bank is deposited in banks (because it is assumed that everybody deposits money in a bank). (In this text I do not consider neither the problem of short-term time-limited deposit nor non-principal details).

This sum then represents the ‘mandatory reserve’ – deposit – of any bank. In other words, the deposit represents all the money issued by CEB. The 9-fold EM emitted by CBs then represents the value of the currency circulating in hardly predictable and
hardly manageable rules in both systems, i.e. between people as well as between companies.

The quantified relationship between both types of money (currencies) can be symbolically expressed as

\[ EM < CM < 10 \ EM. \]

Do not be confused by the fact that in classical economic literature DM is described in a somewhat different way – the principle is the same. I find the description given here simpler and more suitable for further explanation.

The real extent of the CM, however, is finally determined by the CBs, by the amount of money ‘deposited’ – i.e. emitted by the State – actually lent for loans. The CBs thus generate money within the limits determined by CEB. The decision on this sum and on the type and quality of projects to which the loans should be allocated is dependent exclusively on the CBs providing the loans.

What are the criteria for emission of credit money by the bank? The bank has only one criterion, and it is “profit”.

The principle of lending money is based on the fact that a higher sum of money is returned than the lent sum. The difference represents the bank’s own profit. It means that since their establishment, the focus of the banks was not on funding projects producing values, and even less so on other projects. Opposite to that, since their very beginning banks have only served for gaining profit. It means that banks do business with money and the money is placed into their hands without any warranty and with minimum yield. However, the bank itself ensures its profit through various kinds of warranties connected with requisitioning property of much higher value than was the original loan.

3.2.3 Non-bank emitters

There are a large number of emitters of securities (and several types of securities). All securities can be considered as a type of currency that the banks cannot take as a bank deposit. Therefore, I am only stating that such a possibility exists, is used, can be important, but for this text and its conclusions is irrelevant. In contrast, discussion of securities, an important relevant factor, can be rather complicated, and that is why I shall only state that securities exist and are in circulation.

Similarly, another phenomenon, interest, is not relevant for the basic theses. It exists, its explanation is complex, but I am not going to analyse it because the interpretation is by itself rather complicated. Moreover, interest and its existence have no association with or impact on the basic notions.

3.2.4 Two types of money

Usually, CM is not called a second currency – for several reasons. The first reason is historical. Originally, CM was not considered as money but as a financial transaction – provision of credit. At the time of its origin (approx. 17th century), no other way was possible. However, from the first moment the money was of two types. A new currency was created to fulfill the requirements of Economics 2. This fact has been dissimulated for historical as well as present hierarchical reasons. When we realize the existence of two types of money, immediately there are questions that cannot be answered without casting doubt on the present form of the money existence. In other words (and somewhat beyond the scope of this work), contesting the existence of two currencies represents one of the main ideological arguments of the present elite, which founds its superiority on money excess. After accepting the existence of two types of money, the
following questions immediately emerge:

„Who in fact can transform money from one type to the other?“

„Who and in what conditions can emit money – and of which type?“

„Who and in what conditions can transform money from one type to the other?

Who decides on the exchange rate?“

Also, there is the problem of assigning the existing forms of money to M1 and M2.

3.2.5 Difference between emitted and credit money (EM and CM).

Before starting another section we must remind and explicitly explain other essential differences between EM and CM and their mutual relationship. We must remind that there is free transfer between these two money types. Thus, while both their relationship and total value can be expressed globally, albeit with certain limitations, both types of money are mutually converted and transformed by simple operations. They possess a DM and only the banks can do the multiplication (and thus the transformation EM ->CM).

This creates a terrible chaos, which is very convenient for the entities ruling the DM. For all the others, including the State, this situation is extremely unsatisfactory. Before analysing the State possibilities we must remind that EM, based on which the banks emit CM, in fact is not EM and therefore not the banks’ money, and this is a problem. Another, more important problem is that EM does not represent real EM – but CM several times lent by the banks that was each time transformed by consumers’ withdrawals to “legitimate” EM. Thus, the bank transforms CM to the money which not only is not its property, but has also in fact been lent and transformed several times. Normal transformation would not bring undesirable consequences, but the accounting transformation between the lent – credit – money is tragic because each credit is associated with the past credit and the past form of money. This money therefore represents super-unstable money. Its value is threatened by each larger withdrawal – if, for any reason, money is drained from the bank, the whole system starts to collapse and the banks lose the majority of depositors, who behave and must behave towards this money like real money. Each withdrawal means conversion of CM to EM – i.e. each money withdrawal from the bank means withdrawal of a 10-fold amount of money from the system. The only subject not possessing its own finances is the bank – thus losing nothing in the bargain.
3.3 R-State and Its Potential for the Barrier Removal

3.3.1 Introduction

R-State is the State derived from R-Economy. For the removal of barriers, R-State has to complete two different processes:
- **Obtain finances.**
- **Meaningly (and optimally) invest the obtained finances into the removal of barriers.**

Potential sources of finances:
- Direct emission of money
- Tax
- **Credit monetary emission (CME)**
- State CM emission

All of them are complicated and associated with problems in R-Economics.

