



Currency Pluralism and Economic Stability: The Swiss Experience

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The Swiss complementary currency WIR is a classic example of monetary creation managed by economic agents lying outside the traditional banking system. When faced with tightening of credit or liquidity crises, Swiss small businesses increase their WIR transactions; when conditions improve, they return to the Swiss franc. This countercyclical effect illustrates the potential for parallel currencies to serve as tools for macroeconomic stability.

The recent financial crisis has once again put macroeconomic stability on the agenda. Ocampo (2005) observes that the usage of this concept has evolved with academic trends and political moods: in the postwar decades, it was associated with Keynesian theory, in which stability refers to an economy's internal and external equilibrium and implies full employment and sustained growth. By the late seventies, the emphasis had shifted to price stability and budgetary discipline. Since then, and particularly since the 1990s, successive financial crises have reminded us of the existing financial and monetary system's procyclical and fundamentally destabilizing role.

This note will describe how currency pluralism can serve as a potential tool for policies seeking to stabilize economies that have become inherently unstable. "Pluralism" in this instance means a system in which one or several parallel currencies circulate within a given economy alongside a primary currency—complementing it without in any way seeking to replace it.

Parallel currencies play a critical role in the current wave of social innovation and critical reflection on alternative economic models. They can assume

different forms—local currencies, time-currencies, local exchange systems, inter-company credit systems—and can be implemented in a wide variety of ways: as mutual funds, as mechanisms for territorial or social cohesion, as techniques for achieving the ecological transition, etc. Works by Lietaer (2001, 2010, and 2011) and Blanc (1998 and 2007) provide useful overviews of parallel or "complementary" currencies (as currencies seeking to complement national currencies are often called). This note will restrict itself to a specific aspect of these debates: parallel currencies' potentially countercyclical role.

Besides their diversity, the basic principle of parallel currencies like the WIR is "spontaneous" monetary creation—that is, monetary creation managed by economic actors lying outside of traditional banking channels. Because they bypass the banking system's quasi-monopoly on monetary creation through credit, parallel currencies and economic exchange networks remain controversial in the eyes of regulators and central banks. At the same time, the current monetary and financial system's inherent instability makes the search for alternatives necessary.

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An Old but Unknown Currency

The Swiss currency known as the WIR is by far the oldest and most important complementary currency presently in circulation. It remains, however, largely unknown. Created in 1934, it is currently used by approximately 60,000 small and medium-sized businesses found in all economic sectors, but primarily building, commerce (wholesale and retail), and manufacturing (see the chart below). In 2008, the volume of WIR-denominated trade was 1.5 billion Swiss francs (Lietaer 2011:117), a figure that makes it far superior to any other parallel currency but which is still only an insignificant portion of the global monetary mass (0.35% of M2 in 2003).

If the WIR is the best known currency of this kind, it is not the only one. It can be compared to more recent currencies, such as Belgium's RES or Uruguay's C3. Unlike the WIR, which is not convertible into Swiss francs, the C3, for example, can be converted into the national currency.

These currencies are, however, still too recent for conclusions about their impact to be drawn. Because it has been around for 75 years, the WIR provides a unique opportunity for investigating a parallel currency's long-term impact. Even so, studies of how the WIR operates are few and far between. Those that do exist (Studer 1998, Stodder 2007 and 2010) nevertheless highlight its advantages:

- WIR offers small and medium-sized business an

additional source of credit and liquidity, which is particularly valuable at times of tight traditional bank credit;

- At a macroeconomic level, use of the WIR as a "reserve credit" has countercyclical effects, contrary to the overall monetary supply, which has proven procyclical effects;
- At a territorial level, use of the WIR reinforces bonds between local companies and contributes to preserving a society's economic fabric.

An Exchange Network, a Clearing House, and a Cooperative Bank

The WIR currency was created during the Great Depression as a response to the liquidity crisis then asphyxiating the Swiss economy. The system's founders were heavily influenced by the spirit of mutual assistance and the economic theories of Silvio Gesell, who maintained that the dysfunctions of the traditional monetary system resulted from the inherent contradiction between two of currency's functions: means of exchange vs. reserve value. Gesell's writings inspired several local experiments at this time. These various sources inspired the principle of a **private economic circle** or WIR (from the word *Wirtschaftsring*, but also meaning "We" in German.) in which goods and services are exchanged via a complementary currency. (See also the box at page 4, "WIR in practice")

The exchange circle provides its members with a form of inter-company credit based on autonomous monetary creation. Members commit themselves to settling a certain portion of a transaction in WIR (typically, 50% of payments up to 2,000 francs). From the buyer's perspective, the WIR portion of a transaction amounts to a kind of non-bank credit, which must be reimbursed by selling, in turn, its own products in WIR. From the seller's perspective, this portion is not a mere promise of future payment—as with traditional intercompany loans—, it amounts to cash that can be spent immediately on other goods and services. Another significant difference is that the

