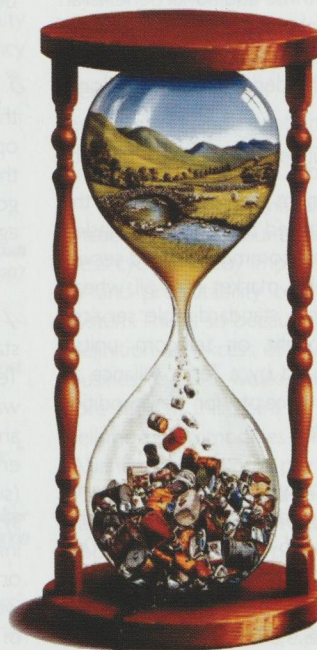




A Win Win Solution to Monetary Insecurity?

TERRA



Can we turn the hourglass around?

Four unresolved issues are haunting the global monetary scene. Firstly, there is no international standard of value, a reliable unit by which to measure exchanges and a critical function of any money system. Secondly, currency instability persists: according to the World Bank, 87 countries have experienced monetary crises in the past 25 years, and still counting. Thirdly, the current money creation process tends to accentuate the business cycle. Indeed, the banking system tends to have a herd instinct when making credit available or restricting it for particular countries or industries. Finally, institutional deadlock: the banking system isn't pushing for monetary reforms because "hedging" products (insurance against monetary instabilities) now constitute significant profit centers; and the current geopolitical environment makes a new Bretton Woods agreement highly unlikely.

Among the effects at the micro-economic level: currency risks are now among the highest risks for doing business internationally. From a macro-economic viewpoint, currency crises have provoked untold human suffering as whole

economies falter. Another consequence: investments in less developed countries have proportionally dropped by one third over the past two decades. This has resulted in a demonstrable drop in the standard of living for eighty nine of those countries.

Proposed Solutions: A Trade Reference Currency

One solution to this problem many corporations have resorted to is international barter; technically called countertrade. However, that is an inefficient and expensive option. In contrast, the creation of a Trade Reference Currency (TRC) - an agreement among a group of business partners to accept some currency arrangement other than the conventional currency - would be more cost-effective. It could also be designed to provide several other benefits that will be explained below, both for its users as well as for society at large.



The TRC would be legally structured as standardized barter. This TRC would be designed to provide three additional benefits: an inflation-resistant international standard of value, stabilization of the business cycle, and the realignment of stockholder's interests with long-term sustainability.

This new Trade Reference Currency - whose unit of account could be called the 'Terra' - would be backed by a standard basket of the most important commodities and services traded in the global market (e.g. oil, wheat, copper, etc., and some standardizable services like international freight or telecom units.) Terras would be issued by a Terra Alliance as electronic inventory receipts for commodities sold to it by producers.

The cost of storage of the physical commodities would be paid by the bearer of the Terra (estimated at 3.5-4% per annum). This makes the Terra a 'demurrage' currency, which encourages its use as a contractual, planning and trading device, not as a store of value. It is different from conventional money in seven ways:

1 The Terra is defined as a standard basket of the most important commodities and services in the global market for which futures markets can be established (e.g. oil, wheat, copper, etc; as well as some standardizable services such as the International Shipping Charter Rates.) It would, therefore, be conceptually similar to a fully backed gold standard, but rather than the backing of one single commodity there would be a dozen of the main commodities being traded today internationally, including gold. Because it is fully backed by a physical inventory of commodities, the Terra would be a very robust and credible payment unit. This backing would also make it possible to convert the Terra into national currencies under certain pre-established conditions (explained in point 7 below).

2 The Terra would be designed as an inflation-resistant currency by the very definition of its composition. Inflation is always defined as the changes in value of a basket of goods and services. Therefore, by selecting the appropriate ingredients in the basket (including, if desirable, an index capturing residual global inflation not

picked up directly by the basket of physical commodities itself), the Terra could explicitly be designed as inflation-resistant.

3 It is a currency that is complementary to the conventional national currencies, i.e. it can operate in parallel with them without replacing them, and therefore does not require any new governmental negotiations or international agreements.