3.3.2 Direct Emission of Money

In general, this is a systemically correct step, but due to DM the State has no control over CM. Therefore, the direct emission of money cannot be used. The R-State has to utilize CM but can only emit EM – we know that emission of CM (i.e. EM -> CM transformation; emission and transformation are often interchangeable in this confounding system) has been completely transferred to the banks by the R-State. In theory, R-State can emit EM and spend it for salaries to officers, policemen or healthcare staff, or release it into the system through some projects – e.g. construction of roads. However, such emission would increase the CM limits. Thanks to the DM effect, for each unit utilized by the R-State to remove the barriers, nine CM units can be emitted into the currency basis. In case of larger investments R-State might encounter serious problems with inflation. Another problem is that the impact of the barrier removal on economy would have to be 10-fold stronger than with other types of money utilization.

In addition, in most cases R-State has bound itself to leave emission of money to the banks, to which it has also transferred the responsibility for the currency stability. This is the price for the government itself not being able to manage money emission while avoiding disasters – the political goals of individuals often differ from the interests of the State and its citizens.
3.3.3 Tax

I have already mentioned tax in State 1 as a step that is not totally indispensable but in itself represents another barrier. In R-Economics the situation seems to be quite different. However, if the R-State cannot emit CM, the tax seems to be the only possible step to get money. The R-State then withdraws money from the system in an illegitimate and counterproductive manner, and deposits it back (of course, not in the full amount because some will be ‘lost’, but the essential part of it).

This means that no new money is entered into the R-Economics – the money only changes its owner. Part of it is transferred from people and companies. Beside the above-mentioned disadvantages, tax collection has one interesting feature. The amount of the collected money is usually independent of the extent of required barrier removal. It is only dependent on the past performance and regulations set up for the tax collection. By long-term experience the State (government) already knows (or believes knowing) which tax will influence economy development and what amount of money it will bring. Every government should also know which barriers should be removed preferentially and in which way and where the investments should go. Nevertheless, despite this knowledge each government wishes to invest more than the previous one. Today, however, the decisive criterion is not the barrier removal but re-election of the ruling elite. At the same time, political parties and their leaders wish to take away a sufficient amount of finances for the case they are not re-elected. Combination of these factors usually leads to the lack of collected money, and the State then opts for credit monetary emission.

3.3.4 Credit Monetary Emission (CME)

CME seems to be a simple procedure. The State emits bonds and offers them for sale to investors. The investors buy the bonds. The major investors into bonds are CBs. The bonds cannot be part of DM, and so they do not result in increasing the limits for CM.

CEB cannot buy the bonds directly. It is because it would emit money to the system and the effect would be the same as for direct emission of money – i.e. both limits would be raised and each purchased unit would increase the upper limit by ten units. Therefore, bonds are purchased only secondarily – and only while maintaining the EM level. So, the R-State emits money that it not only owes to CBs, but for which it also pays interest to the CBs. The advantage provided to the banks makes the State a debtor of CBs just by emission of money that should be used for the barrier removal – because the debt emission is in fact nothing else than DM abuse towards the State needs.

Two aspects should then be noted:
– In fact, there is no debt because the State does not purchase any service from CBs, and CBs do not provide the State with their own money but with SUP in the form of CM, which they are able to emit only because of the goodwill (incapacity?) of the State.
– The State requires money for the only legitimate reason, the barrier removal, which is fully warrantable. However, the banks will not grant the State any exception, and thus the bank accountant wins over all the citizens and the government, which is not able to procure its money legitimately. The entire system of economy is consequently impeded by tax collection.
3.3.5 Conclusion of R-Economics

The present R-Economics was invented and introduced step-by-step into practice by bankers and their accountants at the time of the absolute power of gentry. By a seemingly innocent practice the banks procured themselves a key position, in which only they are allowed to emit CM using DM.

Historically, R-Economics has fulfilled its purpose. At present, this system based on DM discords with current needs and has become an impediment to further development. The crises we are now facing will become more frequent, social differences will grow along with social riots, leading to other adverse consequences. The system is incomprehensible and does not allow effective barrier removal. There is no possible improvement because due to the combination of exchangeability of different types of money with DM, R-Economics represents a corruption-inducing system. As long as DM exists, as long as there is the possibility of free exchange of money (from CM to EM), as long as there is the possibility of free money emission and its mutual transformation, no reform essentially impacting or long-term positively influencing the economy condition and further potential development of human society is possible.
4 Results

4.1 Theory of Systemic Economics (S-Economics)

As I have already mentioned, Economics 2 generally consists of two separate, mutually dependent systems. In contrast to R-Economics, S-Economics respects this fact – this is the principal and essentially the only difference between the two systems – R- and S-Economics. Let’s have a look at its particular solution!

