Comment on the Wörgl Experiment with Community Currency and Demurrage

by Thomas H. Greco, Jr.   May 9, 2002

It is not hard to demonstrate that, because of the intentional scarcity and mismanagement of official currencies, which has been generally prevalent in recent times, and which was particularly severe during the Depression years of the 1930's, a supplemental local currency can and does improve the general economic health of the community, and helps enable its most marginal members to acquire the necessities of living. Thus, I have argued, in all of my writings on the subject, for the freedom to issue such currencies. On the other hand, I have cautioned against the common errors and pitfalls associated with such initiatives, which have too often been repeated. If the cause of monetary freedom (or, more accurately, *free exchange*) is to be advanced, and not unduly hindered by government and the established monetary and financial authorities, it is imperative that private exchange initiatives be properly designed and carried out. It is necessary to distinguish the features which are essential from those which are either superfluous or downright harmful, and for the management of private exchange media to be beyond reproach.

The design feature, which is the object of inquiry here is that known as *demurrage*, which is the intentional depreciation of a currency over time, the main object being to prevent its being hoarded and to speed its circulation from hand to hand. Many of the *stamp scrip* issues of the Great Depression were based on this idea, which is generally credited to Silvio Gesell. Of all his great insights into money and economics, this idea of “depreciating money” is the one item that his followers have seized upon with great passion. The most celebrated case in which a demurrage currency was issued was that of the Austrian town of Wörgl. The Wörgl experience has often been heralded by modern day Gesellians as proof of the effectiveness of demurrage in stimulating the circulation of currency, and thus, as the main feature that is necessary for the economic advantages of a community currency to be realized. But does the evidence support such a conclusion? **The fundamental question, in the Wörgl case is this: *Would the Wörgl currency have been just as effective without the demurrage feature, as with it?***

While contemporary writers frequently refer to this case, few, if any, seem to know any of the details about it, and definitive accounts of the Wörgl experience are not easy to find. However, through T. Megalli, a good friend and colleague in Germany, I have acquired some useful commentaries, which were written at the time. These accompanying articles all appeared in one issue of the *Annals of Collective Economy* from the year 1934. They are:

1. *The Wörgl Experiment With Depreciating Money*. By Alex. Von Muralt
2. *A French View of The Wörgl Experiment: A New Economic Mecca*. By M. Claude Bourdet
3. *The End Results of the Wörgl Experiment.* By Michael Unterguggenberger, Burgomaster of Wörgl (Austria)

These articles all support the conclusion that the local currency did, indeed, improve the financial condition of the local (parish) government that issued it, and the general health of the local economy during the time it was allowed to circulate. As to whether the demurrage feature was an effective element in causing this result, the evidence is far less compelling.

The first of these articles, is perhaps the most informative. Von Muralt appears to have been quite diligent in his investigation and gathered as much factual evidence as was likely available at the time. His account is certainly more detailed than any other I have seen. I will summarize a few of the more salient points and provide my interpretation of their meaning. But, of course, the reader can examine the original article and draw his/her own conclusions.

The town of Wörgl began to issue its currency, called "labor certificates," in July of 1932. Von Muralt's study, which included a visit to Wörgl, was apparently conducted in April of the following year. Let us begin by summarizing the features of the Wörgl notes, as he described them.

32,000 schillings were printed (in denominations of 5 and 10 sch.), but only 12,000 schillings were issued by the parish by paying its workers.
The local currency was redeemable, on demand, for official currency, but there was a 2% fee on such redemptions.
For each schilling of local currency issued, one schilling of official currency was deposited (at interest) in a bank account to cover demands for redemption.
The depreciation (demurrage) rate was 1% per month. This was called the "Relief tax."
In order for a note to maintain its full face value, it was necessary to affix a stamp at the end of each month. these stamps could be purchased at the parish office.
The notes expired at the end of the year, but could be exchange, free of charge, for new ones, so long as all the necessary stamps had been affixed.

The author concludes that the parish (local government) was the "principal beneficiary of the experiment" and describes both the *direct gain* and the *indirect gain* which it realized.

Among the direct gains, he catalogs the following:
1. "..the 12 % relief taxation derived from the circulating certificates," which presumably derived from sale of the stamps which were supposed to be affixed to each note in order for it to not depreciate. He points out that this would not be collected on the entire note issue, since those notes in possession of the parish would need to be stamped by the parish without charge to anyone before being recirculated.
2. Revenue from the 2% redemption fee on notes turned in in exchange for official currency.
3. Interest income earned on the official currency redemption fund (at the rate of 6%).

Income from the first of these re reckons at 50 schillings per month, or 600 per year; from the second, at 690 schillings over a nine month period (during which 34,500 schillings were redeemed), or 920 per year, from the third, 720 schillings per year (6% interest on the fund of 12,000 schillings). Failing to annualize the second figure, he computes a total of "over 2,000 schillings," which more precisely should be given as 2,240 schillings per year. In order to gain a sense of whether this is a large or small amount, he compares it to the burgomasters annual salary of 1,800 schillings.

Another major "gain," which von Muralt mentions in passing, is the windfall profit associated with the substantial amount of local currency which was never presented for redemption. He says, "However,of the 12,000 schillings worth of relief money issued, only about two-thirds is in circulation. The remainder has disappeared, having been annexed by souvenir hunters and collectors. That such substantial amounts of depreciating money should vanish in this way, contradicts the theoretical intention which aims at accelerating the circulation and not at hoarding. For the parish, however, the disappearance of notes is not unwelcome, since this represents for it a net gain." If the stated estimate is correct, this gain would amount to about 4,000 schillings.

