

# the Power of Demurrage: the Wörgl Phenomenon

by [Anthony Migchels](#) on July 2, 2012



(left: Michael Unterguggenberger, the man who ended the Great Depression in Wörgl)

**The velocity of money is a badly neglected aspect of monetary theory. It is far more important than people realize and both in past and in the present depression, sluggish circulation played a major and negative role. The most obvious way of increasing the velocity of money is Silvio Gesell's demurrage, a negative interest rate, in effect a tax on holding money. This is not just theory. There is a famous case in which it was implemented. The Wörgl experiment showed truly extraordinary results and is legendary in Interest-Free Economics.**

**It's relevant today too, with the Danish Central Bank this week setting a negative interest rate for the first time in history.**

Wörgl is a small town in the Austrian Tyrol that would be completely inconspicuous, were it not for an amazing event that transpired almost 80 years ago.

At the height of the Great Depression some 4500 people lived in the village. It was suffering badly from the catastrophic policies of the Austrian Central Bank, which had brought down the money supply from 1067 million Schillings in 1928, to 997 million in 1932 and 872 million Schillings in 1933. Unemployment stood at 1500 and 200 families were completely destitute.

The town owed 1,3 million Schillings to the Innsbruck Savings Trust and had to pay 50,000 per year in interest over that debt. The council was owed 118,000 in

taxes, but it was all but impossible to get at it, with the result that the town was lagging on its own obligations to the regional government.

Meanwhile, there were plenty of public works that needed to be done. Roads had to be repaved, Street lights were necessary, water distribution needed to be extended and trees had to be planted along the streets.

Enter Michael Unterguggenburger, the burgomaster (mayor) of Wörgl. He had been studying economics for the better part of his life and lived through the difficult times of the 1907 depression, the Great War, the associated inflation and now this massive deflation. He believed in Socialism's big idea of 'ending exploitation of men by men', but not in their methods, most certainly not their nationalization of the means of production.

He did however read Silvio Gesell's book '[the Natural Economic Order](#)'.

In this work Gesell introduces his ideas about the circulation of money and how to improve it: through demurrage. A tax on holding money, a negative interest rate.

And Unterguggenberger, desperate at the situation in his town, decided to give Gesell's ideas a shot. He created 'Certified Compensation Bills', in denominations of 1, 5 and 10 Schillings. These would devalue at a rate of 1% per month at the end of the month, and those holding the bill at the time devaluation needed to buy a stamp of 1% of nominal value to extend it.



*(One of Unterguggenberger's certificates. On the right the stamps representing the hoarding fee)*

Quoting from Fritz Schwarz, who originally documented the Wörgl case:

**“On the 31st of July 1932 the town administration purchased the first lot of Bills from the Welfare Subcommittee for a total face value of 1000 Schillings and used them to pay**

**wages. The 1000 Schilling official money paid to the Welfare for the Bills were deposited at the local “Reiffeisenkasse”** (*where they were held until someone offered the bills to convert them back to Schilling, which could be done at any time at a cost of 2% of the nominal value of the bills, AM*).

The first wages paid out, to the amount of 1000 Schillings, returned to the coffers of the community almost on the same day. Taxes were being paid! On the third day somebody came running and shouting, “Mr. Mayor! Our Bills are being counterfeited. We have only issued 1000 Schilling so far, but the amount of overdue taxes paid with them has already reached 5,100 Schillings! Somebody must have counterfeited the Bills!”

The Mayor smiled forgivingly. He knew that bigger men would make the same mistake. Even Professor Dr. Bundsmann, lecturer of macro-economics at the University of Innsbruck and honored with the Austrian title of “Honorary Civil Servant” would call the success of Wörgl with its fast circulating money a hoax, because he could not understand how 5100 Schilling in taxes could be paid from an issue of only 1000 Schillings. That was beyond the expectancy of the Mayor himself. But every Schilling coming as Bill was re-circulated right away to pay an invoice, and was back and out again in short order, because this money attracted a penalty when idle. At that time the National Bank of Austria kept in circulation a constant amount of about 914 million Schillings for a population of some 6 million, or 153 Schillings per person. At the issuing peak, the value of Wörgl Bills was 7443, less than 2 Schillings per person. But these 2 Schillings gave more income and profit to each person than the 153 Schillings of the National Bank. Why? Because they were designed to entice people into using them, which is what money is for: to pay, to do business, to exchange. A. Hornung, who was against this “free money” and the whole experiment, reported grudgingly: “The issue of relief money was back in the coffers of the municipality within days. From there it could be re-used for payments. The total average in circulation was: August 1932 3675 September 3375 October 3525 November 6350 December 5725 January 1933 5450 February 5650 March 5625 April 5750 May 5675 June 5875 July 5800 August 5825 September 5825 Average: 5,294

How ludicrous is the thought of people with no inkling of the importance of money’s velocity of circulation for the economy.

