Impact of New Economics on Money and Monetary Regimes

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Definitions

New Economy

New Economy is an economic environment shaped with the present technological progress, especially with the progress of computer hardware, fast communication, Internet, and computer science (prof. Zlatuška).

Money

Money is a generally accepted means of payment.

Electronic Money

Electronic money is any type of money not existing in a physical but only in an electronic form and transferred as electronic impulses.
A Key Question

New Economy is not new in principle.

It is a synonym for a growth of efficiency of production, trans-action etc. due to technological progress in “computers”. It changes no economic principle at all—behavior of households, firms, and governments is determined with the same key factors. What is changed is the efficiency of searching for information, the efficiency of a production optimization, the cost of contracting and so on.

Can a mere increase of efficiency cause any noticeable evolution of social institutions (e.g. of money or of monetary regimes)?
Evolution of Money

Money is not a human *invention*—it is rather a product of a *spontaneous evolution*.

What was chosen by a society as money was determined with the transaction cost associated with that type of money. Free rational self-interest seeking agents prefer to use that type of money that minimizes the expected transaction cost associated with his desirable transactions.

Types of “Transaction” Cost of Using Money

- The *interest cost*. It is the opportunity cost of holding money.

  The cost can be lowered either with holding lower money balances or with holding types of money bearing higher nominal interest.
Transaction fees are paid for using the transaction media, and for converting them from one type to another. The cost can be reduced either with the use of a cheaper transaction media, or with lower frequency of larger-scale payments.

The interest cost and the transaction-fees cost are contrary.

Instability of Purchasing Power of Currency.
There are two types of this cost: the trend one (expected inflation/deflation), and the stochastic one (unexpected purchasing power volatility).

The cost can be lowered either with holding lower money balances, or with holding more stable currency.

The cost is in contrary with the transaction cost.

Other risks—risks of a money provider’s bankruptcy, forgery etc.
Trends in the Evolution of Money

Historically there was first a strong pressure to standardize money; later the opposite trend prevailed.

There is a strong pressure to money standardization if the conversion cost is high (and when opportunity cost is low). In such a case the only commodity is chosen to be money.

The evolution of financial and other technology may lower the conversion costs, and increase the number of alternative stores of value in the same time (it increases the opportunity cost of holding money). That way it reduces the incentive to use unique means of payment.

Then two interrelated processes came into effect: 1) more and more assets started to act as money, 2) some assets not being money started to be used to optimize the total holding of money, and this way to lower the opportunity cost of holding them.
New Economy and the Evolution of Money

A progress in a technology associated with New Economy decreases further the incentive to use a unique means of payment. Now the conversion fee can decrease enough to allow agents to switch to other currency if the local currency have an instable purchasing power.
What Can We Expect

If the present advance in computer science and related disciplines maintains, we could expect following trends:

1. *Cash would be used less and less.* Its place would take over bank money in company with debit and credit cards (and many types of direct electronic transfer).

   Electronic wallets are not likely to spread much because they have higher conversion cost than cash, and they have higher opportunity cost than debit cards.

2. If the conversion cost of buying and selling a currency (exchange fee) decreases reasonably, we can expect that *agents could use even more than one currency.*
3. The alternative currency need not to be provided by foreign governments only; *any private company can provide it* as well.

Such a private currency can be issued as warehouse money based on a gold, silver or platinum standard (as today already issued by e-gold company), or on any other standard.

This way something like free banking can come into existence once again.

4. It is unlikely that an agent holds in his or her money portfolio more than one currency to diversify the risk of an unexpected inflation.

Because money forms only a small part of one’s wealth it is quite easy to liquidate his or her position in a currency and to start to hold another one.
5. We can expect that *structure and size of “money portfolios” would be more volatile than today—or more precisely, it would be more elastic and sensitive to interest rate and inflation rate differential.*

The lower conversion cost, the lower increase in the nominal interest rate is sufficient to reduce the demand for a particular asset including money.

6. It would (ceteris paribus) force money-issuers (central banks etc.) *to issue currency with a stable purchasing power* (as stable as the most stable one).
Conclusion

Electronic money is only one more step in the evolutionary process in which money evolved.

Electronic money rises the efficiency of transaction. In other words, it lowers the cost of transactions and allows agents to diversify their “money portfolios” better.

The most important result of this fact is agents may better defend themselves from the cost of inflation with restructuring their “money portfolios”—even with switching among different currencies. The demand for a local currency may become rather unstable with respect to inflation.

It means a rise of competition among distinct currencies—both governmental and private.

The competition cannot be perfect, but it will be strong enough to punish the central bank issuing inflationary currency.
Government must either *outlaw the competition* (what may be hard to do given the present state of financial and computer technology), or *issue currency with a stable purchasing power*. Otherwise the competition could make big troubles to the governmental central bank.
Many thanks for your kind attention.

Any questions?