An Annotated Précis, Review, and Critique of *WIR and the Swiss National Economy* by Prof. Tobias Studer; English translation by Philip H. Beard, Ph.D.

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Selected quotes, with *reviewers' comments in italics – t.h.g. & t.m.*

"This treatise therefore aims to open up for all interested parties insights into both the *modus operandi* and the rationale and purpose of WIR."

"WIR exists merely as a bookkeeping entity" *[no paper or token currency]*. "WIR is essentially theft-proof."

Two limitations. "One is that public services are not available for WIR, nor as a rule can WIR be used to pay taxes; Secondly, use of WIR is limited strictly to domestic transactions."

Five essential WIR qualities:
- **WIR is an unusually flexible, versatile payment medium;**
- **WIR is exclusive, used by a select group;**
- **WIR belongs to the private economic sphere;**
- **WIR is a purely Swiss entity; and**
- **WIR, unlike conventional money, is theft-proof.**

Two more essential features:
- **WIR is a widespread, liberally utilized advertising tool; and**
- **WIR is an effective instrument for boosting sales.**

Important insight:
- **WIR is indeed a cash-augmenting payment medium. This function, however, must not be its most essential feature.**

[This is where I find my strongest disagreement with Prof. Studer. As Prof. Studer himself admits later in the book, the credit clearing function is the WIR's most distinctive feature and the main reason for its success. - t.h.g.]

"WIR must possess qualities much more essential than its role as a supplementary medium of payment. In order to grasp these qualities, however, we shall need first to look back to the circumstances surrounding the founding of the WIR system in 1934, and then to an analysis of WIR's current operational mode."

*[In my view, its role as a supplementary medium of payment **is the essential role** of WIR; the other "qualities" are peripheral and supportive of that. - t.h.g.]*

[During the Great Depression] "Global total production fell in the space of a few years by about 60%."

"The collapse of the demand side led to drastic price reductions on the supply side, and to brutal competitive battles for the few remaining orders. On average, world market prices fell by 30%. Prices for certain agricultural products fell much further. Agrarian countries were therefore even harder hit by the crisis than industrial countries. Brazil, for example, found itself forced to use its unmarketable coffee for locomotive fuel in place of coal."

“The global economic crisis led in a few years to a gigantic destruction of wealth. Countless enterprises landed in bankruptcy court.”

[Prof. Studer points to the stock market crash as the “trigger” for the great depression, but fails to explain what ***caused*** *the crash, which is now widely recognized to have been a deliberate contraction of the money supply by the banking system following a long period of monetary expansion. – t.h.g.]*

Attempts to remedy the Depression. [In the United States] “The *[infrastructure]* buildup was financed with the help of the printing press, i.e. through a policy of increased monetary circulation in which inflationary manifestations were consciously accepted in the bargain.”

[The effect of the various New Deal programs was an expansion of the money supply on the basis of government borrowing. When the private sector was unwilling to incur additional debt or was refused credit by the banking system, the government became the “borrower of last resort” to expand the money supply and place purchasing power into the hands of those who needed it. – t.h.g.]

“It must have appeared desirable to do everything possible to reintroduce the money hoarded in banks back into economic circulation, for the good of all.”

[Money held as bank deposits cannot really be hoarded. Banks use deposits as the basis for making additional loans and thus expanding the money supply, but they must be willing to lend and there must be willing borrowers. – t.h.g.]

“Free money theory can be reduced essentially to three axioms:

“• To stabilize sales of goods of all kinds, money in circulation must be precisely adjusted to the supply of goods. In this way the problem realms of inflation and deflation are to be banished, and price stability achieved. By now this idea has become common wisdom, and is practiced by every national central bank as part of its standard monetary policy.”

[Prof. Studer’s point that money must be adjusted to match the supply of goods is absolutely correct, but to argue that central banks put that into practice is patently absurd. The inflationary record of the modern era shows clearly that

1) Most central banks do <u>not</u> do that. The U.S. Federal Reserve, especially, completely ignores linking money issue to the supply of goods. Their money issuance is linked with faulty government debt; their standard monetary policy being to monetize long term debt (mostly government bonds) that, as a whole, is not intended to ever be paid back. Thus additional money is put into circulation without the corresponding delivery of additional goods to the market.

2) Any universal central monetary policy is incompatible with "free money theory".

3) Inflation and deflation cannot be eliminated by this method, as a century of central banking sufficiently proves. Rather, the removal of legal tender laws and banking monopolies are necessary for that. – t.h.g. & t.m.]

