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TOWARDS SUSTAINABLE DEGROWTH :

The importance of Average Value of Labour Time in interest-free credit systems

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* Without notes and references, to be included in the definitive paper

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1. THE QUESTIONS AT STAKE

° **In this talk I am mainly concerned with the problems and benefits of referring to *labour time of average value* in time-based exchange and credit systems, benefits in particular for the Degrowth prospect** (Slide 2).

- **Time-based credit systems (TBCS) have many economic, social and environmental advantages** over *official* and *alternative* currencies (sl. 3)

- but, **time-based credit systems also have some problems that impede their development** (sl. 4).

° Reference to ***labour time of average value* is mainly used to overcome some of these difficulties (slide 5 and 6), to expand the economic and social functions of TBCS** (slides 7 and 8) and **also to improve the *prospects of degrowth*** (slide 12).

- **Credit systems based on labour time of average value can be decisive for financing public economies** (slide 11), weaning them from dependence on capitalist economic growth and on speculative finance (and reducing the importance that the latter continues to have in the organisation of developed societies).

- **Time-based credit systems can be very effective for social security savings** (Slide 10), avoiding the dominant role of pension funds in speculative economic growth;
and they also make it possible to tackle the difficult question of public debt (slides 11 and 12).

° **Finally, time-based credit systems make it possible to conceive and produce social wealth in new ways.**
Care a**ctivities (aimed at care of human and environmental heritage) can take a new leading role in social organisation, in many ways** overcoming **monetary/economic growth.**

2. TIME BASED CREDIT SYSTEMS AND THE PROSPECTS OF DEGROWTH

Briefly, time-based currencies can provide major support for the process of degrowth, for at least four reasons:

1. **Time-based credit systems escape the growth mechanisms implicit in payment of interest** (they avoid paying interest because the value of time-based credits does not change in time and is not subject to inflation).

2. **They link economic processes to a relatively stable and limited value basis**, namely hours of work, **instead of linking them to continuous monetary growth**

3. **Time-based credit systems can subtract sectors and resources from capitalist economic growth and exploitation of resources**:
if an economic resource (live labour or labour accumulated as savings) is used in time-based credit circuits it cannot be used in other economic circuits, especially circuits based on profit, accumulation of money and increasing consumption of resources.

4. **Finally they can promote local economies without implying closed communities**.
They can be used to favour **new forms of universal ecological protectionism** "because care of the commons at local level improves care of commons (natural, cultural and human resources) on a planetary scale".

3. The advantages of time-based credit systems

Time-based credit systems have interesting economic and social advantages over official currencies and also over other types of **alternative currencies**,
(especially those with demurrage, a mechanism that can weakly foster economic growth but increases the operating costs of the currency).

- **Since time-based currency systems have their own stable value base,** which does not change with time, **they can avoid any link with official currencies, as well as inflation and legal problems** due to the creation of a parallel currency.

- **They need** not be material money but **simply a system of electronically recorded credits** to the bearer. This avoids the danger of falsification run by other types of alternative currency.

- **Time-based currency systems can spread and be used on a universal scale** because the terms and unit of account of labour time have a universal character.

- Time-based currency systems generally aim for **more equitable economic exchange** and **can help re-establish a sense of limit or measure for the development of economic activities**.

- Indeed, calculations in labour time provide adequate measurement criteria for economic costs (of goods and services), as well as advantages in terms of the relationship between work and free time.

- From this point of view, **time-based currency systems can also act as a basis for broad planning of sustainable use of resources available to communities**.

4 . MAIN PROBLEMS AND LIMITS OF ALTERNATIVE CURRENCIES

° **To achieve their full economic and emancipative potential, time-based credit systems (TBCS) must tackle certain problems typical of alternative currencies**.

TBCS share certain problems with other types of alternative currencies, and **they also have their own specific problems.**

° **Major problems and limits of most alternative currencies** are:

- too small a scale and excessively limited aims and functions

- management costs usually exceed advantages, leading to failure in the medium or long term

(An exception are alternative currencies that manage to grow within the limits their economic possibilities, such as the Swiss WIR, but this is not generally certain for TBCS).

