

This is no joke!

In opposition to many suggestions for how to steer the future of humanity, the proposal in this essay does not build upon hypothetical eventualities whose logical values aren't known for sure by now. For steering the future we need to know what is true at present due to facts, and not what could be true in the future due to speculations. Though it is true that in science we can often forecast the future if we know certain data at the present, this only works if the underlying system is more or less deterministic. Suggestions which are utopia-like aren't helpful but are merely wild speculations when it comes to change the stormy route humanity has manifestly driven into.

So, instead of envisaging a rosarium of the future, in this essay we focus on one hard problem of the present to see where humanity stands today.

The hard problem is how money is generated and distributed globally. A predominant part of money is what has been called "fiat money". Fiat money is generated out of nothing by an accounting record of a bank (bits and bytes). Usually it is used to give some client a financial loan. If this loan returns to the bank, the fiat money, the loan, isn't existent anymore, it has been annihilated. At this point we face a first similarity to the mechanics of a virtual quantum that can be generated out of the vacuum. Usually, those quantum particles vanish again very rapidly into the "quantum foam", though it is assumed that our whole universe could have been occurred due to such a quantum fluctuation which has inflated up to a giant bubble, no more able to annihilate itself.

Fiat money has a similar nature: If all the individual beings, institutions and nations would pay back their debts of fiat money, fiat money simply would vanish into the void where it came from. But for this to happen, one would need an account to the deposits that are counterpart of the debts. The amount of fiat money today can be estimated to be approximately 700 trillion dollars (year 2010). Let it be some trillions more or less, it doesn't matter: the richest tenth of humanity own about 85 percent of this money. In contrast, the U.S. gross domestic product 2009 was about 14,3 Trillion dollars. The former number is a gigantic bubble of accounts against 90 percent of the human population. What makes this accounts so alarming is, that for the defaulter they are stocks which demand compounded interests. The joke is, that those compounded interests cannot be generated via fiat money, but either must be taken away from other individual beings, institutions or nations (via legal or criminal acts) or must be acquired via hard work – at least from 90 percent of the human population.

At this point the hard problem of fiat money docks at the laws of thermodynamics: In a closed system like that of fiat money (or, the universe), one cannot expect that things will turn better the more time goes by. Things will naturally go more worse. As long as 90 percent of the human population have to organize the continuous flow of the mentioned interest rates for the sake of not ending at personally and existentially dangerous roads of life, they have to work harder and harder to "pay their bills". The side-effects of this dynamic aren't merely more apportionment fights against other individuals (be it for jobs, goods, contracts or rights), but are more and more factors that lead to health problems, additional costs in the health care systems, disappearance of interpersonal trust, frauds and (business) crimes of all kinds. Sociopaths spring all over the world, and hybris, what in earlier times was considered as a sin, nowadays is considered as a goodness. The money system has taught us all that to gain something, we have to take it away from somebody (this is called "free market economy"). And we do our best to play the game, because we know that we anyway can't escape it.

Some may say that the lenders of last resort could well be the central banks that also have the power to create money out of nothing. The problems with those lenders – even if they don't want their “money” (fiat money) back – are the same as those with conventional paybacks: Either they are forced to give money away for nothing or they have to take it at a given time from the 90 percent we spoke of above. Both alternatives seem to be very unfair.

But even in the latter case, those interest rates simply cannot be produced even by all human beings together, because of two factors: everything that could be produced must be bought by those 10 percent of the human population (must be considered worthy by them), and secondly, if we do so, the 10 percent of the human population gets richer while a prominent part of us has only worked for paying interest rates. To finance one's own *life*, one needs *more* money and this money – for the predominant part of humanity – can only come from *more* loans of the banks and more work per time for most of the people at the globe. The gambling with exchanges and interest rates accounts for about 4,1 Trillion dollars – per trading day. This is how fiat money works, it is a law-like force that can constrain huge amounts of the world's population to do more and more thermodynamical work for their survival. It's a bet with the future, namely that there are enough human, scientific and natural resources to pay the prices that fiat money demands. But fiat money is always just a bet on the future and some bets get lost regularly in a law-like manner – if they are zero sum games (like the compounded interest system and the fiat money system is). The bet is that I get my money back with interest rates. We saw those lost bets since the technological financial bubble imploded in the year 2000 and again in 2008 when the real property estate market in the united states of america imploded. We see it in the discussions about how we should organize the global need for energy, independent of our conventional energy resources to let our cars furthermore run, our heating systems, planes and other oil- or gas-dependent systems. We saw this in Fukushima, as the bet of reliable safety for nuclear energy production got lost. Something always loses the bet, either the debtee or nature – or both.

The first proposal to solve the inherent problem is to demand the following: Those 10 percent of the world's population should not furthermore invest their money in further money (its senseless), but in things that are really needed in many of even the most civilized countries in the world (and even for those 10 percent). Namely there is a huge need for a better energetical infrastructure, for new, regenerative energy resources and the needed physical networks to make such energy available for as many people as possible. This would be a sensitive contribution to minimize global environmental pollution, lower energy costs and nobody of the investors would get poor out of this, because the nations should grant them shares of the investment. Of course there are plenty of other projects that could be meaningful, for example refurbish public facilities like schools, kindergartens, hospitals and more. Not to speak of the problems many countries have with generating the costs for retirement pensions a person (who has *really* worked his/her whole life) can live from in a dignified manner. If we go on to save our money instead of investing it in real and globally worthy projects, the thermodynamical drive will increase. Banks all over the world live from the differences between base rates and depository rates for those who carry their money to a bank. Therefore banks do best live from the extremes between both values. They like huge thermodynamical gradients. Their – and their rich clients' – interest is not to invest their existing money in sensible projects, but to invest it in contracts that promise the highest depository rates. Money really does gravitate to places where there exists more money. And most rich people too invest their money in more money instead of investing it in actions that could help avoiding that the thermodynamical drive burns out the planet.

So, by discussing how humanity should steer the future, we should *not* bet on some future circumstances that may never take place. As long as money gravitates to more money, things

will not change. Instead we should rely on the mathematics behind this gravitation that deterministically forecasts a global financial, social and environmental breakdown – if it is further possible for individuals to generate money without creating a *real* additional benefit for the needs of the human population. Gained bets cannot satisfy the needs of a human being, at least not those of the 90 percent of us, and lost bets can't too.