4.1.1 The Elements and Relationships in the Two Systems

Whether we are able to accept the concept of pseudo-animation or not, it is still evident that during technological and intellectual development, an independent system for satisfying human needs – the upper system of companies (USC) – has emerged, in which Companies 1 have been replaced by Companies 2.

However, this system has also its own needs – for its existence and organization, it needs human effort and energy. At the beginning, its primary goal was to produce GSHN, but it has gradually become partially independent. With growing autonomy the entire system changed its priorities from satisfaction of needs of another system (system of people) to direct satisfaction of its own needs. This change of priorities is evolutionarily inevitable. Individual companies compete among them for survival. When a particular company or group starts (despite systems of both internal and external barriers) to give precedence to its survival, i.e. immediate competitiveness, instead of satisfying needs of the second system, the situation starts to change. The other companies weaken or must require a change of conditions from the State, or else start behaving in the same way as the first company.

Along with that, the system of companies needs people and their effort to be established and operated – for its life. People are also part of companies, in which the classical human hierarchy does not work and is replaced by the company hierarchy – people then form, together with the property of the company, a whole unit. Companies enter into contact with other similar units – other companies and institutions (State).

The properties of companies are partly derived from the properties of people, but also from the quality of their internal organization, manner of communication, manner of creating the company hierarchy. People themselves form a number of various units, but to satisfy their needs they are engaged in the companies and enter them as individuals.

The existence of barriers derives from the direction of flows of goods and money. Barriers may exist in any of the flows. In the diagram used here the basic barriers in the upper and lower parts are extended by the barriers of the transition between both subsystems. This type of barriers is designated as Barriers 3 and described in the text.

4.1.2 Lower System of People (LSP) and Upper System of Companies (USC) – Flows

As shown in Figs. 3a and 3b and described above in LSP, an individual’s activity in the company is exchanged for GSHN. The money mediating this exchange is Money 1 (M1). In USC, VDC (value delivered to companies) is exchanged for all the remaining items the company needs for its life – for its body, technologies, energy, people, raw material, intermediates, etc. All this circulates in USC. This independent system can exist
only when money independent of LSP, Money 2 (M2), is exchanged.

Even USC could represent an independent system that could function relatively by itself. However, it needs human initiative, human knowledge, and human work. To obtain it, USC must “sacrifice” part of its energy, effort, and products for people, so that these people could satisfy their requirements and be able to work. Part of products is therefore directed to production of GSHN. Most benefits for the upper system and its organisms are gained when the proportion of GSHN is minimal, and the companies make efforts to obtain maximum work from the people. The interest of the lower system – people (LSP) – is opposite. People try to obtain the maximum and best quality GSHN for a minimum of work (LSP).

The inverse efforts of both systems are natural and legitimate. The balance between the total delivered human work and GSHN cannot be maintained by either the individual or the company. This cannot be done by any member of both engaged systems – not even by the banks, which belong (in a modified form, however) to USC. The only regulating organ may be the State 2. I can vividly imagine the venomous comments on potential corruption, unreliability and incompetence of the State. However, today we know only the R-State with corruption-inducing system. The S-Economics limits corruption to its minimum and ensures transparency of decisions. The S-State has only regulating powers and the duty to remove barriers. It is not absolutely hierarchic but only “opportunistically” hierarchic. The hierarchy is created in particular relationships only (working, personal, official, but also travelling, sports, etc. – in any situation where interaction of people forming a group occurs). In this way, the idea of democracy and equality of people is much better fulfilled.
Figure 3: Basic diagrams of Economics 2

Figure 3a: Diagram of Economics 2 with main flows of goods and money

DLV – delivered labour value
GSHN – goods for satisfying human needs
GSHNT – trade with goods for satisfying human needs
LFV – labour force value – total sum of time expendable in work by an individual or a team in particular conditions
LSP – lower system of people
USC – upper system of companies
M1 – Money 1
M2 – Money 2
VDC – value delivered to companies
Legend to Figure 3a:

In this diagram the lower part (under the black line) is similar to Economics 1. People go to work and exert working activities (LFV). People exchange LFV for money (Money 1 – M1), which they use to buy GSHN (the second – right part of all diagrams starting from Fig.3). The left part, where LFV is not directly intended for consumption but divided into GSHN and VDC, is different. In the upper part of this diagram we see the simplified diagram of the mutual interaction of companies. Exchange of goods is represented schematically.

The difference between Economics 1 and 2 at this level (or in this representation) consists in the establishment of a network of companies. This network of companies is presented in the upper part. For graphical reasons I was not able to show the fact that Money 1 is obtained by the individual – worker – in each of the companies (rectangles in the upper part). Contrary to that, I must emphasize that only some companies deliver goods for exchange into the lower part. Part of produced goods is intended for and used only in the upper part. Conversely, the other part of goods is intended for use in the lower part – i.e. to satisfy human needs.
4.1.3 Transformation Units

Emission of both types of currencies, their amounts and their mutual relationship represent the main systemic tools by which the economy can be influenced. As shown by the diagram below, there are only two places of exchange – individual companies (all) and trade with GSHN. No variant of these exchange places exists.