° **Specific limits of time-based credit systems:**

- abstract interpretation of egalitarian principles in time-based exchanges (for example time banks **consider one hour of any type of work to be equivalent**, making it difficult to sustain exchange with subjects whose work is effectively more valuable);

- difficulties in accounting for costs in official currency sustained to produce or provide many goods and services (this is why time-based exchange is generally very limited).

° These limits are well known since many years.
To some extent, **certain solutions are already evident from past experience of TBCS,** but the **excessively limited concept of TBCS functions have led to underestimation of the lessons learned.**

5. IMPORTANCE OF USING LABOUR TIME OF AVERAGE VALUE

° These problems can be solved by using **labour time of average value** as the basis for exchange and credit systems.

- Different ways of using **labour time of average value make it possible to exchange hours of service activities having different exchange values** (e.g. heavy labour, gratifying jobs, work in low demand or low supply).

- By **referring to an hourly wage of average value, defined in official currencies, it also becomes possible to convert all costs in official currency into time-based credits.**

° **All credits have to be recorded in time-based units, even if they are derived at least partly from resources paid in official currency**.

For this to work, some conditions are necessary:
1. the determination of credits in time units must be completely independent of the dynamics and factors of official currency;
2. there must be a **clear distinction between the *steady units of account* or *measurement* (used to record acquired credits)** and the ***variable exchange value*** **of different goods and activities**

(the exchange values of different activities may vary, without changing the units of the credits used to record the transactions; overall credits will maintain steady their value)

Let's see some historical examples to clarify the various issues at stake

6. SOME CONCRETE EXPERIENCES: FUREAI KIPPU AND ITHACA HOURS

These statements are not based on abstract speculation.
Existing time-based currencies, such as the Fureai Kippu system in Japan and Ithaca Hours, have already tested certain aspects of using Average Value Labour Time (AVLT).
(The Fureai Kippu system was set up in Japan in the 1990s to exchange elderly care services; Ithaca Hours are paper money, the value of which is indicated simultaneously as an hour of work and $10, because $10 was the average hourly wage in that part of the US when Ithaca Hours were first issued, i.e. early 1990s).

° **In the Fureai Kippu system all credits are recorded in standard (universal) time units that can be physically measured (simply by a clock), whereas the exchange value of the different services varies with many factors.**

- For example, personal bodily care can be valued double with respect to lighter activities: an hour of shopping for old people is recorded as 30 minutes and an hour of bodily care is recorded as 2 hours

- However, Fureai Kippu **does not consider costs sustained in official money, nor allow exchange of credits in care services with other kinds of services;**
this significantly limits the advantages of Fureai Kippu and explains why it has not spread, despite its success for elderly care.

° **This last function can instead be performed by the Ithaca Hours system.**

- **setting a price ($10) for an hour of work makes it possible to exchange different types of goods and services,** even those produced and sold under the laws of profit.

- furthermore, in the Ithaca Hours system, users are free to decide a different exchange value for their goods or services (however, the managers of Ithaca Hours advise swapping different services on an equal basis, an hour for an hour)

° **Although Ithaca Hours offer broader possibilities for exchanging goods and services, their management and production costs are high compared to their advantages** and the number of users in the circuit cannot grow.
Fureai Kippu and many alternative currencies also have the same problem.

This is especially due to the limited functions of alternative money and credit systems: Ithaca Hours and most alternative currencies **are more concerned with community-building through *economic exchange,* and they neglect an important functions of time-based credit systems: the long-term credit function** (which is very important for **investment function** and for the **retirement savings function).**

The widening of the function of alternative currencies depends on the amplitude of their social basis (or consent), and this in turn can depend on how AVLT is established.

7. POSSIBLE WAYS OF DETERMINING AVERAGE VALUE LABOUR TIME

° Fureai Kippu and Ithaca Hours are examples of two different ways of considering the Average Value of Labour Time (AVLT);
both, however, raise the problem about how to fix the maximum and minimum value (of exchange, or hourly monetary wage) within which to set AVLT;

° **The Fureai Kippu has the easiest and least controversial reference to the AVLT.**

- As we have seen, **it simply refers to standard physical time,** perceived in the same way everywhere, and it sets different exchange values for different activities;
all exchange values and all claims are still recorded in units of standard working time, which remains stable and unchanging in time, offering significant benefits with respect to credits measured in official currencies;

- but it cannot consider costs sustained in official money (nor allow exchange of credits for care services with other kinds of services).