“• In order for money to function solely as means of payment for the free flow of commerce, it must have the character of an interest-free clearing certificate. This notion is to be found today in the WIR credit clearing system, where it has proven its worth over many decades.”

“• The hoarding of money which Gesell found so inimical to the national economy is to be thwarted by applying a constant devaluation mechanism, thus forcing money to circulate. At first glance this notion appears to contradict the postulate of price stability. But Gesell discovered a sophisticated trick for resolving the contradiction. A bill with a face value of 100 francs would maintain its buying power. But in order for it not to lose its validity, the user would be obligated to paste a stamp worth e.g. one franc on its reverse side every month. Annually, then, the money would be subjected to a negative interest of 12%. This device was practiced in WIR's early years, from 1934 to 1948. It proved less than fully useful, however, and was finally dropped."

[The so-called free money movement included a wide range of views. Prof. Studer's characterization is not universally applicable. If there is one overarching principle upon which free money advocates can agree, it is probably that there should be no public or private monopoly on the allocation of credit. – t.h.g.]
[Credit in the form of paper notes is much more likely to be hoarded or lost. Credits in the form of ledger entries cannot be lost. Since WIR does not use paper notes, there is no need for the "demurrage" feature, which in any case is unnecessary in a properly managed system. – t.h.g.]

"…in the past the WIR Clearing Circle has been hesitant to highlight its developmental history."

"Operating within the framework of a solidarity-oriented self-help organization, members were expected to draw as much as possible on other members to cover their goods-and-services needs, in order to trigger additional turnover within the Circle."

"These exchanges were mediated by means of interest-free clearing deposits initially created by cash payment [1 SFr for 1 WIR franc] or sale of goods, but before long by the issuance of WIR loans as well. Therewith began within the Circle a cash-free economic circulatory system that supplemented other business activities." *[Emphasis added]*

[The issuance of WIR loans was the key step by which the WIR was able to monetize the value created and held by its members, freeing the WIR credit from the official system of money and banking. This monetization of the members' own goods and services is what is necessary to create a true alternative to legal tender. However, as mentioned above, money should not be issued on the basis of long term debt to finance the creation of assets that do not immediately put goods and services into the market. *– t.h.g.]*

"The organization's dramatic success soon gave rise to a chorus of envious and critical outsiders."

"The need for personal contact with potential business partners led already in the first year to the formation of regional trading groups."

"… clearing certificates in denominations of one and five francs were introduced that circulated among the membership like bank notes and thus were simple to manage as exchange media. These clearing certificates were limited to 12 months' validity, and utilized a Gesell-based demurrage feature that required fixing a monthly stamp on the back for the certificate to retain its nominal value. This negative interest feature accelerated their circulation strongly and expanded the turnover volume within the Economic Circle markedly, though not in a way that could be statistically tracked."

[Where is the evidence to support the contention that it was the demurrage feature that caused circulation to accelerate? Would not the availability of these efficient and convenient exchange media without that feature have had the same effect? – t.h.g. & t.m.]

"For this reason, we lack reliable sales data from the early WIR years. Since the WIR central office could not keep the certificates from leaving the official membership circle, nor hinder their sale for Swiss-franc cash, it was later decided to abandon them."

[The circulation of credit certificates outside of the membership circle need not be problematic, and, if properly done, can be advantageous to the local economy. The sale of WIR for cash is only a problem when WIR sells at a discount from face value. The free market rate of a currency provides valuable information that is necessary for its proper management. A discount is a signal that corrective action needs to be taken. If the WIR credits are properly issued, and there is no debasement, WIR credits will hold their value and sales at a discount will not occur. The fact that WIR certificates were selling at a discount indicates that WIR credits were being issued in excess of the value of the available goods and services within the circle, or as a consequence of issuing on the basis of long term debt .– t.h.g. & t.m.]

"In the stormy first years of [Depression] recovery, [WIR] regulations governing the granting of credit were altogether too lax; too little attention was paid to standard banking security measures. In 1939-40, therefore, the Economic Circle had to undergo reorganization."

"• The third WIR phase, running from 1988 to the present [1998] was and continues to be characterized by conceptual and structural modifications, with numerous innovations. **The potential of the original entrepreneurial concept appeared to be running up against ever more limitations, and the management group began to rein in the turbulent growth of the WIR money supply in a targeted way, leading to the need for diversification."**

[What were these "limitations?" Prof. Studer does not say. What was the reason for curtailing growth? Did growth really threaten the survival of WIR, or was its success an embarrassment and threat to the conventional banking system? – t.h.g.]