Number and Percentage of Swiss Companies Using the WIR Currency in 2005 by Sector: Turnover, Account Balances, and Circulation Velocity. Source : Stodder (2010).

| Industry | All Swiss | All WIR | Portion WIR/Swiss | (1,000 SFr) Turnover | (1,000 SFr) Balance | (Swiss Fr.) Av. Bal. | Turn/Balance= Velocity |
|-------------------------|-----------|---------|-------------------|----------------------|---------------------|----------------------|------------------------|
| RETAIL, of which | 62,380 | 14,275 | 22.9% | 345,757 | 127,100 | 8,904 | 2.72 |
| Registered | | 5,933 | 9.5% | 223,822 | 64,958 | 10,949 | 3.446 |
| Non-Registered | | 8,342 | 13.4% | 121,935 | 62,142 | 7,449 | 1.962 |
| SERVICES, of which | 164,709 | 10,380 | 6.3% | 213,515 | 88,788 | 8,554 | 2.405 |
| Registered | | 3,817 | 2.3% | 112,186 | 30,745 | 8,055 | 3.649 |
| Non-Registered | | 6,563 | 4.0% | 101,329 | 58,044 | 8,844 | 1.746 |
| HOSPITALITY, of which | 28,006 | 3,438 | 12.3% | 73,021 | 22,416 | 6,520 | 3.257 |
| Registered | | 2,099 | 7.5% | 61,872 | 16,156 | 7,697 | 3.83 |
| Non-Registered | | 1,339 | 4.8% | 11,148 | 6,261 | 4,676 | 1.781 |
| CONSTRUCTION, of which | 57,268 | 21,162 | 37.0% | 527,619 | 210,477 | 9,946 | 2.507 |
| Registered | | 6,992 | 12.2% | 280,169 | 82,462 | 11,794 | 3.398 |
| Non-Registered | | 14,170 | 24.7% | 247,450 | 128,015 | 9,034 | 1.933 |
| MANUFACTURING, of which | 38,421 | 7,310 | 19.0% | 230,196 | 101,884 | 13,938 | 2.259 |
| Registered | | 1,820 | 4.7% | 87,418 | 26,092 | 14,336 | 3.350 |
| Non-Registered | | 5,490 | 14.3% | 142,778 | 75,792 | 13,805 | 1.884 |
| WHOLESALE, of which | 21,762 | 4,138 | 19.0% | 223,631 | 73,787 | 17,832 | 3.031 |
| Registered | | 1,027 | 4.7% | 80,371 | 15,462 | 15,056 | 5.198 |
| Non-Registered | | 3,111 | 14.3% | 143,260 | 58,325 | 18,748 | 2.456 |
| TOTALS, of which | 372,546 | 60,703 | 16.3% | 1,613,739 | 624,452 | 10,287 | 2.584 |
| Registered | | 21,688 | 5.8% | 845,838 | 235,874 | 10,876 | 3.586 |
| Non-Registered | | 39,015 | 10.5% | 767,901 | 388,578 | 9,960 | 1.976 |

Source: WIR Panel Data, 2010

loan is granted not by the seller but by the exchange network itself.

Indeed, between the two actors, the **clearing house** plays an essential role, comparable to that of a central bank. It pools default risks, creates trust between actors, and records the system's transactions. This is where monetary creation occurs—through the economic transaction itself. From the company's perspective, the system resembles a normal personal account, with debits, credits, and an authorized overdraft. An overdraft without interest payment is allowed to a point determined by a company's payment history and creditworthiness. However, at the level of the system as a whole, the sum of credits and debits is always zero. It is this flexibility and self-balancing in the granting of credit that leads Studer (1998:31) to conclude that the potential for a centralized exchange network is "practically without limits."

Transactions occurring in WIR are purely electronic, so the currency exists only as operations recorded by the clearing house. "In reality the money never leaves the central office, but remains on the books in the role of a creditor. When a loan is granted, an asset and a liability are created simultaneously. The beneficiary receives a sum of WIR and, at the same time, a liability." (Studer 1998, p. 31)

The WIR's basic mechanism—a private exchange network with a clearing house—has since been supplemented by a **cooperative bank** offering its clients more traditional banking services (commercial loans granted independently of exchanges occurring within the economic circle, payment services, etc.). The purpose was in part to respond to a problem that all exchange networks

typically face, namely the asymmetrical relationship between supply and demand: actors are happy to buy using complementary currencies, but prefer to be paid in regular currency, which can be used more widely and without the same constraints as with a complementary currency. This asymmetry of preferences explains why, in many exchange networks, the intensity of exchange tends to stagnate or even decline over time. With the WIR, a company which has been granted a "normal" commercial loan from the WIR Bank must, in order to reimburse the loan in WIR, continue to sell products in WIR, thus increasing the aggregate demand for the complementary currency within the exchange network.