° **On the contrary, Ithaca Hours can consider costs and values expressed in official money and allow exchange of any activity with any goods and services**.
It does this by reference to an average hourly wage **(**established in the socioeconomic context in which the time credit system operates**).**

But here lies **the main problems: How can we determine an average hourly wage? How can we establish maximum and minimum wages?**

° **Two main methods of establishing an average hourly wage (and maximum and minimum wages) are possible: an *empirical* or *statistical* method or an *ethical* or *political* method**.

8. EMPIRICAL AND POLITICAL APPROACHES TO ESTABLISHING AVLT

° **In an empirical approach, reference can be made to *existing* maximum and minimum hourly wages,** then identifying an intermediate value which may be determined statistically.
Only existing exchange or contractual rates are considered, without any ethical assessment; and these rates **may reflect large inequalities in the distribution of income** and social wealth.

° **In an ethical approach, communities using time-based credit systems determine the *socially acceptable* maximum and minimum wages (**and hence the resulting average hourly wage).
Such decisions require mediation and arbitration, which is why the ethical approach can also be defined as political.
The exchange value of different activities can, however, be determined by the agents themselves (as for Ithaca Hours) or by the manager of the credit system (as for Fureai Kippu), between the maximum and minimum wages established by the communities.

° Both the empirical and ethical methods then raise some problems, especially with regard to wider sharing of the choice made.

If we want a widely accepted average value of labour time, it seems appropriate to find a compromise between the empirical and political approaches.
This can be useful to correct disputed social distortions and to reach widely shared criteria of equity and economic utility (I mean shared by as many people as possible).

° **Let us not forget that credits must always be recorded in standard hours of work** which can be physically measured in the same terms, anywhere and at any time.
This means that **the convertibility of time-based credits is only theoretical** and that **such credits never lose their value in the course of time** (Fureai Kippu is an example).

9. THE UTILITY OF AVERAGE VALUE LABOUR TIME

° **Though only on paper, identification of an average value of labour time in official money is useful,** not only to broaden the range of transactions of goods and services accounted in labour time, but **especially to measure the advantages of recording credits in time-based units instead of official money.** This is the aspect that interests us here.

- Official currencies have always had both the functions of credit (medium and long term) and retirement savings because of their store-of-value function.
However, **today these functions work much worse with official currency than they could with a time-based credit** system.

This has happened for many reasons:

a) **the store-of-value function of official money become very weak and instable**, mainly because of the exorbitant creation of money debt by the speculative finance;
b) the official monetary and financial systems charge heavy interest rates even in periods of crisis; this particularly affects activities that cannot increase their productivity or pay any type of interest, such as public economies;
b**) banks pay almost no interest on bank accounts of normal people,** forcing them to resort to financial speculation;
c) **the financial system systematically destroys most of the retirement savings entrusted to it** (such as pension funds).

° Incidentally, **these problems not only regard personal savings and public economies but also degrowth.** High interest rates and periodic destruction of monetary resources in fact make growth necessary, intensifying exploitation of resources and aggravating environmental damage.

° **From the point of view of personal savings, major advantages of time-based credit systems** (i.e. interest-free credit and stable retirement savings) **spring mainly from the fact that inflation and speculative dissipation of money are always greater than the low interest rates and yields conceded by banks and the financial system** (see next slide, about the *Italian case*).
By contrast, time-based credits remain constant in time and can provide access to public services concerned with care: personal, social and environmental.

° **The importance of recording retirement savings and pensions in time units** (hours of work) instead of official currency **is especially great in countries subject to enduring high inflation, high public debt and long-term productive stagnation** (today due mainly to largely tertiary economies).

- All three conditions were persistent in Italy over the last 40 years. **Italy is therefore an ideal example to demonstrate the advantages of a time-based credit system over official currency and finance**.

10. SOME EXAMPLES FROM ITALY

In 1970, 100.000 lira saved (today €50) was equal to a month of work of average value.
In 2010, 40 years or a working life later, the same amount saved (€50) is the mean wage for only *one day* of work.

