Swedenborg's Modest Thoughts on the Deflation and Inflation of Swedish Coinage (1722)

Translated by George F. Dole

Since a country's coinage is established for its economic wellbeing, the stability of that coinage is a matter of primary importance. When it is soundly based, it should not be altered or disturbed, since altering or disturbing the coinage is to alter all the buying and selling in the realm. It affects the principal employment of every citizen, and brings disruption in the very highest matters with which we are entrusted. We are therefore accountable for the ill effects of our actions on everyone, either now or in the more distant future.

More prudence and careful thought on coinage and its value is needed in Sweden than in any other European country. This is clear from one fact only (though there are others), a fact which undermines caution: Sweden has two kinds of coinage, which obey different rules. There is the silver coinage, which should be the fixed standard of all else, since silver is accepted in all countries, with a stahle value. It therefore provides the means by which different monetary systems are reconciled.

There is also our copper coinage. This consists of plates and large pieces[1] which are both coins and commodities. Since the prices of commodities fluctuate according to supply and demand, the value of this coinage fluctuates. It rests on an unstable base. Given these two kinds of coinage, then, careful thought is required to keep them in agreement, so that they can coexist in the same country without having either drive the other out.

It is well known that when a coinage has a stable value over an extended period of time, the prices of goods bought and sold adjust themselves to that value. If the valuation is deflated, then eventually prices adjust; if the value is inflated, then again there is a gradual adjustment, though the situation may be unbalanced at first. If the currency is later deflated, it takes time for everything else to adapt, just as it did when the currency was inflated.

Inflating the currency therefore demands careful thought. The same applies to efforts to adjust it after it has been inflated, since other elements will have begun to accommodate themselves to the new value. We change not only the currency, but also everything that must adjust to it.

We are all well aware how often Swedish currency has been inflated, and how much it has been inflated. We have observed how, time after time, everything else has adjusted to the new value. I intend to show clearly in what follows that it will adjust even better.

It may be surprising that this adjustment happens in so few years, since it has happened that our honest coinage has fallen into disrepute or has been exchanged for paper money or tokens, which negotiate at half or a third of their face value. This means that all the price tags have more than doubled. There is every reason, then, to fear what will happen if the coinage is deflated.

The harm to the coinage might actually be less than its effects on everything that depends on it. Further, a later inflation of the currency some time after it has been deflated might be just as harmful.

To show more clearly that the currency has inflated the price of everything in Swedish business and has set Swedish trade back fifty, a hundred, and even a hundred and fifty percent, we may turn to Swedish iron. This is the principal business of the kingdom, and together with copper, is virtually the only foundation of our national welfare and source of annual income.

It may not seem so, but the iron industry has actually declined from its former peak because of the inflation of the coinage and the virtual worthlessness of the tokens. At this point it is at risk. highly vulnerable to any change in the currency. Everything needed for the manufacture of iron used to cost half to a third what it costs now. We know that the price of pig iron has tripled, as has the cost of the ore, charcoal, transportation, and freight. This means that someone who formerly made a good profit selling iron for 28 or 30 Dalers now has difficulty making a living with the price at 36, 40, 45, or even 48 Dalers.

This, however, applies only to the works that have to buy all their pig iron and charcoal or at least some of it for their forging, and hire others for loading. But for the works that still own their forests, blast furnaces, and horses, the change in currency seems to have done less damage. Still, the minimum cost of manufacture has increased by twenty-five or fifty percent even for them.

As to the present danger to Swedish iron though it may seem healthier than ever if we look closely we can see that if the currency value on which the industry is founded should change, the very basis of the industry will change. Think for example of a plant which cannot produce iron for less than 35, 40, or 45 Dalers. With currency deflation, the price would fall to 30 or 35 Dalers.

Would not the [dependent] works face ruin, and the others be forced to struggle without profit until they failed? I wonder how much care for the kingdom's welfare people have who insist on deflating the currency "for the good of the country" in spite of the fact that the country's main source of wealth is put at risk. It is clear how much domestic trade depends on the value of currency: it is founded on it, and a devaluation would affect not only the currency but also far more important matters.

When a harmful custom becomes habitual in a country, does not that custom acquire power and authority? Whatever the reason, it may become more and more firmly entrenched, and ultimately invincible. I would here argue that it is not easy to change something that has gained strength over so many years and in so many instances.