4.1.3.1. Company

In the company, human work (LFV – labour force value) is transformed to goods and other outputs (DLV – delivered labour value). Human work is potentiated by collective experience. This is collective work done with machines and tools and using knowledge, all of which are part of the company. The quality of work is dependent on the people working in the company, their abilities and education. Of importance is also the hierarchy of the entire group, motivation, powers, as well as quality of equipment, technologies, etc.

Transformation of M2 to M1 can and must be done exclusively in the direction USC -> LSP.

The inverse transformation of M2 to M1 corresponds in the system to the transformation of the sum of work of individuals to the goods. In other words, this transformation is associated with payment of people – individuals – for their work.

Part of DLV is intended for the growth of companies (VDC – value delivered to companies) and part for the goods for people (GSHN). See paragraph 3.1.5, the equation <1>.

For their work, people must always obtain money M1, independently of whether their work is directed to the establishment of companies or to production of GSHN. For this money they can only purchase GSHN. Work cannot be divided in this particular way, because it is not specialized within a group – company. A decisive role is played by the type of goods and their functionality. The decision on the goods purpose is done exclusively by the company.

Individual salaries and their extent represent an internal matter of the company. A certain sum of money M2 is placed apart by the company for salaries – according to its gain or its internal key (hierarchy, diligence, merits, etc.), and the company distributes it among individuals, transforming it to M1 using a coefficient given by the State. No tax or other fees are paid. More precisely – the transformation occurs automatically in a special account intended exclusively for this transformation. This account is associated with the company, which however only sends the money M2 to it. According to a macro-economic coefficient, the State transforms M2 to M1 – identically applicable to all employees in the company, all companies in a particular field, the entire country. Some regions or fields, however, can be to some extent favoured, when the State is interested in their development. This is in principle the only possibility of the State to influence production, with the exception of State tenders.

4.1.3.2 Trade with goods satisfying human needs (GSHNT)

Purchase of GSHN by people followed by satisfaction of their needs represents transformation from VDC goods to LSP goods. For the obtained money M1, people buy GSHN at GSHNT.

In theory, GSHNT transforms Money 1 obtained by people for their work to Money 2. In reality, products of companies are exchanged – as part of the goods enabling the companies to obtain energy and purchase material plus technologies for their establishment and life.

Systemically, it is absolutely warrantable that the inverse money transformation (M2 -> M1 in the company and M1 -> M2 in retail) also occurs in the company and in retails, subjects transforming work to goods and vice
versa, goods exchanged by companies (intermediate products) to GSHN. Conversely, there is no other warrantable place for these transformations. The sum of money that will be intended for salaries in individual companies cannot and must not be controlled either by the government or by the banks. The transformation will then occur automatically – based on the coefficient defined by the S-State.

Losing the possibility to transform money the banks lose their contemporary purpose and can be converted to investment organizations, which would fulfil their original purpose without influencing financial transformations and exchange.
In this diagram the lower part (under the black line) is similar to Economics 1. People go to work and exert working activities (LFV). People exchange LFV for money (Money 1 – M1), which they use to buy GSHN (the second – right part of all diagrams starting from Fig.3). The left part, where LFV is not directly intended for consumption but divided into GSHN and VDC, is different. In the upper part of this diagram we see the simplified diagram of the mutual interaction of companies. Exchange of goods is represented schematically.

The difference between Economics 1 and 2 at this level (or in this representation) consists in the establishment of a network of companies. This network of companies is presented in the upper part. For graphical reasons I was not able to show the fact that Money 1 is obtained by the individual – worker – in each of the companies (rectangles in the upper part). Contrary to that, I must emphasize that only some companies deliver goods for exchange into the lower part. Part of produced goods is intended for and used only in the upper part. Conversely, the other part of goods is intended for use in the lower part – i.e. to satisfy human needs.
4.2 S-State

S-State is State 2, disposing of S-Economics

The duty of the S-State (government) is to create an environment that will stimulate both production and exchange. For this reason the government emits both Money 1 and 2. Its duty is to emit money with the aim to favour economics and with the knowledge enabling it to do so. Money emission must be done without limiting production by its lack. Barriers to development in a normally functioning system are solely associated with technology, geography, raw material, communication, energy, etc., but NEVER with finances.

4.2.1 Barriers

The State 2 and a diagram of fulfilling its main role are shown in Fig. 4. This diagram shows that the barriers exist at both these levels and in the sphere between them. The specificity of S-State compared to R-State is the possibility – and connected with it duty – of optimal removal of another type of barriers, Barriers 3 (B3), which also exist in R-Economy, where their definition is however very difficult, if not impossible, and in which they cannot be removed.