If this saving had been recorded in time-based credits in 1970, it would still be the equivalent of a month of work or 180 hours. Today credits recorded and saved in 1970 would still be worth 180 hours of work**, which is worth about €2000 today in Italy (about 4,000,000 lira).**

By keeping their value, time-based credits would have multiplied in value by about 40 compared to savings in official money.
Or the latter **would have depreciated to one fortieth (compared to) the value of time-based credits**.

Of course, savings in official money could have earned interest or rents. If we assume a very high interest rate of 5% per annum, the savings would have multiplied by about seven in the course of 40 years: £100,000 would have become £700,000 or €350, about one sixth of a monthly wage, or about 30 hours of work of average value. **So despite the interest received, the savings would still have lost about 80% of their value, compared to the same amount recorded in time-based credits.**

It is impossible to consider the interest accumulated by pension funds in the last 40 years, because pension funds only became compulsory in Italy in the nineties.

We know, however, that after a few years of great promises, the real gains fell sharply to below the sums initially invested.
We also have to consider that the next big financial crisis will probably destroy the pension fund system itself, and public finance will have to come to the rescue in a big way.
This will inevitably increase the level of Italian public debt, undermining the public retirement system.
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11. TIME-BASED CREDITS AND FUNDING OF PUBLIC ECONOMIES

Credits based on average-value labour time are not only good for single small savers and investors: they can reconcile the needs of individuals, public economies and the community, and **they can promote ethical, ecological and sustainable economic values.**

Let us summarise main aspects.

Individuals **benefit from a time-based credit system because it protects their savings from the inflation inherent in official money** in tertiary societies. People **can stop their savings from being destroyed** by increasingly frequent and devastating financial crises.

Public economies **can avoid paying interest and therefore avoid increasing public debt**, as well as the growth of money mass invested in speculation.

Time-based credits are also positive for the *community*, which can finance public economies and care-related activities, free of interest, rents and profits.
If interest, rents and profits are applied to activities that cannot increase in productivity, such as public economies and care-related activities, the cost of such activities increases.
This not only increases the cost of living but **also reduces access to care-related services for most people** (See Ruzzene 2008).

Furthermore, time-based credit systems can arise more readily on a local basis but they can also develop through broad federative agreements of national and even transnational dimensions, because of the potentially universal nature of credits based on labour time (including those based on average-value labour time, as all credits are recorded in standard universal time). This means that time-based credit systems can challenge the hegemonic role of monetary growth on a *local* and on a *global* scale.

For all these reasons, even individuals concerned with the purely economic aspect will find it worthwhile converting their savings into time-based credits that can finance public economies and care-related activities, instead of investing them in pension funds, badly managed by speculative finance.
This should also interest persons and groups concerned with the environment and Degrowth because by using time credit systems they could become promoters of new models of socioeconomic development.
In exchange, **everyone can obtain pension credits that do not devalue with time, ensuring their right to quality services in their old age at a lower cost**.

12. CONCLUSION: AVLT CREDITS, PUBLIC DEBT AND DEGROWTH

Summing up, we can say that a credit system based on average-value labour time (AVLT) could be a **powerful tool for reducing public debt and the hegemonic role of capitalist finance**; they can also challenge the incessant push for economic growth through alternative use of a major resource: pension funds.

The whole system of **financing public economies could become more transparent and controllable,** as the community could play a much more active role in controlling spending and public debt.

Time-based credits can also keep public spending and debt within sustainable limits by linking them to the labour resources available in a community.
(By the way: **It is not a question of tackling the crisis by printing more money, not even in the form of alternative currency.** We have to go beyond the concept of *money creation* as a way to stimulate indiscriminate economic growth, because the costs of which are becoming more and more devastating.)

A credit system based on AVLT could strengthen responsibility of individuals and government because it makes it easier to consider the costs and benefits of alternative uses of all resources, both on an individual and an overall scale**.**

For all the mentioned reasons, **alternative exchange and credit systems based on average-value labour time could be a good chance for strengthening sustainable degrowth.**

Finally, let me point out that by **"sustainable degrowth" I mean a degrowth prospect not only concerned with ethical and ecological questions, but also with economic aspects,** in which **economics is primarily concerned with "*saving*" *(and taking care of)* all resources**: environmental, social and especially labour resources. I've finished, thanks !

The importance of Average Value of Labour Time in interest-free credit systems: towards sustainable degrowth.

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