Bringing all the factors mentioned above back to their former health is easier said than done, and altering the currency is more likely to exacerbate matters than to allay them. The [govermental] supervisors m who are less harmed when work is not done or materials are not sold can adjust more readily than the owner, who may have to let the whole work stop.

Another situation demonstrates more clearly the hardship which a change in coinage would cause manufacturers, threatening their estates and leaving them disillusioned about their profession. I refer to those who have contracts in force at prices determined by the present state of the industry, in the range of 30, 35, or 40 Dalers, disregarding inventory and the unpredictable annual loss from uncollected accounts receivable.

If the coinage is deflated and the contract is held to, with iron dropping to its former value, one party to such a contract would absorb a considerable loss and others make a three to six percent profit. This would be the ruin of the industry, cutting off the primary source of our kingdom's prosperity.

The same would apply to subcontracts for manufacturing, haulage, coal, ore, pig iron, and the like. People who once paid seven Dalers for pig iron for their works because ore, coal, freight, and the like were considerably cheaper then, now have to advance risk capital and pay 10. 12, 15, or even 18 Dalers for the iron, depending on the kind of work they are doing.

We can therefore see what has happened to domestic trade because of the change in currency valuation, and can project what would happen if the coinage were deflated back to its former domestic level.

If the coinage is deflated, there is risk of another injury to the iron industry, with the possibility of permanently reducing the kingdom's income. We may assume that Swedish iron will have to lose value in proportion to the coinage from 45 to 50 Dalers to 30 or 32.

However. we must take into account that the manufacturer has to recover his costs from his sales, and there is no guarantee that the iron will devalue as quickly as the coinage. Factories with large inventories will be most reluctant to sell at a lower price, as we have seen. The iron must either maintain its former price in deflated coinage, or lose it.

The former alternative seems the worse. If the price of iron is inflated to match devalued currency, then it has to be raised abroad in the same proportion. The consequences must be clear to everyone, so I need not spell them out here. Whether devaluation raises the price of iron in foreign markets or lowers it in domestic markets, [the industry will suffer].

What we have said about iron applies equally to copper. Inflation of coinage and the worthlessness of tokens have brought chaos to the economy. We should be all the more concerned about this matter because internal trade in Sweden depends so heavily on our copper works. In the absence of silver coinage, they supply us annually with our most valuable means of exchange.

As stated above, the very foundation of this rich production in Sweden has shifted from its former state to adjust to the value of our coinage. The costs of manufacturing have gradually risen; so the costs that have remained stable owing to fear of devaluation have caused the greater hardship of increased and uncontrollable indebtedness for the workmen who by law have had to work at a fixed wage even though their goods and provisions have become more expensive.

This shows the state that both copper and iron have been brought to, and also the state they would be brought to if a deflation should occur now that prices are so high.

It is even clearer that the inflation of the currency has already helped the copper mining district, and that as time passes, this inflation will bring increased productivity and bring the country greater benefit than would be possible otherwise. It is common knowledge that there are several grades of ore in the mine at Falun an abundance of low-grade ore and a lack of high-grade.

We know it is a deep mine. and that there have been attempts to expand it. We know that the risks make expansion uninviting. Yet there are surely undiscovered veins of copper, which we must regard as newfound wealth for the country. Inflating the coinage has promoted this kind of development.

As the currency inflates, such work can be done with less loss; exploration can proceed, and new levels found which will cover its costs. Further, the low grade ore can be processed, and improvements can be made which would have to be suspended if the coinage were not inflated.

To be solicitous of the soul and flow of Swedish trade, which now depends on copper production, one must therefore give full weight to the consequences of deflation. The losses to the industry would be a hundred times more severe than the gains in the monetary realm.

The same principles apply to all the products of our kingdom, but treating them individually is too great a task for this memorandum. I refer to the silver industry, to the production of alum, vitriol, brimstone. masts and lumber, tar. and other commodities produced by workers in Sweden.

Most of these are exported, and are sources of our annual income. They are also our only means of balancing accounts with our imports. As already stated, these depend on an inflated currency, inflated even more by the intrusion of paper money and tokens. This has initiated a harmful cycle which will be very difficult to change.

We must also look at the problems which inflating the coinage would cause and at the problems it has already caused in Sweden, in order to see how this inflation would disturb the stability we are seeking, making it necessary to deflate the coinage in order to offset the difficulties caused by inflation.