4 It can be initiated by private initiative as a standardization of countertrade transactions. Terras would be issued by the Terra Alliance as warehouse receipts. The Terra Alliance would be an organization structure open to all newcomers meeting certain pre-established criteria (similar in this respect to the Visa credit card system). Such an initiative could be undertaken initially on a small scale as a pilot project. The organization structure of the Terra Alliance would be designed as a "chaord", on the model of the Visa credit card alliance.

5 The Terra could evolve into an accountancy unit, used for international planning, contractual and payment purposes. Terras would take the form of an electronic inventory receipt, and not be issued as notes or coins.

6 One key feature, which differentiates it from previous commodity basket currency proposals, is that the cost of storage of the physical commodities would be applied to the bearer of the Terra. This cost for holding the currency is estimated at 3.5-4% per annum. This makes the Terra a demurrage-charged currency, the opposite of a conventional positive interest rate currency. This insures its use mainly as a trading, planning and contractual device. It is intended by its very design to remain in circulation. Unlike conventional money, it is not designed to fulfill the function of store of value. Consequently, it would strongly activate commercial exchanges and investments wherever it circulates.

7 There would also be the possibility to redeem the Terra for conventional money at specific conditions, one of which is a 2% penalty. The Terra Alliance would then simply deliver

the inventories to
ity markets and ob
cies necessary for
aims at giving an in
circulating in trade.

"I foresee
in the

Chairman of the

"The t
economic globaliza

unit of account

accepted

- in other words, a

ex-Chairman

In short, the Terra v
ized warehouse rec
international trading
teristics of being inf
rage-charge curren
instrument with t
macro-economic ad

The Terra wo
international value
capture main elem
even be an exceptio
that it is a fully bac
haven't had since th

In addition, th
have as second m
capacity to relaunch
ularly important ne
economies in the
downturn for the
Japan has been stru
a deflationary liquid
ever since its real-e
1990. Europe's rec
collapsed after 200
pact" introduced t
against inflationary r
Keynesian recovery
Europe. On top of al



the inventories to the corresponding commodity markets and obtain the conventional currencies necessary for the payment. The 2% penalty aims at giving an incentive to keep the currency circulating in trade.

*"I foresee new currency markets
in the 21st century."*

Alan Greenspan
Chairman of the Federal Reserve Board, 1997

*"The ultimate logic of
economic globalization is a stable and common
unit of account and an internationally
accepted means of payment
- in other words, a common world currency."*

Paul Volcker
ex-Chairman of the Federal Reserve Board, 2000

In short, the Terra would legally be a standardized warehouse receipt that can be used as an international trading currency. Its unique characteristics of being inflation-resistant and a demurrage-charge currency, would endow this trading instrument with three unusually interesting macro-economic advantages.

The Terra would be an ideal standard of international value, given that its basket would capture main elements of global trade. It would even be an exceptionally robust standard, given that it is a fully backed currency, something we haven't had since the early gold standard days.

In addition, the Terra mechanism would have as second macro-economic benefit the capacity to relaunch the world economy, particularly important now when all three major economies in the world are in simultaneous downturn for the first time since the 1930s. Japan has been struggling without success with a deflationary liquidity trap for a decade now, ever since its real-estate bubble burst back in 1990. Europe's recovery attempts have all but collapsed after 2000. In addition, the "stability pact" introduced to protect the new Euro against inflationary risks will now ensure that a Keynesian recovery solution is not available in Europe. On top of all this, the collapse in the US

of the high-tech and dot.com phenomenon bubble followed by the events of September 11 provided a psychological shock to an already weakening US economy. A mechanism like the Terra would help in unblocking the resulting economic quandary of the convergence of a downturn in all three leading world economies.

