# The Commercial Credit Circuit – C3

In order to create a dynamic, competitive and effective means of payment, STRO has developed the Commercial Credit Circuit, abbreviated as C3. In the C3 network, consumers, businesses and public institutions use an internal means of payment called Value Claims.

This means of payment can be rooted in a mix of backings, as long as there is an ultimate guarantee of a capable third party, such as trustable financial institutions, guarantee funds or credit insurances.

When in need for liquidity, a company can get a line of commercial credit to spend within the C3 network. This credit is simply "the right to obtain products from all other participating companies up till a certain value". So, when a company gets a credit of €1.000, it will have an online account with €1.000 worth in Value Claims, which it can spend with supplying companies in exchange for goods. No money circulates within the network.
When the credit is due, the debtor of the credit has to repay in money. In case of default, the C3 actions the guaranteeing institution. The money that the C3 receives is passed to the suppliers of goods and services that have a positive balance of Value Claims and are in need for money.
Value Claims can thus be either spent within the C3 network, or exchanged for money. Of course, the money will come only after the credits have been paid. Therefore, if suppliers want to cash their Value Claims early, they will have to pay the interest costs of advancing this money.
The specially developed Cyclos Software (www.cyclos.org ), tracks the flow of Value Claims and informs the system and its users of the amount of time the holders of positive balances will have to finance if they want to cash their Value Claims at a certain moment. Holders of Value Claims can thus either choose to spend their Value Claims at face value within the C3 network, cash them now and pay the costs, or wait till the credits that back the Value Claims are compensated in cash and the money is thus freely available.

The main goal of the C3 network is to supply credit-worthy businesses with short term means of payment that serves as transaction capital and that does not depend on a monetary bank-loan and is thus cheaper and more readily available.

On a macro level, the C3 pretends to create more liquidity in the local market and thus stimulate local trade, when larger monetary flows might have 'sucked' the money towards more dynamic markets or regions.

## Step by Step

The C3 mechanism involves the following steps:

1. C3 offers a network in which participating businesses buy and sell goods and services. This network consists of a system of online accounts, on which the businesses hold their balances in Value Claims. This very much looks like transactions within a bank.
2. The Value Claims (just as any other means of payment) can be earned by selling goods or services to other participating businesses, or can be taken as credit from the system, thereby generating the possibility to buy products now, and pay the money later.

3. The business that holds Value Claims, has a claim in money on the C3 network. When it does not want to spend its Value Claims within the network, it can ask to convert its Claims in cash.
4. All the Value Claims are backed either in cash or in guaranteed promises in cash. The guarantees must be offered by capable third parties, such as guarantee funds, financial institutions or credit insurance companies.
5. The C3 thus offers Value Claims as credit to businesses, that they will pay in cash at a later date. This commitment to pay money at a later date, is guaranteed by third parties.
6. The costs that a company will have when opting to cash the Value Claims, are determined by the amount of time the C3 will have to wait before receiving the money of the credits.
7. Because the need for businesses to exchange Value Claims for money might be bigger than the actual cash in the C3 bank account based on repayments of credits, the C3 holds credit-lines at banks to be able cash Value Claims into Euros at any moment.
8. The business that has obtained Value Claims as credit (hereafter referred to as business A) opens a checking account in the C3 clearing-network and electronically spends the Value Claims by, for example, paying its supplier (business B).
9. To receive its payment, business B only needs to have its own checking account in the network. Business B has now two options: either cashing the Value Claims for national currency (at the cost of paying the interest for the outstanding period, e.g. 90 days, plus fees); or pay its own suppliers with the Value Claims, within the C3 network, thereby using these Value Claims as a liquid means of payment at face value.
10. When businesses want to cash their Value Claims before the credit has been paid by business A, the C3 will be borrowing this money from the contracted bank, and will be charging the interest for the period that the C3 has to wait until the claim come due.
11. In stead of / better than cashing the Value Claims and paying interest, business B can opt to use the positive balance on its account in the network, for instance to pay its supplier business C.
12. Business C also needs to open an account in the network. It has then the same two options as business B: cash it in for national money, or spend it in the network. And so on… In this process, time goes by, and the outstanding period before the money of business A is expected become shorter. Therefore, business C will have to pay less interest costs if it wants to cash the Value Claims, and can choose to wait while these costs become lower and lower. The software of the C3 makes this calculation automatically.
13. When the time span of the credit to business A has passed, the C3 network gets paid the amount of the credit in cash currency, either by business A or, in case of default of business A, by the guarantee fund or insurance company. This money is now available to cash the Value Claims of whoever owns at that point the proceeds of the credit to business A, or to pay-off the credit that the C3 had to take at the bank in case the Value Claims have already been cashed beforehand.