**AM: the total amount of trade financed by the certificates amounted to the equivalent of 2,5 million Schillings. While only about 5,500 worth of certificates were circulating on average. Meaning that the small demurrage of 12% made the certificates circulate at least a hundred times faster than the Schilling.**

An eye witness report by Claude Bourdet, master engineer from the Zürich Polytechnic. “I visited Wörgl in August 1933, exactly one year after the launch of the experiment. One has to acknowledge that the result borders on the miraculous. The roads, notorious for their dreadful state, match now the Italian Autostrade. The Mayor’s office complex has been beautifully restored as a charming chalet with blossoming gladioli. A new concrete bridge carries the proud plaque: “Built with Free Money in the year 1933.” Everywhere one sees new streetlights, as well as one street named after Silvio Gesell. The workers at the many building sites are all zealous supporters of the Free Money system. I was in the stores: the Bills are being accepted everywhere alongside with the official money. Prices have not gone up. .... One cannot but agree with the Mayor that the new money performs its function far better than the old one. I leave it to the experts to establish if there is inflation despite the 100% cover. Incidentally price increases, the first sign of inflation, do not occur.”

## Aftermath

As a result of the incredible success of Unterguggenberger's experiment, hundreds of Austrian towns planned on implementing the scheme. As a result the Austrian National Bank panicked and forbade the experiment. Vienna crushed the resentment with the threat of military intervention. Within a short while Wörgl was suffering again.

Famous men noticed the experiment. John Maynard Keynes and Irving Fischer payed homage to Gesell. French Prime Minister Edouard Daladier visited the place to check the experiment for himself. And Ezra Pound [visited Unterguggenberger twice](#), the last time just before the good Burgomaster died in 1936.

## Conclusion

To this day the Wörgl case stands out as the classic example of the need for monetary reform. It vindicates Silvio Gesell's powerful analysis of the monetary and his demurrage.

A notable aspect of demurrage is that it offers a clear incentive for interest free loans. Sitting on it would lose value, value maintained by lending it out.

The simple fact is that even today a demurrage instead of interest on the money supply would radically transform our economies overnight.

Related:

[Don't hoard the Means of Exchange! \(Part 1\)](#)

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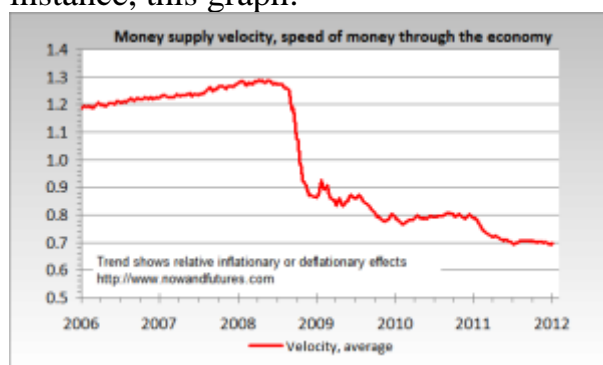
[Regional Currencies in Germany: the Chiemgauer](#)

Here is in interesting interview with FOFOA on the differences between the store of value and means of exchange functions of money. He offers a number of interesting insights (Thanks Transparent Unicorn):

[Interview with FOFOA](#)

## Afterthought on Sluggish circulation

It seems that deflation is closely linked to sluggish circulation. Consider, for instance, this graph:



Quite a catastrophic decline in circulation and good proof that hoarding cash is detrimental. And also that a deflationary crash is closely related to hoarding. This is

not an attack on those who save money. In the way the system works, it's rational behavior. It just shows that the system is not working properly.

Although I don't have figures about the velocity of money in the thirties, Michael Unterguggenburger most definitely assumed that hoarding was the problem, because he had this printed on his certificates:

*“To all whom it may concern! Sluggishly circulating money has provoked an unprecedented trade depression and plunged millions into utter misery. Economically considered, the destruction of the world has started. – It is time, through determined and intelligent action, to endeavour to arrest the downward plunge of the trade machine and thereby to save mankind from fratricidal wars, chaos, and dissolution. Human beings live by exchanging their services. Sluggish circulation has largely stopped this exchange and thrown millions of willing workers out of employment. – We must therefore revive this exchange of services and by its means bring the unemployed back to the ranks of the producers. Such is the object of the labour certificate issued by the market town of Wörgl : it softens sufferings dread; it offers work and bread.”*