"1952: The Economic Circle formally renounced the "free money" [Gesellian] doctrine, therewith freeing itself of unnecessary ideological ballast. Now the cooperative's capital was free to earn interest, which provided the basis for reliable financing. Sales volume surpassed ten million francs for the first time."

"1954: "Silent partner" status was introduced. At first it was intended only as a trial period for new members, but quite unintentionally it led to the long-term development of a very interesting and significant market segment."

[What was this silent partner function? – t.h.g.]

"1958: After a ten-year break from self-renewal the Economic Circle adopted a new mission statement, avowing its support for the "solidarity of the small- and medium-sized business community through pooled buying power.""

[How was this pooled buying power mobilized? – t.h.g.]

"1992/93: The Economic Circle was provided a new capital base through the creation of cooperative capital of eight million francs. The issuance of the new common shares, which in contrast to earlier practice were now traded at market value on the WIR-internal stock exchange, gained for the Circle approximately 15 million francs' worth of new own capital. This established a reliable foundation for further entrepreneurial free rein, especially for expanding business activity into cash sales."

[How was this done? What was the "earlier practice?" – t.h.g.]

"1995: The Economic Circle initiated a diversification strategy, deciding to move toward cash sales with the introduction of the "Combi-Card.""

[What are the details of the "Combi-Card;" *what type of card is it and what functionality did it add? – t.h.g.]*

"1997 … the interest-bearing cash account [Kontokorrentkonto] was introduced as the first classical bank product available through WIR, completing the organization's transition to true bank status."

"From 1934 to 1997 WIR has filled its own market niche with practically no competition, thanks to **one single mechanism: the WIR credit clearing system.** To understand how this mechanism functions we must bring to mind the problem that it was designed to solve."

The Problem
"... consumers' lack of buying power."
"How can we increase turnover in the face of scarce money, and thereby secure our survival?"

"But how does one organize a secondary cashless barter trade in an existing money economy? The problem demands a complex solution. The difficulties are not only of a technical-organizational nature, but have financial, legal, political, and social aspects as well."

"By separating the barter process into two separate transactions, practically unlimited possibilities are opened. "A" can carry out cashless purchases from "B" even if B has no need of anything A has to offer. The number of potential traders rises exponentially compared to direct two-party barter. In principle, every member of an organized barter circle becomes a potential customer (and supplier) of every other member. And they may number in the tens of thousands. Barter thus becomes no longer a onetime process as in direct two-party exchanges; rather, a lasting, multifaceted trade relationship characterized by constant trade flows can emerge."

[E.C. Riegel speaks similarly, referring to the process as "split barter." Such an arrangement enables transactions that are no longer properly called "barter," but provides, in actuality, a monetary system. The substance of the money is the credit advanced by the members that enables a time lapse between a member's purchases and his sales. The conventional monetary systems fits the same description, but with the addition of a number of debilitating political elements. – t.h.g.]

"In barter circles, however, "give" and "take" must maintain an equilibrium."

[This is the principle of reciprocity, which must be the raison d'etre of any honest exchange system. – t.h.g.]

"But the most important condition to be met … is the mutual trust and rule-based behavior of all members."

[This means there must be a clear agreement as to the rights and responsibilities of membership, and there must be agreed mechanisms for providing surety of contract. – t.h.g.]

"The Talent Experiment attempts to achieve the desired equilibrium between giving and taking first by limiting the acceptance of services through the general overdraft limit of SFr 700, and simultaneously stimulating the offering of services through the constant devaluation of positive balances. This motivates their owners to search actively and quickly for opportunities to redeem their credits, thus indirectly stimulating service offerings on the part of negative balance holders."

"In every transaction between two participants with previously zero-balanced clearing accounts, automatically a positive and an equal negative balance are created. **The positive balance may be viewed as a money-like means of payment, and that perception gives the system the ability to create money. But the central office itself creates no money. It just sets and applies the rules.** From another perspective the simultaneous emergence of a positive and a negative clearing account balance through value exchange may be interpreted as merely a variant of delayed payment schedules together with clearing functions within a closed circle of contractual partners."