This souvenir collecting (hoarding) is a phenomenon which Gesell seems to have overlooked, but it is one which can provide significant profits to a currency issuer, especially in the early stages while the currency remains a novelty. Still, so long as there are people who are disposed to "collect" things, some profit from this source can be expected (just as stamp collectors provide a profit to the post office by buying stamps but never using them to claim the services due). Frequent changes in the design of the notes (as with postage stamps) should make collectors a continual source of profits for the issuer. A similar experience has been reported by the issuers of Ithaca HOURS, with the amount of currency "lost" in this way being estimated at up to fifty percent.

Von Muralt also describes "important indirect gain of the system" stating that "during the first six months heavy tax arrears, 90 % of these in relief money, reached the parish treasury." Such arrears were said to have risen from "26,000 schillings to 118,000 schillings between 1926 and the close of 1931," and that 79,000 schillings of that had henceforth been paid, however von Muralt says that "I was unable to obtain full confirmation at the offices of the Tyrolese Government."

He further provides figures that show substantial increases in revenues from local taxes (From the numbers he cites, one can compute a combined increase in such local tax revenues of more than 61%), arguing that, "These are increases which can only be accounted for by the payment of arrears; but they are not as substantial as those cited by the burgomaster." He reports the burgomaster's observation that "taxes were eagerly paid" and sometimes paid in advance. He concludes that, "This eagerness to pay taxes may be, in my opinion, simply owing to the fact that the business man who finds at the close of the month that he holds a considerable amount in relief money, can dispose of it with the greatest ease and without loss by meeting his parish obligations. A change of attitude has manifestly taken place. If formerly the paying of taxes was deferred to the last, now it occupies first place. It would be therefore highly desirable to inquire whether, parallel to the increased tax payments there is not an increased indebtedness towards other creditors, *e.g.*, towards the suppliers in Innsbruck and Vienna. I have no data bearing on this problem." That last point is certainly an important one.

To round out the financial picture, von Muralt points out that, with regard to a preexisting debt of 1,290,000 schillings, owed to the Innsbruck Savings Bank, the parish was still unable to "to *meet* its obligations in cash." In addition, he points out that much of the improvement to the local economy may have resulted from the injection of funds from outside. He says that, "Thanks to the various sources of revenue above indicated, and thanks also to subsidies from the Productive Unemployment Fund and a relief credit of 12,000 schillings from the Tyrol Government, the parish was enabled to carry out a far-reaching employment scheme."

So, the situation was a bit more complicated than we, today, might have thought. In light of all this, how much of the "miracle of Wörgl" can be said to derive from the issuance and circulation of the local currency, and how much was contributed to that effect by the demurrage feature? I think the case is very strong for arguing that this supplemental medium of exchange had a very significant impact in improving, not only the financial condition of the local government (parish), but also the local business climate and general prosperity, although von Muralt gives us little information about the latter. Still, there can be no doubt that, being a local currency accepted only within the local economy, the Wörgl notes must have benefitted the local economy, because, unlike official currency, they could not be used to pay outsiders.

The fact that the local populace were, as a whole, substantially in arrears on their tax dues to the parish would certainly assure a high level of acceptance (locally) and a continuing demand for the local currency, at least until such time as those tax arrears had been paid. This "tax foundation" is, after all, the primary reason for public acceptance of any government-issued currency. In light of this, I maintain that the demurrage feature had little to do with the success of the Wörgl experiment, and that the results would have been largely the same without it. The demurrage feature may have, however, as von Muralt, intimates, given the payment of local taxes priority over the payment of private bills by the populace, but the small savings derived from following that course make it doubtful. I would think that the threat of property seizure would provide a far stronger incentive for the payment of tax arrears than would the avoidance of a small percentage loss on the currency.

In my opinion, given the prevailing circumstances in Wörgl at the time and the particular design features of the Wörgl currency, its beneficial impact derived primarily from three fundamental effects:

1. the “substitution effect,”
2. the “supplementation effect,” and
3. the “backlog effect.”

The substitution effect derives from this: A sum of official currency, which once spent into the local economy, can quickly flow out again, instead, was deposited at interest and used as the basis for issuing (spending) a local currency that would have a circulation limited to the local community economy. This assured recirculation within the community enabled the rapid clearing of local debts and gave local merchants preferred status over outsiders as sources of supply.

The supplementation effect is this: The official money deposited did not remain idle in a the bank's vault, but as is the practice of banks, was used as the basis for making additional loans to its customers, so that money remained in circulation, while the new local money was also put into circulation.

The backlog effect is this: The general monetary stringency which existed throughout Austria at the time had caused debts to accumulate far beyond their normal levels and for peoples' material needs to go unmet. The infusion of new supplemental exchange media would likely be met by people eager to spend it.

We see in the Wörgl currency notes, many features which are also inherent in the Toronto Dollar model, which notably does not include demurrage. Such similarities invite performance comparisons, which I leave to others or for another time. One should be cautioned, however, to also take careful note of their differences, particularly the fact that Toronto Dollars are not issued by the municipal government and are not accepted in payment of taxes, so Toronto Dollars lack the impetus to circulate which derives from a tax obligation. Further, while both currencies provide for redemption in official currency, the Wörgl notes were issued as wage payments to municipal workers, so the amount issued was determined by local government action, not by volunteer purchasers. Lastly, the economic circumstances are different. The backlog effect in present-day Toronto is generally missing.

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