The reason is that the Terra would automatically tend to counteract the prevalent business cycle, thereby improving the overall stability and predictability of the world's economic system. This is so because corporations have by definition an excess of raw materials when the business cycle is weakening. They would therefore tend at this point of the business cycle to sell more commodities for storage to the Terra Alliance, which would pay for them with Terras. These corporations, so as to avoid the demurrage charges, would tend to spend the Terras as soon as possible to pay their suppliers. These suppliers in turn would have a similar incentive to pass on the Terras as medium of payment. The spread of this increased incentive to trade with this currency would therefore automatically activate the economy at this point in the cycle.

Whenever the global business cycle would in a boom period, this mechanism would automatically work in reverse and stabilize the economy in the other direction. In a boom period, corporations would have a systematic incentive not only to stop selling new inventories to the Terra Alliance, but also to cash in the Terras (even incurring the 2% penalty charge), just to take delivery of the raw materials themselves. This would reduce the amounts of Terras in circulation when the business cycle is at its maximum, thereby cooling off inflationary pressures on the economy at this point.

In summary, the Terra denominated exchanges would tend to automatically dampen the business cycle by providing additional monetary liquidity in counter-cycle with the business cycle thereby compensating for the pro-cyclical pattern observed in the money creation process of conventional national currencies.

The introduction of the Terra is also important for the world's population at large. Job availabilities is a growing concern worldwide. The simultaneous down-



TERRA



turn of all major world economies makes this issue particularly pressing at this time. The counter-cyclical nature of the Terra mechanism would not only improve the immediate situation, but also permanently reduce the boom/bust cycle that feeds the job instability everywhere!

Last, but not least, there is another societal benefit relevant for everybody. As long as there is a systematic conflict between financial priorities and long-term thinking, there is little chance that we will manage the shift towards a sustainable society. The Terra mechanism would be a key tool to realign financial interests with longer-term concerns, including long-term ecological concerns. This is in direct contrast with what happens today with conventional national currencies. A discounted cash flow of conventional national currencies with positive interest rates emphasizes systematically the immediate future at the expense of the longer-term.

Demurrage charges would do the exact opposite: they focus the attention on the longer-term rather than just the immediate future. The use of a demurrage charged currency like the Terra for planning and contractual purposes would therefore reduce the conflict that currently prevails between the stockholder's financial priorities and the long-term priorities of society at large. Realigning financial interests with long-term thinking is a necessary condition for sustainable development to have a realistic chance at the scale and speed that are now required. Therefore, the Terra mechanism will be helpful to the population at large simply by making sustainability a practical reality for their children and grandchildren.

So rather than trying to legislate or impose a moral obligations on business - a process that is unlikely to be successful in today's political environment - demurrage pro-

vides the functional dynamic along with the financial incentive to be able to think long term and re-align sustainability with stockholders' interests.

Differences with earlier proposals

The Terra is a commodity-basket currency. Over more than a century, there have been several proposals for commodity basket currencies by a series of well-known economists.¹ The main reason they have not been implemented is not due to a technical fault of the concept, but rather because they were aiming at replacing the conventional money system. Such replacement would have put in jeopardy powerful vested interests, and required a new international Bretton Woods treaty. This is not the case with the Terra proposal.

On the contrary, the win-win strategy underlying the Terra mechanism includes the financial sector as well. The Terra is a complementary currency, which is designed to operate in parallel with the existing system. Anything that exists under the current monetary modus operandi would remain in operation after the introduction of the Terra. Specifically, the Terra mechanism wouldn't be a financing source, keeping the monopoly of conventional money financing intact.

The Terra only provides an additional option to what is currently available for denominating international trade transactions. Furthermore, given that the Terra is in fact a standardization of countertrade, it would enable banks to offer financial services in a the fast growing domain of international barter where they are today completely excluded (e.g. opening accounts, advising on currency selections, and transfer funds in Terras as they do today for any foreign currency).

'The Terra would be an ideal standard of international value, given that its basket would capture main elements of global trade.