[As Riegel says, the money power is in the people. The central office is merely a "third party record keeper." This is also the primary role of commercial "barter" exchanges, which is acknowledged by the Internal Revenue Service. The actual money creation occurs when one member makes a purchase and the seller accepts his credits in payment for it. – t.h.g.]

"Barter circles of the Talent Experiment genre, which have been springing up all over the world since the 1920's in this or a similar form, do have only a limited potential effect. The need to maintain positive and negative balances in equilibrium forces the setting of limits to the value of negative accounts, and thus indirectly to positive ones as well. When the latter are burdened with demurrage, the accumulation of large positive balances by individual members is further actively hindered. Thus larger transactions are de facto excluded, with the result that these organizations are characterized by limited turnover volume and only local or at best regional significance." [p.28]

*[Part of the problem may be that account balances are unduly limited. This section also highlights the need for a **finance** function that can operate alongside the **exchange** or" clearing" function. – t.h.g.]*

BCI
[Lines of credit are limited and secured] "Each member receives an individually determined overdraft limit, chargeable to the members at large. In extreme cases the limit may surpass a million DM, but in every case it must be covered either by a bank guarantee or a credit insurance policy. Neither positive nor negative clearing account balances bear interest."
…
[Members create the currency] **"The creation of money takes place not at the will of the central office, but exclusively through the members' transactions. Positive clearing balances in members' accounts are always balanced by equal negative balances in those of other members. Legally, then, positive balances are demands made on a collective of debtors, not on the central office."**

[Default risks are minimal and Losses insured] **"Losses based on default of a debtor can hardly occur, given the obligatory bank guarantee or credit insurance. The central office is a pure service provider without any banking function. Thus it is not subject to banking laws."**

[Periodic settlement] “Every participant is pledged to redeem his purchases through sales of equal value within twelve months (in Austria only nine months), or at the end of this period to settle outstanding obligations with cash.”

[The above description of BCI operations suggest that it may approach the ideal clearing system even more closely than WIR. – t.h.g.]

Unique aspects of WIR

“The creation of positive account balances in a barter circle presupposes the creation of corresponding negative balances. The basic difference vis-à-vis a conventional barter club consists in the fact that **negative balances in the WIR system do not come about by the member’s utilizing an agreed-upon overdraft privilege charged to the collective membership, but through active loans provided by the central office.** The office is authorized by the bylaws to grant loans to individual members against collateral, in accordance with standard banking practice. This implies bank status, and therewith unavoidably the applicability of banking laws. Thus the WIR account balance looks entirely different from that of a barter club, since the Central Office itself is the reciprocal party for all outstanding positive and negative account balances of WIR participants.”

[This is a curios deviation away from direct credit clearing toward centralized control. One wonders if WIR always operated in this way or if it was a later shift. In both the BCI case and the WIR case, credit is allocated to members and secured or insured. Why is it necessary for WIR to act as a principal instead of a third party record keeper? WIR, like conventional banks have nothing to loan; they can only redistribute the credit of their members. – t.h.g.]

“Only the tool of autonomous money creation through the granting of credit allows a barter circle to gain full access to the practically unlimited potential of the barter market.”

“When the central office itself plays the role of a loan bank, it bears the credit risk itself. In granting loans, though, it will serve its own interest by screening applicants carefully for creditworthiness and the quality of the proffered collateral securities.”

[So long as WIR is operated as a cooperative, the interest of the central office ***is*** *identical to the interest of the collective membership. – t.h.g.]*

Advantages of the WIR Concept

“• First, by means of the loan business the volume of the account balances that serve as means of payment for the participants can be controlled by the central office.
A simple barter club with uniform limits gives its central office practically no such influence, and one with differentiated limits only a little more. The mere setting of overdraft limits creates no means of payment per se, but only allows them to be created through transactions with third parties. In the WIR system, by contrast, every franc of WIR credit automatically and immediately becomes a franc of WIR payment medium. Conversely, every franc of repaid WIR credit results in an immediate, corresponding reduction in the amount of circulating means of payment.