In view of satisfying human needs the existence of USC represents a systemic problem that must be solved very carefully. USC is a system that tries to satisfy its own needs by itself, even when it is a system dependent on the existence of people, their activity, thinking and needs. As an example we could mention production of intentionally low-quality goods, lobbying for own profit – against consumers’ interest, often even production of goods harmful for health. Another example is purchase of new technologies, expensive cars and luxurious above-standard equipped residences, employment of redundant staff, etc.

The role of the State in the regulation of flows is in this case very complicated. The State must support the efficiency of USC while preventing its excessive growth. To reach this goal the S-State cannot and must not use any tools connected with power – i.e. direct authorizations and bans. B3 as the only barriers cannot be removed directly but only influenced by arranging conditions to be less advantageous for the companies and to maximally parallel the companies’ profit with the health and profit of people. The level of satisfying the needs of people as individuals is determined by conditions established for the entire S-Economics.

I consider the relationship between the USC growth and the growth of the level of satisfying needs (i.e. the relationship between VDC and GSHN) as one of the main problems of S-Economy. To satisfy LSP needs, the companies should not spend more energy, material and human invention for their existence than is necessary. For LSP, it is just the opposite.

The flows of values between both these circuits can only be influenced by the State – if it possesses the required tools, knowledge and conditions – and this is only true for the S-State and not for the R-State (which is practically without influence). The relationship between VDC and GSHN can undoubtedly be influenced by the amount of emitted Money 1 and 2 (i.e. their ratio) and by the ratio of their exchange in the transformation points. This possibility exists only for the S-State.
Figure 4: Schematic representation of barrier removal by State 2. Also shown is a schematic delineation of the area of all types of barriers.

Legend to Figure 4:
The figure shows the main flows of S-State in a basic economic diagram. The black dotted line shows the barriers and the yellow arrows show activities of the State. The sole role of the S-State is to remove the barriers.

The types of these barriers (further referred to as B + digit) are the following:

**Barriers 1**: At the LSP level – barrier between the company and its employees on the one hand and retail on the other. In this case the barriers reduce the accessibility of goods for satisfying needs and the possibility to deliver an optimal performance in the company – at work. This category includes education, healthcare accessibility (the barrier is represented by ignorance and diseased condition), (in)accessibility of companies, way of distribution and quality of goods, but also publicity and its falsehood, (non)provision of information on the goods, etc.

**Barriers 2**: At the level of companies (upper circuit) – barriers disabling extension of production and its modernization. In particular, these barriers are:

- geographical – connected with the place, its sources of raw materials, accessibility, transport; education of the population and its health, customs, working ability; climate, etc.
- technological – e.g. barriers to access to the scientific and research results, to reaching scientific results(!). The reasons are irrelevant – from lack of funding for research and development through communication barriers between scientists and other people, lack of companies dealing with machine production, distance and accessibility of raw material and energy sources, lack of special raw materials, lack of qualified or educated workers, etc.
– commercial – small or conservative market, rare population, poor distribution of
goods – language barriers, artificial barriers – competitive and political; different customs
of people.

– legislative – the required number of authorizations for production and distribution,
type of regulations and the possibility to fulfil them, type of handling finances; amount,
manor of collection, and institutions related to tax, or conversely types of funding and
incentives.

Barriers 3: In the relationship between both social circuits. B3 then derive from
redundant, and with regard to satisfying human needs ineffective, consumption of
energy, work and material in USC at the expense of LSP. This third system of barriers –
i.e. in the relationship between USC and LSP – is completely new and typical of
Economics 2. Without diagram used for the first time in this work, B3 could not be
recognized or defined.

4.2.2 Tools of State 2

The tools of State 2 are following:
– Emission of Money 1 and 2
– Definition of the ratio of money exchange in transformation points
– Removal of barriers

4.2.2.1 Emission of Money 1 – Lower System of Companies

Money 1 circulating in LSP can be emitted only when the value of GSHN increases.
Such a situation can occur when the upper system (USC) is more effective and
generates more of these goods, or when B3 – i.e. the ratio between USC and LSP
establishment – decreases. The decrease in B3 and increase in the upper system
effectiveness concerning GSHN production is closely related but is parallel, not identical.
The quality, as well as the environment and other factors, can be under control. On
the other hand, if some type of goods required by all people could be produced, there is
no reason why people could not obtain it at a principally larger scale.

In theory, all activities related to satisfying human needs by work should be
performed in the regime of USC. Therefore, the companies must be paid by M2 and the
money will be transformed in a particular, defined way. However, some small services
could probably be (in some cases, or even more often) performed in the LSP system.
It means that people would pay a small trader for his small service in Money 1. This
cannot be avoided – and there is no reason why. This is not a company establishment,
in most cases the company is represented by the trader himself, with routinely available
tools. USC includes automated mass production, application of novel scientific findings,
pre-investments, etc. This is totally redundant for small services – these can be
operated using a single currency, as is the case of Economics 1. Of course, when the
extent of these services is enlarged, the trader starts to use technology, loans, etc., and
enters USC. The business credit itself can only be obtained in Money 2, and in this way
the trader falls into the regime of the upper system.