## Benefits

For businesses

- Businesses increase their access to the short-term credit that they need to improve their working capital and the use of their productive capacity. The size of this credit can be built up to a stable level at a cost substantially lower than when charging financial interest rates.
- The C3 opens a way that allow buyers to pay immediately (within the circuit), regardless of the payment schedule in money, injecting substantial liquidity at very low cost in the entire SME network. So, while the buyer has postponed payment facilities, the seller meets immediate payment, as long has he can also spend within the network.
- The technology is a proven one, doesn’t require any new legislation or government approvals, since it can use the permits of the contracted bank. The Cyclos software is fully operational. Only invoices and other claims that are 100% guaranteed, and 100% computerized, are acceptable in a C3 system. C3 thereby encourages the generalization and more efficient use of IT infrastructure among SMEs, including the opening of new markets and marketing channels through e-commerce.

For the market in general

- More liquidity generates more circulation of goods and services
- More local customers
- Strategy to overcome the 'vicious cycle' of crisis and depression
- The market in general is forced towards lower rates for short time credit

For governments, particularly regional governments

- The C3 offers the opportunity to fine-tune the effects of a currency used in an area with too many differences is the structures of the regional economies.
- It offers an innovative way to systemically reduce unemployment. Governments at different levels (EU, national, regional) can contribute to a joint guarantee mechanism. Such a guarantee mechanism is considerably cheaper to fund than subsidies or other traditional approaches to reduce unemployment. Up to that subsidies often create distortion of market mechanisms, while the guarantees only counter unfavourable conditions
- C3 systems are best organized at a regional level, so that each network remains at a manageable scale. C3 allows management to introduce incentives that makes it for businesses better to spend their balances in the same regional network, and thus further stimulate the regional economy up till the point that the economy of that regions grows to full employment. C3 provides a win-win environment for all participants, and therefore promotes other collaborative activities among regional businesses.
- The C3 offers thus tools that can contribute to the stimulation of the local/regional economy, while maintaining the positive effects of the currency bond with other regions.
- The raise in economic activities as a result of C3 will contribute to the tax revenues

## Specific details

The Cyclos software, on which the C3 runs, has specific patented elements that offer opportunities for highly innovative economic stimulation measures.

<u>Measuring the age of Value Claims</u>
The C3 is a complex structure. Value Claims are emitted at different moments in time and circulate between the participants of the network. At any moment, the positive balance that a user has in Value Claims, is composed out of different flows of Value Claims between clients and suppliers, that eventually end up at some participant's account.
Therefore any positive balance has Value Claims of different ages. The Cyclos software 'tracks' these flows, and keeps score of the average age of each balance.
This information can be used for different applications, which, in general, stimulate that the Value Claims circulate for a certain period of time before being exchanged for money.

The main object of this tool is to be able to swap guarantees that will deliver cash on short notice into liquidity avoiding costs of money creation and to create cheap commercial credit.

<u>Measuring the number of times Value Claims have circulated</u>
Comparable with the above, the Cyclos software keeps track not only of the time-span that Value Claims have been in circulation, but also of the amount of times they are used as means of payment.
In this way, the C3 can stimulate that local purchasing power circulates more times within the local market before the Value Claims are exchanged for money. Or, it can charge extra exchange-taxes for Value Claims that are exchanged before that point.

The advantage of these tools is that they offer a government a guarantee that the money of stimulation programmes will stimulate the domestic economy several times or a certain period of time, while avoiding protectionism, because, after the number of transactions or the amount of time has passed, the Value Claims can be cashed and the purchasing power can be spent in other regions and markets. So the main object of this tool is to be able to influence the multiplier of the purchasing power that is introduced in a region, up to the point where the balance between stimulating the regional economy by more economic activities gets less then stimulating that economy by contacting the world market.

<u>Charging on positive accounts</u>
Through the Cyclos software, the C3 can charge a small percentage of tax over time (say: 1% / month) over the positive balances in the system. Thereby, holding Value Claims will have a cost for the user.
Historical evidence documented with this 'liquidity tax', shows a significant acceleration of the velocity of circulation of money (v).
Therefore, such a liquidity tax helps to stimulate the amount of economic activity in a certain region.