[This “loan business” on the one hand, and the setting of lines of credit, on the other have the same result, to quantify the amount of credit that a member may spend. It is true that “The mere setting of

overdraft limits creates no means of payment per se," *but neither does the granting of so-called "loans." Adding numbers to a member's deposit account on the basis of* ***no transfer of real value*** *merely represents authorization to spend; it does not put money into circulation. Money goes into circulation only when the deposits (which banks call the proceeds from a loan) are spent and another producer accepts them in payment for real value, as Prof. Studer himself has previously acknowledged. As Riegel puts it,* "Money simply does not exist until it has been accepted in exchange. Hence two factors are necessary to money creation: a buyer, who issues it, and a seller, who accepts it. … That the Government [or banks] can issue money for the people, or, in other words, that there can be a vicarious money power is an utter fallacy. Money can be issued only by a buyer for himself, and he must in turn be a competitive seller to re-capture it and thus complete the cycle. He must recapture it to stay in business, since his issuing (credit) power is limited. Moreover, in a market conducted under free competition, he will be compelled to give the par value of his issue, since under free competition he must bid for money against all other sellers and thereby return as much to the market as he took out with his issue. " (Flight From Inflation, p. 16) *Banks like to foster the myth that they can create money so that they can appear to be justified in charging interest, but in actuality, all they can do is authorize account holders to create money by spending.* ***The key question here is how much credit creation power shall be allocated to each member, and on what basis?*** *– t.h.g.*

Indeed, the biggest flaw in the WIR operation is the granting of "loans" on the basis of long-term debts. When Prof. Studer talks about money creation by loans and praises this as the big advantageous difference to the normal barter clubs, he is certainly talking about <u>*long term loans*</u> *that earn interest to the bank and at the same time are the basis of issue of money. He describes all loans consist of two types: 792 million francs long term (mortgage) loans and 93 Million francs short term (current account) loans. And all this together is the 885 millions of WIR money circulating for immediate use! He says:*
"But while a conventional lending bank first must receive customer deposits before lending them out again – <u>*and thus doesn't create credit itself, but only transfers it -- , the WIR Central Office can grant loans without having received corresponding customer deposits first. Thereby it can freely create money-like clearing balances and put them into circulation.*</u> *[Emphasis added] [The first part of the underlined phrase is not accurate; see Endnote 1 for explanation.]*

Thus, WIR converts long term debt into money claims that are immediately due. This cannot work because it violates the principle that new money coming into circulation must be matched by goods and services already in the market. Violation of this principle is the main cause of inflation in the conventional money and banking system, and is surely the cause of the high discounts at which WIR credits are often sold.

The financing of long-term debts must be a separate function from the credit clearing function. Clearing matches short-term payables against short-term receivables, thus facilitating the exchange process. The financing of long-term debts should match would-be ***borrowers*** *with would-be* ***savers****. Normally, the process should be like this: WIR should first have to look for people who want to* <u>*save*</u> *WIR-money. So they first would have to introduce something like savings accounts, where people can put WIR-money that is – for savings purposes – taken away from the actually circulating money; remember that this is money created by peoples' buying and selling of real goods and services. Those people who are willing to abstain for a certain period of time from immediate spending put this money into that savings account and may earn interest for their abdication (by the way, in contrast to interest for issuing, this kind of interest is totally justified in my opinion); they would allow the bank to lend it to others who immediately spend it in lieu of the saver and thus put it back into circulation where the money can find its way back to those who were involved in its original issuing process. At the end of the savings term the money plus interest must*

be paid back to the bank which returns it plus interest to the saver. This is the natural and normal way it goes.
But WIR does not seem to do this – at least not according to Prof. Studer's description –, instead it is praised that WIR can create <u>*new*</u> *money by loans! Of course, this money, issued in such a way, cannot find the corresponding goods or services in the market; instead, there are long-term debts on the other side of the balance sheet! This is the same deficient issuing method that the conventional banks use today, which debases the currency and inflates prices. It appears that the WIR bankers have succumbed to the same fallacies that have marred conventional banking practice. – t.h.g. & t.m.] [See Endnote 2 for elaboration upon this point.]*

"• Second, this control mechanism allows for the creation of an economically significant volume of means of payment, and thus of the needed liquidity for an intense level of barter business, one that can make a significant difference in the economic activity of the individual participant. Thus it comes as no surprise that both in terms of turnover/sales and above all in relation to the size of the national economy, the WIR system with its credit-granting central office is the largest barter system in the world."

[There is no reason why an "economically significant" volume of credit cannot be created without the pretense of a central body making "loans". What is needed is a clear policy and formula for setting credit line limits based upon the sales volume passing through each account. All resulting balances can be adequately secured, bonded, or insured. Further, because, as described above, the so-called loans are made on the basis of long-term debt, this "control mechanism" does the opposite of what is intended; it enables over issuance which is evidenced by WIR credits being sold at a discount. – t.h.g. & t.m.]