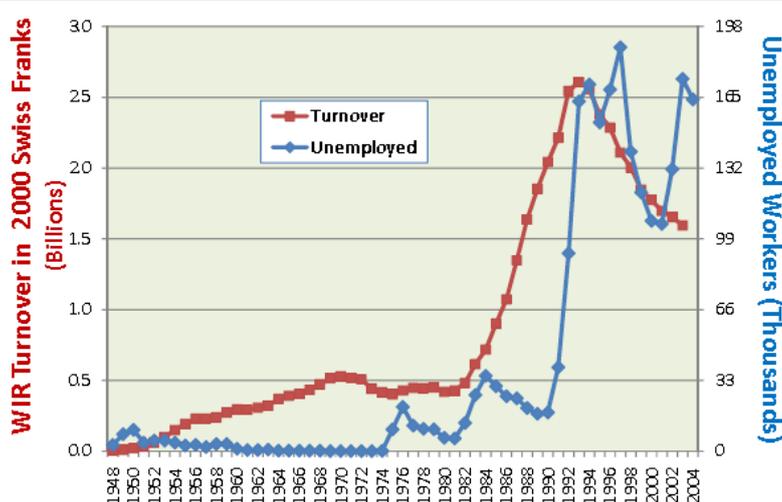
A second and similar modification of the WIR system, introduced in 1973, forbade the practice of converting WIR into Swiss francs when an agent left the system. By selling them off and applying discount rates, departing members made the WIR resemble a "bad" currency, undermining confidence in the system. Ever since, accumulated surpluses of WIR can only be spent inside the exchange network.

Exchange Networks and Monetary Creation

Over the very long term, the volume of transactions denominated in WIR tends to increase with the global monetary mass. Within a particular economic cycle, however, Stodder observes a contracyclical effect that is statistically verified: demand for WIR decreases in periods of growth and increases in periods of crisis. This is explained by varying opportunity costs, as the WIR exceeds "the transactional productivity of traditional currency, particularly when the latter is restricted by anti-inflationary policies" (Stodder 2009:14). More specifically:

- The driving force of the countercyclical effect is the non-bank credit generated by the WIR system, not the velocity of circulation. In times of crisis, companies increase their WIR-denominated transactions.
- This countercyclical effect is most pronounced for companies that exist along the system's periphery, which are not formally affiliated with the exchange network but which use the WIR as they wish, on an *ad hoc* basis.

Number of Unemployed (in thousands, right column) and Transaction Volumes in WIR (in billions of Swiss francs, left column), 1948-2004. Source : Stodder (2009).





- In recent times, use of the WIR tracks the unemployment rate (see the graph on p. 3). Beginning in the 1970s, the WIR system was restricted to small and medium-sized companies, which are more sensitive than others to fluctuations in unemployment.

To sum up, an exchange network's capacity to sustain demand at the very moment when the aggregated demand is in decline qualifies it to be counted as a full-fledged macroeconomic tool. But the case of the WIR also illustrates the potential of exchange networks, especially in the wake of the information revolution.

WIR in Practice

In a transaction between two members of the WIR circle, company A opts to pay part of its bill in WIR—for instance, 1000 WIR out of a total of 5000 Swiss francs (it is the service provider, or company B, that chooses the portion, which is never 100% of the entire bill). Company A pays company B 4000 Swiss francs and opens a credit line of 1000 WIR with the clearing house (with no interest rate if the credit is short-term). Company B receives 4000 francs and 1000 WIR, which have thus been created out of nothing. They exist as a debt that the buyer owes the clearing house. Next, company B buys goods worth 10,000 francs from company C, 2000 of which it opts to pay in WIR. It spends the 1000 WIR in its possession and opens a credit line of 1000 WIR, just as company A did.

Thus, no one makes a decision about whether the loan should be granted or not. The clearing house simply determines the portion each member can pay in WIR and registers the transactions. Monetary creation is determined solely by the companies engaged in transactions. But it occurs in a single place—the clearing house that records the system's transactions. This is one way in which the WIR system differs from the credit lines typically offered by banks: here, monetary creation is centralized, as with the credit lines available through central banks. In reality, Swiss small businesses use WIR credit alongside traditional bank credit lines, particularly in times when bank credit is tight.

Company B accepts partial payment in WIR because it knows that it, in turn, can use WIR for purchases. Moreover, joining an exchange network typically results in a 5% increase in turnover (a consequence of "club" membership loyalty).

Traditionally, the complexity of modern economies is what justifies a decentralized monetary system as we know it today, with a great number of independent credit-givers (banks and other financial institutions). "Decentralized monetary systems emerged when the information volumes generated by a complex economy became too large to be managed by older information technology. Modern information technology makes exchange systems possible once again" (Stodder 2010:1). Research has focused on the macroeconomic impact of new technology on price formation and stock management. Yet the case of the WIR demonstrates that new technology can contribute to macroeconomic stability in another way: by radically transforming mechanisms for credit allocation.

Translated from French by Michael C. Behrent

Notes

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