# model of a neutralised currency and exchange system for central banks

Part I - Introduction

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## Introduction:

Coming from the philosophical question "what is the price of the world" did I cognized very soon that money is not the right staff to answer this question. Money is immaterial and the value of money is always related to something and cannot be determined as a absolute value. Nevertheless I could not stop thinking about this subject and read in the meantime something about single global currencies and the possibility of complementary currencies. As I let my mind wander I was surprised to find something that looked childlike but feasible and reflecting closer to it, I had to cognize, that it could be very important for us all. So I started to write down this idea.

### The idea

Starting with the question: Can we find a scale for the value of money? We could ask also: Could we find something that never changes the value? If this value should be further valid for the world society, the only scale which could be interpreted as never changing would be the "whole"

But what could be the "whole"? If we reduce our field of vision only to the world of money, take the world supply of money, name it as "world capital" and would agree with the statement, the amount of "world capital" changes but not the value, it would lead to the possibility to set the changing amount of "world capital" to a not changing number as equivalent that represents the not changing value.

This number can be used as a complementary global reference currency. If we name this currency for example ANNA<sup>1)</sup>, then we can write

# 1 [ANNA] is equivalent to the "world capital"

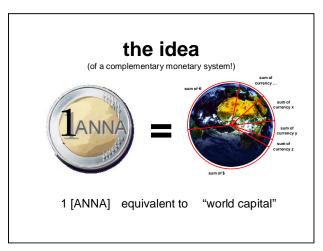


figure1) the idea - 1 [ANNA] is equivalent to the "world capital"

<sup>1)</sup> ANNA is a arbitrary taken name with no further sense. The name should be free for registration of a world currency, should be simple in pronunciation and represents the mirror imaging behaviour of this monetary system by reflecting A(II) N(ations) <>NA: The result of reverse reading is also ANNA.

In fact it is a simple correlation and can be permitted if we take it as a agreement. It would be a agreement like to accept money as a value.

How could we interpret a not changing value?

If the world society could sell the world as the "whole" to get the total of all available money, what would happen? In the moment as we would make the deal and we had to leave the world and life, just in this moment the earned money would get valueless. Sometimes we have the feeling that the world society prefers to earn money by accepting ecological disasters, but nevertheless viewing from the point of humans this not changing value means to let everything ongoing forever in a proper way and to keep the world society alive. Human life in total is inalienable.

Also Sustainability can be defined as to keep everything ongoing forever in a proper way. Within this global reference currency would be a mathematical description of Sustainability. To accept this not changing value as a constant figure of a global reference currency is a declaration of belief in sustainability.

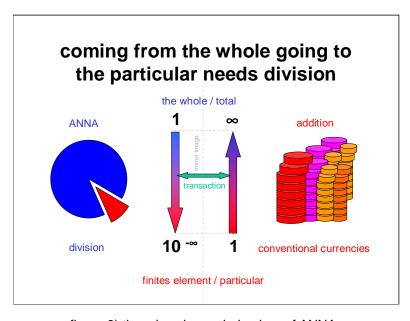


figure 2) the mirror image behaviour of ANNA

Coming from the whole going to the particular needs division. Division is not practicable for normal use. Having a non changing value does not allow free pricing, because prices must be able to change. So ANNA cannot be used like normal money!

Figure 2) shows ANNA as a mirror image of money. ANNA is only understandable as a complementary system that needs the correlation to conventional monetary systems!

But how could ANNA be used?

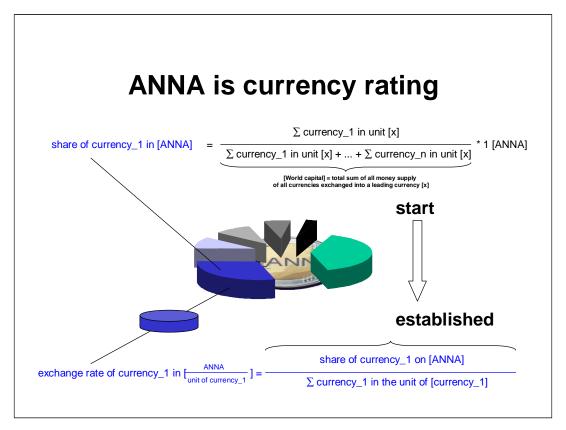


figure 3) ANNA is comparison of currencies

The equations in figure 3) shows a calculation of percentages or rating of currencies. This can be used very well for exchange rates. Due to this way of calculation the exchange rates would be always coherent. It means, without charge and demurrage the transaction from one currency to the next, doing further transactions into a all currencies and coming back to the first would have no spread in the account.

This Coherence is possible without the game of supply and demand of trading on foreign exchange market as it is necessary for the current determination of exchange rates.

In fact ANNA would need Data of the money supply but could work otherwise frictionless without any own monetary policy.

Conventional currencies still would need monetary policy, but the new way of determine exchange rates would lead to much more interaction between the currencies.

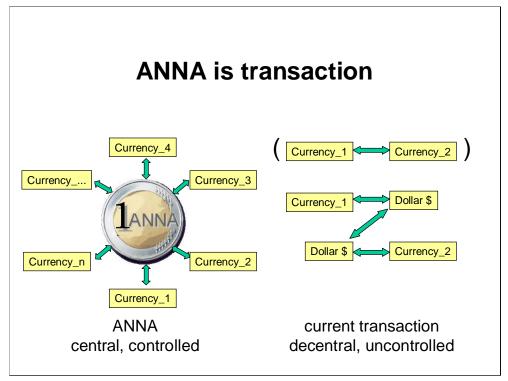


figure 4) ANNA is transaction

Figure 4) shows the difference to current transaction. Current transactions are not central. The equilibrium of exchange rates will estimated on the foreign exchange market by trading. It is the so called equilibrium of the free market

# ANNA would be a centralised system.

Transaction would be done by buy and sell of ANNA. The equilibrium of exchange rates would be mathematical determined and the control of the exchange rates are at the central banks. This are in parts properties of all single global currencies. The outstanding difference of ANNA would be the neutralisation. Neutralisation means:

### ANNA is free of inflation and deflation

due to the constant amount of money of always one. Due to this ANNA is a long term stabilised monetary system.