"• Third, the loan business generates welcome interest earnings that reduce costs for the other participants. In 1997 these earnings totaled 18 million francs, from which the non-borrowing customers of the WIR Bank also profited, thanks to the cross-subsidization of the account balance activity through the loan business."

[This justification for the imposition of interest charges is suspect. The practice is questionable in that it violates the principle of matching revenues to cost of service. Each service should pay for itself unless there is good reason to subsidize some services at the expense of others, but those decisions need to be made on a case-by-case basis. – t.h.g.]

"• The most important advantage, however, is the fourth: the fact that the loan business is ultimately the most powerful driving force behind the barter business. Experience has shown again and again that in simple barter clubs, the members' activity after a period of initial enthusiasm with time falls off or even ceases entirely. With the WIR account balance trade this is technically impossible, since the WIR credit customers at expiration of the loan term pay back their loans in WIR, and up to that point must be building up their WIR accounts through regular deposits. This means that they must be selling their goods/services for WIR accordingly. Even if the non-credit traders' activities were to go completely dormant, still every franc of WIR credit would automatically lead to at least two francs' worth of WIR turnover, i.e. to the spending of one franc following the granting of the loan and to the spending of a second franc to create the basis for the loan repayment. Thus for the non-credit customers of the WIR Bank the loans granted amount to a guarantee of both sales for WIR and purchases with WIR in like quantity, without their having to take any particular conscious measures to promote this commerce."

[This raises a serious point. As I put it, in any currency or clearing system it is necessary to **pull** *credits through the system rather than* **push** *them through. Those who place credits or currency into circulation*

must have sufficient incentive to earn them back by selling real goods and services. Prof. Studer is quite correct in his observation of the typical barter club life cycle, which points up their shortcomings. In contrast, he points out that WIR credits, by virtue of the loan repayment obligation, have a greater impetus to circulate, i.e., members who have taken loans are eager to earn back WIR credits(by making sales) in order to fulfill their obligations. But the use of a line of credit also creates a similar obligation. Is it necessary for debit balances to be time limited? Perhaps, but a clear understanding of a member's obligation, and a reasonable amount of account activity may be sufficient. That needs to be worked out in practice. Whether it is considered to be a line of credit or a loan, the main concern is that the obligation be short-term and based on currently available goods and services. – t.h.g. & t.m.]

Maintenance of Equilibrium under the WIR Concept

"• Purchases are kept in check on the one hand by the absence of interest-free overdraft limits, and on the other by the interest requirement for WIR loans. This makes it impossible to build up the high volume of free short-term debt characteristic of conventional barter clubs."

[Prof. Studer repeatedly compares WIR to "conventional barter clubs," as if that latter term were adequate to describe the wide variety of arrangements that prevail in LETSystems and other such clearing systems, which, of course, it is not. The main question here is, whether there is any effective difference between a "WIR loan," on the one hand, and use of an overdraft privilege, on the other. The second question relates to the necessity of charging interest.

With regard to the first question, the only effective difference between the two is that, by calling it a loan, banks get to collect interest on the entire line of credit, rather than on the amount that is actually used. As pointed out earlier, it is not the bank that creates money; it is the member that creates money by spending it into circulation. By crediting a member's account by the amount of the "loan" principal, the bank merely authorizes that amount to be spent/created. Having a predetermined line of credit accomplishes the same thing, but without the same interest burden. Interest might still be applied, but in the line of credit case, it would be applied only to the amount of credit actually drawn.

Prof. Studer's statements indicate that he views the matter in conventional banking terms, seeing the bank as a principal in a financial transaction rather than as a "third-party record keeper." To clarify the matter, we need to recognize the distinct functions that are necessary in mediating the exchange process.

*At the most fundamental level, the level of principle, the requirement that is first and foremost in any exchange community is that the **members must reciprocate**, i.e., each member must give as much value as s/he gets from the community. At the operational level, there are various practices and procedures that can be used to assure that each member will fulfill that obligation. The most obvious necessity is to limit the extent to which an account may be overdrawn, or in banking terms, to limit the amount of any "loan." The next requirement is to assure that the account remain active. In the case of a loan, that means the loan must be "performing," i.e., that it is being paid off on a regular schedule. In the case of an overdraft, that means that the credit line is never exceeded, and the account shows a regular flow of credits into it,(typically, as the result of sales of goods and services). It is not necessary that debit balances be completely eliminated, only that "old debits" be replaced with "new debits."*

So, in sum, Prof. Studer's concern about keeping "purchases in check" can be adequately addressed by placing appropriate limits of overdrafts. This is, in fact, common practice in many community exchange systems and most commercial trade exchanges.