The main problem would seem to involve the country's commerce in general. When a coinage is inflated, it takes some years for commerce to adjust to the change. As with a change in standards of weight, where the adjustment happens erratically, and it takes time to reach a widespread state of equity, so it is with the value of coinage.

As a result, the Swedish products already mentioned will tend to keep their former values and not adjust to the coinage more than nominally. In the first year, the costs to the kingdom will outweigh the gain to private citizens.

Again, we may take iron as an example. It took some years after the last bout of inflation for any change at all in the price of iron. It stayed in the range of 30 to 32 Dalers. The people who profited were the foreigners who found ways of taking advantage through articles, bills, cashing in sound currency, etc. The country lost far more than a few private citizens gained.

On the other hand, when the value of a currency is inflated, it necessarily follows that [international] traders raise their [prices] accordingly. This is the second reason that inflating currency does a country tremendous damage. Imports remain at book value, the value of their native currency.

This, then. gives a general view of the damage a country suffers when coinage is inflated. Within a year or in a few years, the country loses far more than a few private citizens can profit. Even so. their wealth does not consist in the figure on the coin, but in its intrinsic value.

We can now see the major problems caused bv inflating a coinage and the losses we have suffered from it for some years. At this time. however, we can see that the years have worked an adjustment, so that the current valuation is to our benefit.

The metals we export are now priced in proportion to the value of the coinage, so that the price rise of our exports has been fifty percent (or a little more) in the case of copper, while the price rise of such imported items as grain, salt. fish. tobacco, cloth, etc.. has been in the 3040 percent range. The inescapable conclusion is that the occasion of our greatest loss and difficulty has turned to our advantage.

Therefore. since a long period of stable currency has brought everything into equitable relationship, we would lose our advantage by changing the coinage now, ushering in years of anxiety, difficulty, and an underlying uncertainty.

[We may also look at the effects on] people who receive salaries from the government, both aristocratic and humble functionaries of the kingdom, most military personnel, and others who are not granted living quarters. The ones who are paid in grain and the like may well be in favor of inflation, but not by any means the others.

Since all their needs for food and shelter will have to be bought with the inflated currency, it is no more than fair that they be compensated by salary raises in proportion to the change. Since this is an inconvenience that could be evaded, some might argue against disregarding the general welfare of the kingdom in order to maintain the value of the functionaries' salaries. This might seem as reasonable as rewarding them with the same salary in inflated as in deflated currency.

The same principles apply to people who by statute, stipulation, or contract are obliged to remain at the salary level originally granted them factors, tenants, various sorts of artisans, smiths, smelting masters, and in general all workmen at mines, furnaces, and forests, who are required to content themselves with a fixed sum for their work.

These need to be grouped with those above, since everything they need for survival will adjust to inflation. They should therefore be granted appropriately calculated raises, on the assumption that the coinage were settled permanently at its present valuation.

In considering matters of currency, which is a mainstay of the country's prosperity and the foundation of its whole private and public economy, we should examine carefully the effects of change on every class of the kingdom. People who own factories or landed estates have little to fear from inflation of currency.

Product prices have risen in proportion, so that in a year's time everything has balanced out. So the right honorable nobility, like the clergy and the farmers, are not likely to feel obliged, for the sake of personal profit or increased productivity, to favor the deflation of a currency that is already much to their advantage.

The [international] merchant is the one through whose hands the wealth of the kingdom of Sweden passes, and who negotiates the common welfare and fortune of the kingdom. The more prosperous the merchant, the less profit he may expect from inflation.

Whether he builds his inventory from the land where he lives or by developing its raw materials, or depends on his ships and their voyages by consignment marketing of local products in distant lands and bringing back the profits, in any case he profits personally from his efforts and enriches the country thereby.

Such merchants rarely speculate on changes in currency, since for them the domestic value of the currency is the basis on which they calculate their risks. If they happen to profit from a currency change, they regard that as a windfall from their country.

On the other hand, those who do try to make a profit [on currency changes], either by borrowing and depending on a rapid turnover of second or third party properties or by selling short, are making themselves wealthy at the expense of the country, since their profit really consists of the interest on the capital which the country has invested. They will probably recover in a year or so if the currency changes.