# ANNA would allow long term reflection

# Two necessary characteristics of ANNA



- Never change the amount of ANNA. This would change the value of ANNA
- ANNA must be used with a demurrage, otherwise everybody would try to save money in ANNA

figure 5) necessary characteristics of [ANNA]

The main necessity would be keep the amount of ANNA always constant otherwise the concept would loose acceptance.

Due to the never changing value of ANNA everybody would try to save money in this system. This would lead to a stop of trading. To avoid this disturbance ANNA must be used with a demurrage.

This demurrage must increase as longer a account would try to stay in the system. Only the time which is necessary for a transaction should be free of demurrage.

ANNA is a simple concept which is based on electronic banking and related to the "world capital". "world capital" is much more unspecified and means in fact the world money supply. But is it possible to count the world money supply? The supply of money is one of the main responsibilities of central banks. ANNA would be dependent on data of central banks!

# ANNA would be a tool for central banks

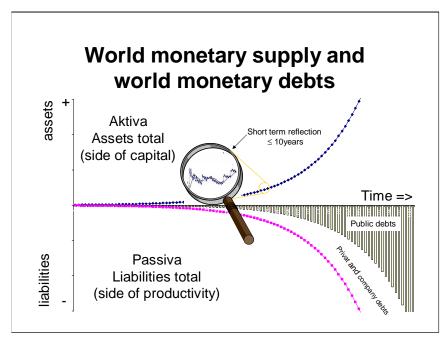


Figure 6) world money account and world debts versus time

Money has two sides. One side are the assets, the active side where the owners of the capital claim the demands.

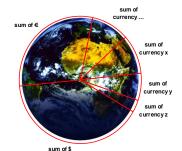
The other side are the liabilities, the passive side where the debtors have to fulfil the demands in the way to be productive.

Everybody pays attention if the accounts are correct, if they are in plus or minus and also in which currency they are. It is a system which does not forgive mistakes and is related to owners.

If we take exclusively the total side of plus and add the total of cash to it, then we would have something like the value of "capital of each currency". It should be close or equal to the value which central banks call money supply. In Fact, central banks should be able to determine the emission of their own money as we also assume that they are able to control the fractional reserve banking as a important part of this money supply. At least the central banks must be able to estimate the capital of their own currency.

Figure 6 shows the monetary supply and debts versus time which should have similar shape for every currency as well as for the world capital. Of course it is a simplified curve and shows in reality dents and humps and the curves are not smooth if we look with a magnifying glass onto short terms of less or equal 10 years. But in a long term view it is always a geometric growing curve due to the interest rate and the not limited self life of money. Money has to earn money, it will be loaned and debts will follow money supply like a mirror image but may be in a more rugged shape. So it would be possible to take also the side of debts, as a basis of estimation for non central banks.

# One necessary Characteristic of "world capital"



 The result of exchange every kind of money in one moment into ANNA must be less or equal 1 [ANNA], ever.

figure 7) necessary characteristic of "world capital"

The sum of the "capital of currencies" would be the "world capital". In the initial step every "capital of currency" has to be exchanged into one leading currency like [\$] or [€]. As ANNA would be established the sum of the "capital of currencies" could be measured in ANNA.

The "world capital" must be determined in a way, that the result of exchange every kind of money in one moment into ANNA is not more then 1 [ANNA]. And mistakes must be avoided to keep the system accurate. So the central banks have to determine the theoretical maximum possible values of money supply which would be lightly raised and strongly smoothed curves compared to time actual values which are oscillating curves. Oscillating values would lead to oscillating exchange rates. And for ANNA is it much more important and exactly enough to know the theoretical maximum possible values.

The theory of ANNA is simple, but probably the details are difficult and complex, so that establishing of ANNA would take centuries of simulation and preparation and requires the good will of the central banks.

ANNA as a centralised and monopolised system needs a non profit management and it is very important that the organisation of ANNA gets and keeps the acceptance of the world community and will be also controlled by the world community.

# summary

- ANNA is a model of a monetary exchange system and basis for a single global currency system
- ANNA is the only monetary concept which includes the idea of sustainability

figure 8) summary

But why should we think about such a complex solution? It is a system which does not allow to earn money by money and due to this it will never get acceptance in the world of finance!

But it is also absolutely sure that a geometric growing system (like figure 6) cannot be kept stable over all times. The aggregate of liabilities will increase. Debts cannot paid back to the creditor. This will lead to crisis as we had already thousand times in world history. The difference to the past is the more global character of economy which will lead to a more global character of crisis. And as stronger a economic crisis is as more it is interwoven with political crisis and wars.

If the world community wants to find solutions, ANNA could be a helpful tool to avoid the economic part of crisis and within in many cases the cause of crisis.

For example ANNA could be a outstanding solution for national debts, especially for countries with bad rating which have to keep treasury bonds in foreign currencies. This debts could be transformed into ANNA. The Debtor could avoid to be caught in the trap of debts, because ANNA is free of interest. The Creditor would not loose the value of claim, because ANNA is free of inflation and deflation. So far ANNA seems to be the only method of solution for the world wide increase of national debts in the way to have a sustainable and peaceful answer. I hope this essay could awake a little spark of interest.

Thank you for your attention!