Now, as to the question of interest on account balances, Prof. Studer's statement does not make clear what beneficial effect that has on system operations. Presumably, the interest cost provides an incentive for a "borrower" to liquidate his "loan" as quickly as possible, which means making a sufficient volume of sales that credit his account. But is an interest penalty really necessary to achieve that. This is an open question that needs further study, but in the absence of more convincing evidence, I am inclined to believe that most accounts would remain active even without the imposition of interest. I think that the huge advantage of being able to purchase goods and services without using scarce official cash is sufficient for most account holders to continue to be eager to earn enough credits to remain within their allowed limit. Furthermore, loans and/or overdrafts constitute the money supply. The desideratum is to "keep it fresh" not to liquidate it.

Further, as pointed out above, one must distinguish between short-term credit lines that enable the turnover of goods already in the market and long-term loans for consumption or capital formation. The charging of interest may be justified on the latter, but to charge interest on the former has the effect of impeding exchange rather than facilitating it. – t.h.g. & t.m.]

"• The offering of goods and services for WIR is promoted by the fact that every official participant is obligated to accept payment in WIR for at least 30% of the first 2000 francs of the selling price, and every loan holder must amortize his/her debt by selling goods/services for WIR."

[This 30% limit, in my opinion, is inadequate to assure the lively flow of credits that Prof. Studer is so eager to achieve. As a result it tends to have a devaluing effect on the WIR currency. ***Ideally, any member who has a negative (debit) balance should be required to accept WIR credits for 100% of the purchase price, and on a par with the corresponding national currency up to some maximum amount.*** *This is common practice among many commercial trade exchanges. A per-transaction limit could probably be retained without negative consequences as a way of preventing sudden liquidation of one's credit line, which could conceivably cause financial embarrassment.*

In practice, it will very likely be more advantageous and less confusing to extend the 100% requirement to all members. If some members find that they are accumulating more credits than the can easily spend, that means that others are earning less than they need to keep their balances within limits. Their respective limits should then be adjusted to correspond more closely to each member's earning capacity. Remember, credit clearing is a dynamic system, like riding a bicycle. In static terms, balance seems impossible, but given a proper start, it takes only small adjustments to keep it operating smoothly. – t.h.g.]

"The autonomous money creation of the WIR Bank through the granting of credit secures for it a unique competitive advantage vis-à-vis both standard credit banks and conventional barter clubs without bank status. Through this mechanism it can access potential otherwise only available to national banks."

[This gets to the heart of the matter, which is the mobilization of the members' credit for use as a medium of exchange without the participation or imprimatur of conventional banks. *Whether or not it is advantageous for a credit clearing association to have bank status depends upon the particular legal environment in which it must operate. – t.h.g.]*

"• **WIR is primarily an instrument for generating increased turnover, both by creating additional economic activity and by shifting market share to the benefit of the WIR membership with the goal of realizing increased profits."**

"WIR is thus primarily a marketing tool rather than a financial management tool."

[These statements seem to be at odds with one another. The question boils down to this: What does participation in a credit clearing circle achieve? Is it merely the competitive (marketing) advantage provided by having preferential access to a group of potential customers? That means shifting market share from non-members to members. Or does it enable the realization of additional economic activity that could not occur under the conventional system of money and banking? Prof. Studer acknowledges that it is both, and I agree. Why, then, does he emphasize the former and downplay the latter? In my view, the financial advantage far exceeds the marketing advantage, and it is an advantage that benefits not only the membership, but the entire economy by enabling a greater proportion of all desirable trades to take place. This is the most significant result of autonomous credit creation and the direct clearing of obligations among traders. ***There is no escaping the fact that conventional, centralized (and political) money and banking is sub-optimal and that autonomous credit creation and the direct clearing have an ameliorating effect.*** *– t.h.g.]*

"**A barter circle only begins to create practical advantages after reaching a critical mass of participants.** The threshold size of that critical mass is estimated variously by different commentators, ranging from several hundred to a few thousand. The innumerable failures of barter ring experiments over the last 60 years result to a large extent from not having reached this critical mass. The WIR system reached and surpassed it decades ago. **Judged by the criterion of the most intensive exchange flow possible, the attractiveness of a barter ring grows in direct proportion to its size."**