We know that after a deflation, goods keep their former price for a while their prices do not immediately drop in proportion to the currency, since in the deflated currency they enjoy a higher value against any previous indebtedness. By the same token. if the prices of Swedish products were to fall drastically due to deflation, with their owners losing their rightful profits, industries would surely fall into the hands of such [manipulators]. This means that the profits would be lost to the rightful owners and accrue to others who were less disposed to use them for the welfare of their country. These people, together with foreigners, are most likely to profit from deflation.

As for the public revenue of the Crown, it seems to be reduced by the difference between the former and the latter coinage. However, we must note that the Crown can take advantage of inflation at every opportunity, when taxes are paid in kind (such as grain, iron, or the forging tithe and the copper toll), or when they are paid in silver coins.

If we compare the two situations, and adjust what has to be paid proportionally to the coinage, and then calculate the difference in the event of deflation, keeping expenses as initially budgeted, it is hard to see how the [national] income will be increased by deflation. Since everything is subject to change, there is certainly no reason to risk the failure of our currency, heedless of all the unsettling effects we have mentioned.

The income just mentioned ought properly to be adjusted by the uncollected taxes incumbent on the populace and by loans, mortgages, and other claims. Since they are substantial, they are a major problem. They should be repaid when the currency is deflated and is therefore of greatest worth. The policy [of the manipulator], though, is to inflate the currency and thereby get off cheap, especially when indebtedness is high.

Certainly, many think that our copper coinage (which as already noted is a commodity as well as a coinage) is of greater value. Like other commodities,

it can be exported, in which case it is not a means of international exchange. In this respect, however, the effect of inflation or deflation has not been rightly understood. Inflation will by no means prevent the export of the commodity, and neither will deflation.

As soon as exchange rates adjust themselves to the new valuation and a par value is established between Swedish and foreign currencies, there will be no further hindrance to the export of the coinage. Whether copper plate is at 6 Dalers in Sweden with the Rixdaler at 24 or 25 marks in Holland, or the plate is at 9 Dalers and the Rixdaler at 35 or 36 marks in Holland, the plate can be exported with equal advantage. The exchange adjusts to change, and the freight to the weight.

Only the fall of the exchange rate hinders the export of copper coinage. Raising the rate promotes it. If the rate is allowed to rise to 40 or 44 marks, this will cover the costs of export and provide a profit on the plate itself. So [internal] inflation or deflation does not affect the export of copper coinage. This is affected only by changes in the exchange rate, and to some extent by the price of copper abroad.

This demonstrates the necessity of attending to the rises and falls in the exchange rate to see that it is appropriate for the value of the copper and for the necessary costs of exporting it. If the rate is kept down, then copper will be kept in the country.

This will impede foreign trade to some extent, but domestic trade will benefit as the coinage stays in the country. Imported goods which can be brought in at a low exchange rate will be cheaper, while exports will keep their price, which seems to be to the country's advantage.

However, if the exchange rate is allowed to adjust itself to the balance of trade, we in Sweden must fear that it will rise substantially, since our imports exceed our exports. If this were to happen, our money would leave the country.

Domestic trade would come to a standstill, foreign goods would be very expensive, and exports, given the lack of money, would drop below imports. We must suppose even further consequences once the exchange is given free rein, with no public means available to effect the balance of trade.

It would take too long to discuss the proper ratio between silver and copper coinage, the ratio that would keep both in the country. I would note only that domestic inflation of both tends to be equal, with each responsive to the value of the other. This can best be seen and determined by looking at the relevant laws, the costs of exporting, and by their value in foreign markets.

Just as a change in currency is dangerous, so is the rumor of such a change. It spreads a confusion which lasts a long time. The rumor prompts many people to get rid of their currency before it loses its value, to get out from under it.

They invest it in commodities, or enter into special property agreements. Others mistrust the currency, and keep their real and personal estates as security in case the currency should fail. This brings domestic trade to a halt, and has other effects I need not list here. Anyone who spreads such rumors should be held accountable in view of the harm they do to so many people.

The foregoing should demonstrate that both inflation and subsequent deflation are severely damaging to a country once the whole economy has adjusted to a given valuation and has come to depend on the stability of the coinage.

My opening statement follows inevitably that altering the coinage without good reason would be to disrupt the principal employment of every individual and would affect the very highest matters with which we are entrusted. It would affect the commerce of the whole kingdom, and would therefore make us accountable to everyone who would be adversely affected by it immediately or in the more distant future.

1 See the frontispiece for an example of such "large pieces."