4.2.2.2 Emission of Money 2 – Upper System of Companies

With some exceptions, Money 2 is emitted as the money invested by the State to
B1 and B2 removal via commercial companies (state tenders). The prerequisite is that
real barriers are removed – i.e. barriers whose removal will raise production – of course,
reasonably and sustainably, with regard to the environment.
The deformed and most discussed state tenders should be improved in this case as
well. The companies cannot corrupt using M1 because they don't have direct access to
it. M1 is only in the hands of individuals. For delivered work, companies obtain M2 and
transform it to M1 by the same key as other companies. M1 is transferred directly to the employees. Using M2, corruption is almost impossible (I don’t say totally impossible because people are so very inventive). A private person, and moreover a state officer, cannot transform M2 to M1 in any way – and certainly not in higher amount than it is done today, when such transformations are done without limitation.

Emission of Money 2 in USC should be, while observing the investment rules, covered in a certain time period by an increased amount of produced values. This enables support of the following investments by new money emission. Finances that must be emitted into the circuit can be used for direct payments of the persons working on the barrier removal. This means that more money will have to be emitted to preserve its own value. At the same time, there will be no problem in covering the investment by “capital”.

This system will also allow provision of credits, but only when the provider – let’s say S-bank – covers it by the sum of money that it has really available. No multiplication of money will be possible. S-banks will have only one task – to meaningfully invest M2 they have at their disposal. Money is their means to gain money, and meaningful investment is the only way to their own gain – in Money 2, of course. The gain is used for paying salaries to individuals, similarly as in any other company (see Fig. 3a and 3b).

The ratio between both types of currency, the strategy of USC activation towards B3 removal, and the removal of B1 and B2 are just technical problems that must be solved ad hoc.

It is clear that in the stage of economics development, when emission of money represents an organizational matter and is not limited by the accessibility of precious metal or other measures, limitation of production or working activity due to the lack of money is absurd and represents an obvious systemic error.

4.2.2.3 State Budgets

All executive activities are performed by private companies, including studies on the need of implementation of individual projects. All projects are paid with M2 emitted by the State. The S-State comprises only a small number of individuals of elected self-administration.

It is absolutely requisite to have all flows of Money 1 under control because this step significantly and objectively reduces the possibility of corruption. The investments of M2 – i.e. money intended for financing companies – will be decided by executive power.

Emission of both types of money and their ratio (i.e. their exchange rates) represents the main tool for B3 reduction. This activity will have to rest completely under the control of an organ parallel to the current CEB. Removal of other types of barriers then becomes a purely professional matter and not a matter of tax collection and competition for money (which today is transferred between various subjects, privatized, transformed via banks or outside them, etc… to be expanded without any relevant work and deposited in places where in fact is does not belong).

As several factors influence the levels of the two money types, the impact of their emission and ratio on the economics effectiveness and barrier removal will also have to be defined empirically.

The S-State is a professional, not hierarchical State. It creates the same conditions for everybody and strictly requires their observance. The barriers to establishment of companies are significantly lower and the State possesses the means to support more diversified ideas. The effort to apply more ideas further increases the economic variability and faster development of S-Economics. The potential of employing active people will significantly increase.
5. Discussion

Transformations of R-Economics to S-Economics

When transforming R-Economy to S-Economy, we must first realize that it is by the process of evolution, not revolution. No new hierarchy, but only new economic conditions will be installed. In future, in a natural course, these conditions may generate a new hierarchic elite formed according to them.

5.1 Introduction of a Functional System of Two Systemic Currencies

To remove the deformations associated with R-Economics we must perform the following steps:

- Introduce two actual currencies, M1 and M2 (technically, this is not a problem)
- Prohibit emission of money to all subjects except the State
- Prohibit “illegitimate” and uncontrolled transfers of money in both directions (M1<->M2).

5.2 Expectable Positive Consequences of the Transformation

Transformation to S-Economics will lead to the following immediate effects:

- Successful companies, which would not be allowed to transform M2 to M1 “in the form of gain”, will possess much more finances for their own development. They will be more active in development and search for novel approaches and investment opportunities – competition will be more severe and the technological development will be essentially accelerated.
- The State will be able to act more strictly and create rules by which it will influence the trends and development (in ecology, towards solution of future risks, regional handicaps, towards better observed equal rights of citizens and companies, etc.). There will be efficient tools for enforcing generally beneficial regulations and for barrier removal. The barriers will be removed based on the knowledge of effectiveness or scientific knowledge. Today, the barriers are removed only based on rough estimates and presumptions.
- All types of funding will be cancelled. On the other hand, companies will be favoured in transfers of M2 to M1 by selection of the exchange ratio M2 : M1. The ratios can differ among professional fields or regions. These “regulations” will have no effect on the relationships between companies and on free competition and can lead to “populating the selected regions” or increased interest in “preferred” professional fields. This favouring will not be directed to companies but to individuals, who will possess more money from the same salary in Money 2.
- As no tax will be collected, the State will have no reason to interfere with the internal organization of the companies. The internal rules of the companies will depend on the internal agreement of the company employees, e.g. on filling vacancies, type of hierarchy, remuneration, carrier development, etc. The State will only supervise fulfilment of the reached agreements.
- More forms of property and relationships will be created. Companies will have to survive much more severe competition, resulting in better quality and more resistant companies, with optimal internal organization.
- The economic crime rate and corruption will be significantly reduced. Money 2
will not be used for corruption and only serve to do business. The amount of Money 1 will be limited and its flow will be fully controlled, similarly as their transformation M2 -> M1.

- The above-mentioned changes will improve the atmosphere in the entire society, people will be able to direct their efforts to meaningful problems related to the growth of society, its diverse populations and nations, environment, conditions of their life, etc.

5.3 Different variants of possible development

Since all redundant activities impeding the development of economy and technologies (e.g. tax collection, healthcare and social insurance collection, elimination of problems with pensions and banks, economic crime rate and crime in general) will be removed, the paths of goods exchange will be unblocked and people will have time to devote themselves to meaningful activities, we may expect a significant leap forward in the economy. Governments will deal with real problems. Governing will become a professional and not hierarchical activity. In these conditions, the government will be devoted to the barrier removal and not to enforcing the hierarchic positions. Therefore, we may expect that finances allocated to the barrier removal, and entered into the system in the form of emitted Money 1 and 2, will be compensated by an appropriately increased performance and value of both parts of society (USC as well as LSP). If, however, the accrual is reduced or limited for some reasons, this will not be accompanied by a crisis.

Diagrams in Figs. 5a and 5b and 5c show the hypothetical situation in which the system does not receive any finances. In this situation the value of USC does not increase, together with the value of overall goods intended for LSP – i.e. for satisfying human needs. Tax is not collected and no money emitted, either Money 1 or Money 2. The companies only finance basic operations and the barrier removal is so demanding that the finances are just sufficient for maintaining the present status.

All ratios are only illustrative – the real values and ratios can strongly differ. The role of these Figures is just to illustrate that the mechanism can also work in the given conditions without any collapse. At the same time, sufficient finances are available for the barrier removal – which is the prerequisite for further growth.

The basic principle is circulation of M1 and M2 in closed circuits, which however are partly and controllably interconnected. Figure 5a displays the entire diagram showing the main flows of both types of money.

From the total gained finances in the form of M2 the companies separate 2000 units to salaries. They ask the State for authorization to exchange 2000 M2 to M1. The pay sheet of the employees, however, will only contain 700 M1 units (exchange in the ratio 2000 M2 -> 700 M1). The State obtains 2000 M2 and gives 700 M1.

We assume that this is a regular flow.

In this case all M1 is used for purchase of GSHN. To this sum of 700 M1 we add the sum of 300 M1, by which people dependent on the State – pensioners, teachers, judges, police, etc. – are paid. All of them satisfy their needs and together with people from companies spend 1000 M1. The State exchanges this sum for the value of 1500 M1, which it returns to the companies as an exchange for the goods intended for satisfying human needs. The remaining 500 M2 are used by the State for maintenance of roads, highways and new pencils sharpeners for officers.

The State obtains 1000 M1 (the difference between the accepted and released M1) – this money is also used to exchange the 700 M1 to 2000 M2 in the next round. Of these 1000 M1, after giving 700 M1 there are 300 M1 that are invested by the State to salaries in administration (pensioners, teachers, judges, police, etc.). In this way the circle is closed.

Money was only exchanged in the points of transformation of value and work, products and goods – i.e. inverse processes.
What is happening in USC has no impact on LSP. In USC the companies compete, are built, established, abolished, modernized, etc. They compete for M2 and trade with VDC. In this particular case, VDC is intended for maintenance only (statistically). If the total value of USC is the same, the sum of M2 is also the same. GSHN is produced to the same extent.

If there is a growth of values in USC or LSP, the State could generate additional money in an amount preserving the value of both currencies and thus support growth by a more intensive removal of an additional barrier. Generation of money is best done as seen in Fig. 5.