It would even be an exceptionally robust standard, given that it is a fully backed currency, something we haven't had since the early gold standard days'

The other c
the Terra propos
the demurrage ch
age costs of the b
er of the Terra re
lem that previou
facing: who will p

Notice that
tant issue for Le
are producers of
would be part of
tries face two we
scarcity of hard
degradation of ter
anism creates a s
addresses those
Developed Count
ity that is a comp
in the same posi
described above.
exchange its com
vertible currency
dump it in the m
reduce its price. In
ly the same positio
were during the g
extract is in fact a
Finally, as stated ea
an international m
been on hand. Th
relying on private
viewpoint, it would
frameworks of co
any formal govern
convertible. Count
practiced today in
volume of more th

Why should interna to get involved

The last key questi
al business be willin
initiative? The sho
involved with the
most realistic way a
following key impro
happens normally:

- 1 It provides an
against uncerta
from internatio

HUMANIDAD



The other conceptual difference between the Terra proposal and all previous proposals is the demurrage concept. The fact that the storage costs of the basket are covered by the bearer of the Terra resolves the other tricky problem that previous commodity proposals were facing: who will pay for it all?

Notice that this also resolves an important issue for Less Developed Countries that are producers of any of the commodities that would be part of the Terra basket. These countries face two well-known hurdles: the one of scarcity of hard currencies, and the one of degradation of terms of trade. The Terra mechanism creates a solution that at least partially addresses those two problems. A Less Developed Country that produces a commodity that is a component in the basket is exactly in the same position as a corporate backer described above. It has now the possibility to exchange its commodities directly into a convertible currency (the Terra) without having to dump it in the markets and thereby further reduce its price. In short, such a LDC is in exactly the same position as gold producer countries were during the gold standard days: what they extract is in fact a convertible currency. Finally, as stated earlier, the political context for an international monetary treaty has simply not been on hand. The Terra avoids this pitfall by relying on private initiative. From a legal or tax viewpoint, it would fit within the existing official frameworks of countertrade, and not require any formal governmental agreements to make it convertible. Countertrade is indeed routinely practiced today in over 100 countries, with a volume of more than \$1 trillion per year.

Why should international business be willing to get involved in such an initiative?

The last key question is why should international business be willing to get involved in such an initiative? The short answer is that getting involved with the Terra Alliance provides the most realistic way available today to obtain the following key improvements, compared to what happens normally:

- 1 It provides an insurance against uncertainties deriving from international currency markets

- 2 It makes it possible to change inventories of major raw materials from illiquid assets into liquid ones
- 3 It provides working capital at a lower cost than conventional national currencies
- 4 It reduces the cost of completing counter trade transactions

In addition to the above benefits for businesses, the three important macro-economic effects already described earlier are relevant not only for society as a whole but as well for the corporations as well.

- 5 It makes available to businesses a robust international standard of value
- 6 It systemically reduces the possibility or seriousness of a global recession by its countercyclical effects on the business cycle
- 7 It resolves the conflict between long-term sustainability and financial priorities

In conclusion, the Terra mechanism is a Win-Win approach for all main actors in the global scene, and that is why it may have a chance to succeed where others have failed in the past. What is at stake is more than economics. Today, the bulk of the decisions that will influence the future of humanity are made by the major corporations. And as long as those decisions are made mainly on short-term criteria, the chances of us getting to a sustainable future have unfortunately to be considered low. The Terra mechanism would contribute to reorienting these decisions towards a longer term perspective, which may turn out to be vital for our entire biosphere.



1 See for example in chronological order: W.S. Jevons: Money and the Mechanism of Exchange (1875); Ian Gondriaan How to Stop Deflation (London, 1932); Graham, Benjamin Storage and Stability (New York: McGraw Hill, 1937) and World Commodities and World Currency (1944); and World Commodities and World Currency (New York: McGraw Hill, 1944); Harmon, Elmer Commodity Reserve Currency (New York: Columbia University Press, 1959); Albert Hart of Columbia University, Nicholas Kaldor of Cambridge University and Nobel Laureate Jan Tinbergen: The Case for an International Reserve Currency (Geneva: presented on 2/17/1964 (Document UNCTAD 64-03482); St Clare Grondona Economic Stability is Attainable (London: Hutchison Benham Ltd, 1975).