[These points are unarguable but there is more to the story. It is not merely a matter of the size of the circle, but also the diversity of goods and services being offered and the inclusion of all levels of the supply chain among the membership. Each member will wish to have his suppliers in the circle. Retailers need to pay wholesalers, wholesalers need to pay manufacturers, manufacturers need to pay basic commodity producers, and all need to pay employees. ***The more inclusive the circle is, the more useful it will be.*** *– t.h.g.]*

"If all market participants in a given national economy were simultaneously members of one and the same barter circle, then in theory turnover could grow as a result of the diversification of trade mechanisms, but it could not grow as a function of shifts in market share, since a market share of 100% cannot be increased. Thus a functional barter circle must remain small enough to realize increased turnover through gains of market share, i.e. through directing sales away from non-members. From this perspective a barter ring's attractiveness grows in direct inverse proportion to its size."

[Again, Prof. Studer places too much emphasis on the competitive advantages of membership and downplays the financial advantages. In so doing, he argues that members should not welcome all into the circle and that they should be satisfied with crumbs rather than the entire banquet. – t.h.g.]

WIR money not a fiscally disruptive factor

"… the WIR system serves not only its own membership, but the entire economy as well, since **like every other barter-trade organization it supplements conventional economic trade and thus facilitates jobs-creating transactions that otherwise would not transpire.**"

[Discussion of the final chapter, Chapter 14. Evolution of the "WIR Bank," *will be left for a later time as it deals with the recent radical departure of the WIR Bank from its traditional service concept and hence raises many questions about not only the prospects for WIR but for credit clearing associations in general. – t.h.g.]*

Endnote 1
*Prof. Studer's argument that a conventional bank "*does not create its own credits but merely mediates credits," *is not accurate. Conventional banks DO create money, not just CENTRAL banks. Central banks regulate, by various means, the amount of credit-money expansion in the conventional banking system, but commercial banks, under the fractional reserve system, create money by making loans or buying securities. WIR is not subject to those limitations, as it acts as its own central bank under its own authority to extend WIR-credit. – t.h.g.*

Endnote 2
According to the published WIR balance sheet in Prof. Studer's book, almost 90 percent of WIR's liabilities are long term; thus, WIR must be ranked among Prof. Heinrich Rittershausen's issuing bank type II, an institution that has "bad reflux" and "inevitable discount" of its issued money (Heinrich Rittershausen's "Internationale Handels- und Devisenpolitik" [International Trade and Foreign Exchange Policy] first edition).

> *"… if such a note issuing bank, in exchange for the issue of its notes, accepted bills of exchange due only in 20 years, then the note holders would have a document in their hand, which pays them no interest and which will be paid with 100 % only after 20 years. (The type of the "Ausgleichskasse" ["Clearing office"] in Rendsburg, 1932, which had constructed roads with the notes issued.) This type of note issuing bank could also be called: "investment bank" and its notes "investment-notes". However, the present time value of an interest-free claim of 100 DM, which is due in 20 years, according to financial mathematics is 41,46 DM (given a country's interest rate of 4,5%). And this rate really showed up in Rendsburg. So trying to artificially increase the rate of such paper money up above 42 percent will be a fruitless effort in the long run. …" . (Heinrich Rittershausen, Internationale Handels- und Devisenpolitik, second edition, page 220 et seqq)*

In the case of WIR, most long term liabilities seem to be mortgages, which, however, usually do have a very small reflux, since they have a regular amortization schedule. But these amortization schemes simply cannot produce a demand for this kind of "mortgage-money" big enough to hold it on par value.

Seen from a sober economical or monetary viewpoint, participants with positive WIR accounts have exchanged their products and services for parts of the total mortgage in the WIR balance sheet, thus they are essentially <u>mortgage holders</u>. As pre-central banking history shows and is described by Rittershausen and others, – in contrast to prevailing banking doctrines – long term debts do not qualify as a good basis of issue for any money whatsoever. They cannot produce a reflux of about 1/100 daily which by experience is a prerequisite for sound money issue. Instead, they are responsible for that money being discounted in a free economy, or for inflation, if that money is equipped with legal tender power.

Thus, it must be concluded, that the high discounts (there are reports of up to 30%) from which WIR money has to suffer in the free market are a natural consequence of the WIR issuing policy; this policy would urgently need to be improved. – t.m.

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