*Figure 5 shows that S-State is financially stable and liberated from any financial crises even in technologically or otherwise critical situations that could theoretically impede the economy. However, in S-Economics this is not very probable, or rather less probable because of the following fact:*

**Production is only limited by technological, intellectual or organizational reasons.**

The payment power of LSP is not limited by the access to money, but only by technological decisions and USC potential. People buy goods offered by the companies. The decisive factors are competitiveness, technological requirements of production, etc., but not the "purchase power" of LSP, which does not change according to the mood of individuals managing the flows of finances, as it is the case in R-Economics. From the financial sphere, the problem of satisfying human needs moves to the technological sphere, and from the hierarchical sphere, which is the sphere of financial speculations, to the sphere of free decision of individuals on the manner of satisfying their own needs.
Figure 5a: Basic complete representation of the flow of two types of money in State 2 – null growth situation
Figure 5b: Representation of the flow of Money 1 in State 2
Legend to Figure 5:
Figures 5a, 5b and 5c show the basic flows of money. Figure 5a illustrates all flows in mutual relationships. Figure 5b gives the flows of Money 1 and Figure 5c the flows of Money 2. These two figures serve only for illustration, to show the distinct flows in the particular area and the cyclic nature of their circulation. The principles of cycles and their mutual correlations are presented in the text. Red-yellow arrows represent M1 flows withdrawn from the system by the State and then returned in the form of barrier removal.
and the black-turquoise (up on the left) similar M2 flows. The end of M1 flow is shown in two ways. Figure 5a shows the M1 returning from small sale to the companies in a simplified way, for reasons of clarity of the remaining part of the diagram. The representation is done with a purple cross-hatched arrow leading from GSHNT to the company. In Figure 5b, which shows the M1 flows only, the route of this money is given in detail using three red cross-hatched arrows starting from GSHNT. First, the State takes money from GHSNT (first arrow) and gives it to the companies (second arrow – left) in the form of salaries to people – third arrow. This diagram may be a little unclear concerning the transfer of money between companies – last arrow. As mentioned, the companies are represented in two ways here – as a system of mutually trading companies (blue incomplete rectangles) and as a centre of transformation of work into goods and at the same time as a centre of M2 transformation (green-blue square). The flow between them is the flow from the company to the employees. The remaining flows, including total balance, are described directly in the text.

6. Conclusion

In S-Economy the growth is an order higher than in R-Economy thanks to the higher working productivity of the entire society. That is why quantification of flows in Figure 5 represents the lower extreme showing that even in the extreme situation of null growth (routine situation in R-Economy), provision of finances for the barrier removal is not a problem – without burdening society and individuals by the drain of working force to tax collection, control of counterproductive regulations, and criminalization of people. One may then expect a much faster growth, with much more effective control and impact on the environment, and better regard for the diversity and specifics of human race and its historically originated groups. The barrier removal can be much more effective, faster, and without potential corruption. Altogether, this increases the potential growth of the value of both parts of society – USC and LSP – and thus potential emission of money – both M1 and M2. The possibility to remove barriers is thus further elevated (emission of money in S-Economy is done most effectively by financing companies and institutions assigned to barrier removal). Here I can only say that S-Economy possesses real regulating mechanisms applicable to both groups – i.e. emission of both currencies and their exchange rates. The real effect of these two tools on the development of both systems must first be determined – in all probability empirically.

The principle of R-Economics represents a set of rules and powers that together form an unsustainable system. The main problem lies in concealed emission of two types of money – classical emitted money and credited money. The introduction of this second type of money – loans – enabled establishment of the present technological society (Economics 2). Contesting the existence of two actually operating currencies does not allow real analysis of their flows. My starting assumption was the existence of two different systems and their respective currencies; I have identified them and described their pathways in the present, real economy. Based on this analysis I have concluded that the distribution of powers for emitting both these types of money and powers during their mutual transformation is totally unsuitable for the current modern economics. Notably, this model does not allow fulfilment of the main role of the State, to remove the barriers, and hinders economy by the lack of finances. With the present form of money, which can be emitted in any amounts and therefore used to stimulate economy, there is a ‘lack’ of money collected by the State and sometimes also in the M2 part. This lack results in unemployment, deforms the competitive milieu, and consumes efforts of a high proportion of people. All this can only be explained by the deformed rules for money emission and its mutual transformation.
The advantages gained by introducing this system in approx. 17th – mid 20th century have already been surpassed and the disadvantages associated with R-Economy are more than absurd, at least for the majority of people; the strongly benefiting minority, of course, find these advantages desirable.

We must realize that there are large numbers of people who wish to work and cannot, people who wish to be educated and cannot. There are companies only waiting for the removal of barriers, but they cannot do so because the State has no money, which also lacks in the circulation. However, the money can be emitted. If it is printed, all the economy will collapse. Some people can get rich without working, and other people cannot live on beneficial and hard work. These paradoxes are not generally understood, people become indifferent or aggressive, and the social tension increases.

Further implementation of this model threatens not only further development, but also the existence of the present society. I have proposed a model (S-Economics) bringing solution to a number of the existing problems associated with Economy (namely various financial and debt crises) and social sphere (unemployment, impossible assertion of personal capacities, group frustration).

Acknowledgements: My family, my patient friends, Technologie a Inovace o.s.

References:


