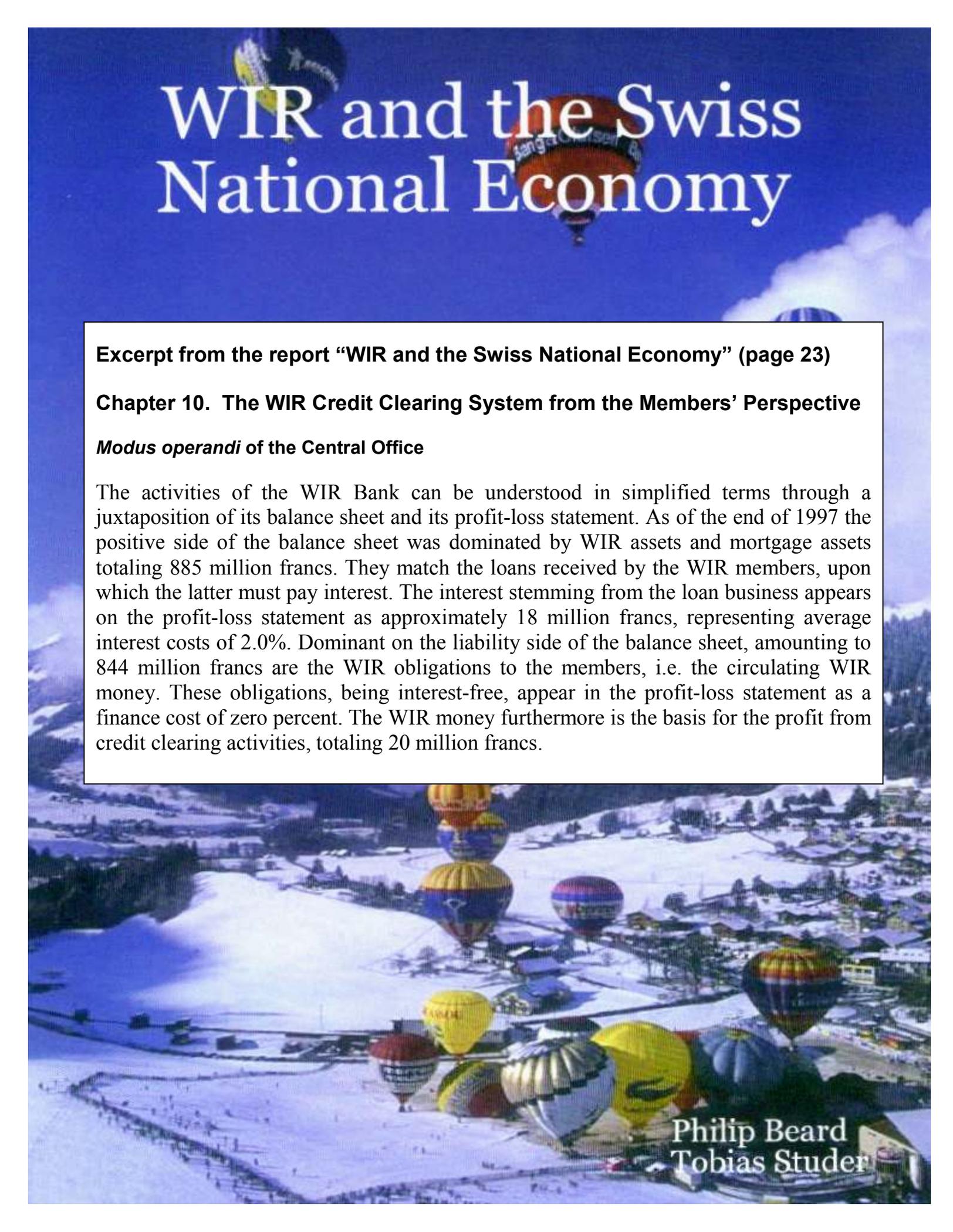


WIR and the Swiss National Economy



Excerpt from the report “WIR and the Swiss National Economy” (page 23)

Chapter 10. The WIR Credit Clearing System from the Members' Perspective

Modus operandi of the Central Office

The activities of the WIR Bank can be understood in simplified terms through a juxtaposition of its balance sheet and its profit-loss statement. As of the end of 1997 the positive side of the balance sheet was dominated by WIR assets and mortgage assets totaling 885 million francs. They match the loans received by the WIR members, upon which the latter must pay interest. The interest stemming from the loan business appears on the profit-loss statement as approximately 18 million francs, representing average interest costs of 2.0%. Dominant on the liability side of the balance sheet, amounting to 844 million francs are the WIR obligations to the members, i.e. the circulating WIR money. These obligations, being interest-free, appear in the profit-loss statement as a finance cost of zero percent. The WIR money furthermore is the basis for the profit from credit clearing activities, totaling 20 million francs.

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WIR and the Swiss National Economy

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WIR and the Swiss National Economy

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Chapter 1. Introduction

Tens of thousands of Swiss citizens regularly use WIR. Perhaps over 100,000 know about WIR. But certainly the great majority of Swiss do not understand how it functions. Even in the affected trade sectors themselves, ignorance is widespread. Surveys show that the number of small and medium-sized enterprises whose owners claim to know nothing about WIR range in the thousands. Ignorance, however, leads quickly to skepticism and even to prejudice. This treatise therefore aims to open up for all interested parties insights into both the *modus operandi* and the rationale and purpose of WIR.

WIR: the Great Unknown Quantity

Any outsider who follows attentively the ads in our daily news media can't help but notice offers of the most varied goods and services payable in part with WIR instead of Swiss francs. Likewise, at the entrance to numerous shops, restaurants, and hotels one frequently notices the WIR logo, placed just as prominently as the VISA, Eurocard, or American Express stickers. Obviously, WIR eases access to a broad range of goods and services. The precondition, however, is that one belong to the WIR System and possess a WIR account. And in Switzerland that is the case only for a small minority of the populace.

While one often hears talk of "WIR money", WIR lacks one major quality of freely circulating money, namely the quality of a token, be it as a coin or as a note. WIR exists merely as a bookkeeping entity that entitles the holder to purchase certain goods and services. Thus WIR transactions fall under the rubric of cash-free payment media, with all the attendant advantages. In contrast to cash, for example, WIR is essentially theftproof.

For the exclusive circle of WIR members the palette of available goods and services is much broader than the ad section of the newspapers would lead one to believe. What the public sees is merely the tip of the iceberg. A variety of WIR publications, first and foremost the quarterly WIR catalog, document the extremely broad range of goods and services available for payment in WIR. The use of WIR runs up against only two limitations. One is that public services are not available for WIR, nor as a rule can WIR be used to pay taxes, since according to statute WIR functions as a private economic entity – although among the "silent" participants may sometimes be found public agencies or state-run businesses. Secondly, use of WIR is limited strictly to domestic transactions. Purchases made abroad and direct imports thus may not be paid for with WIR. It is entirely possible, however, that a Swiss importer may accept payment in WIR; to this extent, the purely domestic nature of WIR doesn't in principle limit its potential range of application.

WIR Features

What has been said thus far allows us to recognize five essential WIR qualities:

- **WIR is an unusually flexible, versatile payment medium;**
- **WIR is exclusive, used by a select group;**
- **WIR belongs to the private economic sphere;**
- **WIR is a purely Swiss entity; and**
- **WIR, unlike conventional money, is theft proof.**

The large number of newspaper ads with a WIR reference is remarkable inasmuch as WIR is not legal tender, but an entirely voluntary instrument. The existence nonetheless of such frequent and intensive advertising with WIR implies that the advertisers must expect manifest advantages from its use. Were that not the case, clever businesspeople would surely steer clear of it. And if we examine the WIR ads in the daily papers more closely, we recognize that WIR obviously can be employed as a sales booster even when the search for a buyer may be expected to be strenuous and tedious. Someone is selling a 1936 English Daimler luxury sedan, for example, for SFr 70,000, of which the seller will accept 30% in WIR. [Ad with photo reproduced next to this ¶.] Now, collectors looking for precisely this item who also possess the requisite small change to pay for it are likely few and far between. Selling this car won't be an easy job. But the party who placed the ad nonetheless expects to succeed with the help of WIR. This example bears witness, then, to two more essential features of WIR:

- **WIR is a widespread, liberally utilized advertising tool; and**
- **WIR is an effective instrument for boosting sales.**

When a product can be paid for part in cash, part in WIR, one is tempted to assume that WIR might be a kind of secondary currency. But where could the advantage be found in trying to sell a product not for a single currency, but for two simultaneously? What competitive advantage would an ad purchaser gain, for example, if he were to offer honey for ten francs plus five dollars? No one would take him up on it! Of course one might imagine a restaurateur who generously allows an imprudent tourist who can't pay his total bill in Swiss money to pay SFr 20 plus £ 30. But this would certainly be the exception. No restaurateur would ever come up with the idea of employing such a bookkeeping nightmare of a payment option as an advertising tool. From this example emerges a further important insight:

- **WIR is indeed a cash-augmenting payment medium. This function, however, must not be its most essential feature.**

Therefore another explanation must be found for the fact that WIR has existed for more than 60 years, and that it continues to prosper and to expand. WIR must possess qualities much more essential than its role as a supplementary medium of payment. In order to grasp these qualities, however, we shall need first to look back to the circumstances

surrounding the founding of the WIR system in 1934, and then to an analysis of WIR's current operational mode.

Chapter 2. The Economic Circumstances Accompanying the Birth of WIR in 1934

The WIR Economic Circle was founded at the depths of the greatest global economic crisis of modern times. The crisis was triggered by the infamous Wall St. stock market crash of October 1929. At avalanche speed it engulfed nearly all sectors of the global economy, to an extent hardly imaginable today. Global total production fell in the space of a few years by about 60%. World steel production, for example, which had reached 9.7 million tons per month in 1929, slipped to only 4.1 million tons in 1932. In the western industrialized nations alone, unemployment reached 30 million. No one counted how many were put out of work in the rest of the world. The collapse of the demand side led to drastic price reductions on the supply side, and to brutal competitive battles for the few remaining orders. On average, world market prices fell by 30%. Prices for certain agricultural products fell much further. Agrarian countries were therefore even harder hit by the crisis than industrial countries. Brazil, for example, found itself forced to use its unmarketable coffee for locomotive fuel in place of coal.

The global economic crisis led in a few years to a gigantic destruction of wealth. Countless enterprises landed in bankruptcy court. Banks collapsed. Not even first-class standard investments were spared by the collapse of value. United Steel shares, for example, previously a blue-chip leader, lost more than 90% of their value. Global personal income sank commensurately with global production. Inevitably, tax revenues of practically all nations collapsed in turn, producing record deficits everywhere. Governments therefore lacked the desperately needed means to assuage the rapidly spreading destitution and misery of broad segments of society.

The study of economics was unfortunately just getting off the ground in the mid-1930's, and was unable to offer any well-tested and proven theories and tools for mastering the crisis. Politicians therefore were fairly disoriented, and their recipes for a solution were generally unsuitable and contradictory. Many nations attempted to wall themselves off from the world market, and introduced protective tariffs, import quotas, or even import prohibitions to protect domestic production. On the other hand, many countries were tempted to crank up exports by devaluing their own currencies. This, however, led regularly to defensive maneuvers by the affected competitors. Free global trade was partially replaced by bilateral trade agreements and governmental foreign exchange controls. Economic autarchy free of dependence on imports was sought by numerous countries. But all these measures only accelerated the downward skid of world trade. Meanwhile most countries attempted their own methods of crisis management, in which monetary policy took over a key role.

National Crisis Management Strategies

- **Great Britain** drew on the resources of its colonial empire, which at the time covered one quarter of the Earth. It surrounded that empire with a wall of protective tariffs and dedicated itself primarily to the task of paying down its foreign debts from the first world war. This was accomplished by a disciplined savings program, in whose framework an actual surplus was budgeted for 1934 – a surplus equal to the total expenditures of the Swiss Confederation. But such a scarce money policy was unable to solve the unemployment problem; on the contrary, it tended to exacerbate extant social tensions. Meanwhile, expansion of the state-run infrastructure was neglected, a policy that was to engender harmful long-term results.

- The **United States** addressed the economic crisis with that economic and societal restructuring known as the “New Deal”. Roosevelt’s prime goal was to strengthen the purchasing power of the masses, thus using rising domestic demand to jump-start a resumption of production. The government led the way with gigantic investment programs; their greatest beneficiary was the large country’s hitherto underdeveloped infrastructure. More than a million kilometers of new roads were constructed, along with bridges, canals, irrigation systems, airfields, power plants, administrative centers, school buildings and hospitals. The buildup was financed with the help of the printing press, i.e. through a policy of increased monetary circulation in which inflationary manifestations were consciously accepted in the bargain. By the end of the 1930’s several million new jobs were created in this way, and simultaneously the modernizing of the infrastructure laid the groundwork for the economic upswing of the postwar period.

- In **Germany** a path was followed that superficially resembled that of the U.S., inasmuch as state expenditures were drastically increased. But the primary goal of the make-work programs (that were called “work battles”, and were financed euphemistically with “future reserves”) was to enhance not the infrastructure of the German economy, but military armaments with which Germany’s own world empire was to be created, following England’s example. The economy was subsidized in targeted areas where it could never become competitive, e.g. the manufacture of synthetic gasoline and rubber, with the goal of making the importation of these strategically important raw materials superfluous. Although Germany amazed the world by re-integrating six million unemployed into the economic process in the space of a few years, ultimately the ploys embarked upon proved entirely counterproductive.

- **Italy** attempted to meet the crisis with the concept of the corporate state. Unions and economic associations were transformed into compulsory state corporate entities with the goal of snuffing social conflict and the competitive struggle within the Italian economy, and promoting domestic sales of Italian products. This however did not enhance Italy’s long-term competitiveness in world markets. Italy too launched grand investment programs. They aimed above all to expand Italy’s colonial empire, thereby reducing domestic unemployment through accelerated emigration.

- The **Soviet Union** remained almost untouched by the world economic crisis. The totalitarian planned economy with its systematic enslavement of millions of workers guaranteed statistical full employment with twofigure growth rates of industrial production, so that the Russian example found many adherents in the West in spite of its inhuman excesses. The crisis-abatement efforts undertaken by the industrial nations at the time thus demonstrate two opposing main tendencies: an expansive and a restrictive one. Expansive strategies attempted to create increased economic activities via state job creation programs, while accepting both the inflationary tendencies triggered by the expansion of monetary circulation and the rising indebtedness of the public sector. Restrictive strategies took the opposite tack of reducing state deficits by cutting expenditures and wages, protection of the domestic economy by setting import barriers, and reducing destructive competition by means of a variety of prohibitions and regulations. Deflationary tendencies were consciously accepted by practitioners of this strategy. Political discussion reduced the spectrum of crisis-abatement strategies to the buzzwords “inflationary policy” and “deflationary policy”. The former was practiced initially by the U.S. and Germany, the latter mainly in England, but also in Belgium and other countries. In Switzerland no single course of action emerged.

Chapter 3. Swiss Economic Conditions in WIR's Initial Year

Switzerland in Recession

After 1929 Switzerland was dragged into the whirlpool of the global economic crisis more slowly than other countries, and reached the nadir of its slump later. While the U.S. and Germany began slowly to re-emerge as early as January 1933, in 1934 Switzerland still found itself mired deep in recession. Exports and hotel industry turnover plummeted by 65% in only five years. Certain economic sectors and individual firms were hit even harder, and the number of bankruptcies reached record heights. One of the enterprises hit hardest by the dramatic decrease in trade and tourism was the Swiss railroad, SBB, whose deficit was double that of the federal budget. Since over the same period imports declined by only 45%, the Swiss trade balance was soon deep in red ink.

Unemployment was widespread, especially in the large cities. 95,000 job seekers were registered in early 1934. This number can't be compared with the unemployment figures of the '90's, since in 1934 there was no obligatory unemployment insurance, which would have guaranteed every registered person a survival-level income. In addition to the official unemployed figure, there was likely a large number of hidden jobless. For every 73 officially registered job seekers in early 1934, exactly one open position was announced.

While the difficult labor market had depressed wages seriously since 1929, things got worse: Now a skilled laborer earned on average ten percent less than before the crash. To be sure, the cost of living had dropped even further, i.e. by nearly 20%. Worst off were people with debts, e.g. construction workers and farmers hard put to meet their mortgage

interest payments from their declining income. Relatively well off were people in tenured positions like civil servants and teachers, or people who lived off their pensions or interest income. For them the deflation meant a *de facto* pay raise. A thin layer of very rich people survived the crisis in high luxury. In the daily papers one found an amazing number of ads for all kinds of luxury goods, such as Cadillacs with eight, 12, even 16 cylinders. The contrast between the misery of broad segments of society and the ostentatious wealth of the upper strata could not have been more striking.

Inevitably, the economic crisis dragged public budgets deep into the red ink as well. Hardest hit were the large cities, where unemployment was also the most severe. Zürich's 1934 budget deficit was 17%, Basel's 19%. Drastic measures seemed unavoidable, whether on the revenue or the expenditure side of the budget. Help was expected to come primarily from the federal level: The Federation had been providing up to that time only a little more than SFr 100 per capita, and was running a budget deficit of only about 5%.

One manifestation of the urban crisis was the high percentage of vacant dwellings. The figure topped three percent in the city centers, and up to five percent in the suburbs. Real estate prices dropped radically, and many mortgage loans were endangered. Construction appeared an ever greater risk. Falling prices and unfavorable payment conditions were the norm. A large percentage of the few contracts still awarded were unprofitable, and most construction firms were operating at a loss.

Chapter 4. Swiss Recipes for Crisis Abatement

Foreign models...

Predictably in view of its federated structure, Switzerland was not able to arrive at one uniform crisis abatement strategy. Diverse demands put forward by countless interest groups tended to cancel each other out. Since Switzerland experienced the economic crisis relatively late, it was possible to design its policy in line with foreign models and the relevant experience already gained abroad. Every global alternative approach had its advocates. The numerically impressive achievements of the Soviet Union; the rough-and-tumble élan of National Socialism; the muddled, and therefore seductive, theories of the fascist corporate state; England's disciplined savings program; and Roosevelt's reformist New Deal – all had their Swiss adherents and champions. Policy making was therefore characterized by a welter of the most contradictory ideals and postulates. That said, most of the actual policy discussions, and the resulting concrete measures taken, were predominantly of a restrictive nature.

...and their imitations

Government authorities' first concern was to reduce their budget deficits. Investments were halted, subsidies reduced, and wages cut. The Federal Remuneration Reduction Act of early 1934, for example, implemented an across-the-board cutback of seven percent. Many cantons and municipalities followed with similar wage reductions. On the income side, however, only a few measures could be implemented. General tax increases, given

the widespread loss of income, were out of the question. So service charges (such as hospital fees, for example) were raised, as were excise tax levies. The Confederation was able to push through a “crisis tax” for large incomes and inheritances, as well as doubling the gasoline tax.

Export sector players demanded an adaptation of the inordinately high Swiss price and wage levels to foreign economic conditions, and therefore supported the public sector’s deflationary policies. The tourism industry demanded the adoption of a “tourist franc” as a cheap parallel to the official Swiss franc. Even a devaluation of the franc and the sacrificing of the gold standard were discussed, although bitter resistance from the farmers, bankers, and others succeeded in delaying these measures. Trade associations baldly demanded the adoption of new limits to the freedom of commerce, as well as a new constitutional amendment that would supplant ruthless competition with a type of “ordered freedom” patterned after the Italian model. Farmers’ associations demanded that agricultural debt be relieved by lowering the basic interest rate or reducing mortgages to the earning-capacity value of the mortgaged property.

The results achieved by economic policy were typically characterized by small-minded, protectionist measures to the benefit of individual interest groups. Thus already in the fall of 1933, legal strictures on the construction of department stores, hotels, and factories had been adopted, all for the purpose of damping competition. Occasionally, government authorities ordered the closing of business branch offices and forbade the opening of new branches and factories. In response to a demand of the master cobblers’ association, mechanical shoe repair shops were now forced into concessionary relationships, in order for the 12,000 independent shoemakers to maintain their established turnover and price level.

Customs policy was likewise twisted in order to benefit particular interest groups. Protective tariffs were adopted for synthetic silk, agricultural products, and whitefish, for example, in favor of domestic producers. Quotas were decreed on the import of film projectors in order to protect the movie theaters, already hardly profitable, from any additional competition. The import of cigar machines was totally prohibited, under pressure from the tobacco industry. Export too was forced partially into the service of the isolationist policies. Export prohibitions were adopted, for example, on certain watch parts, dies, and movements, in order to block the development of the watchmaking industry in cheaper foreign lands. Ever more rigid bidding requirements practically put an end to supra-regional competition for the remaining governmental contracts.

Amidst this welter of protectionist, anti-free-market measures designed to thwart initiative, the few positive, future-oriented approaches that were proposed gained little attention. They did exist, however. In particular, cantons and municipalities enacted innumerable emergency measures designed not only to develop their infrastructures, but also to provide useful work for thousands of unemployed. One crisis-abatement initiative attempted to promote such local measures with federal subsidies, as did an “Alpine roads” initiative.

Future-oriented private initiatives

Most of the forward-looking proposals of those years, however, came from private sources. An example was the 1931 introduction of the crossbow logo for Swiss products, aimed at furthering domestic sales and raising foreign consciousness of Swiss manufacturing quality. A patriotic cottage industry movement attempted to mitigate farm hardships by marketing homemade craft products. In 1934 a Swiss travel fund was proposed whose purpose was to invigorate domestic tourism by means of so-called “Reka-checks” redeemable for low-priced vacation accommodations and discounted train and bus tickets.

This was the creative atmosphere into which the WIR Economic Circle was welcomed at its founding in 1934.

Chapter 5. Ideational Fundamentals of the WIR Economic Circle

According to a League of Nations estimate, the crisis drove worldwide bank deposits down from over \$82 billion to \$60 billion between 1929 and late 1932. Switzerland, however, was totally unaffected by this bloodletting. Swiss bank deposits remained nearly unchanged. The citizenry must have been perplexed by the apparent paradox that on the one hand, far too little money was flowing into public demand for goods and services that would create jobs, while on the other hand a lot of money remained on deposit in the banks. It must have appeared desirable to do everything possible to reintroduce the money hoarded in banks back into economic circulation, for the good of all. Many felt that money should be “freed of its shackles” and be allowed to circulate “freely”. Such was the core idea of the so-called “free money” [Freigeld] concept.

Origins of the Free Money Doctrine

The doctrine of free money originated with the German-Argentine entrepreneur Silvio Gesell (1862-1930), whose freewheeling life saw him once serving, for example, as Bavaria’s finance minister, a position he held for seven days. His revolutionary theories were triggered by the serious Argentine economic crisis of the 1880’s, which hit Gesell hard and moved him to ponder the causes of such crises and how they could be avoided. As a self-taught outsider he was rejected by most conventional economists. But through dogged, decades-long pursuit and promotion of his ideas he was able to build up a faithful community of adherents that ultimately numbered in the hundred-thousands. Like Karl Marx, he was an important social critic who propounded a comprehensive structural alternative to capitalism. But whereas Marx’ ideas became the basis for widespread experiments which ultimately demonstrated their ineffectiveness, Gesell’s ideas were subjected to practical tests only in a few small, isolated areas.

Free money theory can be reduced essentially to three axioms:

- To stabilize sales of goods of all kinds, money in circulation

must be precisely adjusted to the supply of goods. In this way the problem realms of inflation and deflation are to be banished, and price stability achieved. By now this idea has become common wisdom, and is practiced by every national central bank as part of its standard monetary policy.

- In order for money to function solely as means of payment for the free flow of commerce, it must have the character of an interest-free clearingcertificate. This notion is to be found today in the WIR credit clearing system, where it has proven its worth over many decades.

- The hoarding of money which Gesell found so inimical to the

national economy is to be thwarted by applying a constant devaluation mechanism, thus forcing money to circulate. At first glance this notion appears to contradict the postulate of price stability. But Gesell discovered a sophisticated trick for resolving the contradiction. A bill with a face value of 100 francs would maintain its buying power. But in order for it not to lose its validity, the user would be obligated to paste a stamp worth e.g. one franc on its reverse side every month. Annually, then, the money would be subjected to a negative interest of 12%. This device was practiced in WIR's early years, from 1934 to 1948. It proved less than fully useful, however, and was finally dropped.

During the depression, this free money doctrine developed in all Germanspeaking countries and in Scandinavia into a heterogeneous mass movement. Supplemented by the "free land doctrine" [Freilandlehre], it ultimately encompassed nearly all areas of life, ranging from economics to art, literature, and private life styles. Peripheral social phenomena included nudism, free love, and Dadaism, the latter a new poetic form that worked with empty word shells, "freed" of any referential content. Many disadvantaged people saw in a free-money world economy the solution to all economic and social problems. Initial negative-interest money experiments in Germany and Austria were surprisingly successful, but were soon squelched by the totalitarian governments. [Translator's note: Prof. Studer is mistaken about the fate of "Freigeld" in Wörgl, Austria. Local currencies were outlawed in Austria in 1934, while the country was still a run as a pluralistic parliamentary democracy. It was the central bank working through parliament and the courts that doomed Austria's free money experiment, not a totalitarian government.]

The Free Economics Movement in Switzerland

The main advocates of free economics in Switzerland were the free-money theoretician Werner Zimmermann and the Appenzell city councilor Hans Konrad Sonderegger. The movement became something of a doctrinal theology. In August 1934, for example, some 1500 people gathered for the first convocation of the "Basel Area Free Economists". The

meeting began with a ceremonial religious service, followed by the proclamation by Councilor Sonderegger, who had a degree in theology, of how free money would do away with all poverty and misery, all unemployment and all artificial limits on technical development. But what adherents heard as a message of salvation was denounced as heresy by non-believers like the federal parliament and the national bank.

Free economics was more than just a theory. It encompassed an unpredictable mix of economic and sociopolitical programmatic elements that functioned simultaneously as an ersatz religion. Doubtless it promised more than it could ever deliver. But if in the Baselland canton alone over 1500 free economics adherents could be mobilized, they may well have numbered over 50,000 in Switzerland as a whole.

Looking back, the free money doctrine appears as an episode in economic history that nowadays is dismissed by most economists as a dead-end street. In fact it has neither been finally proved nor disproved whether free money theory could have offered a serviceable basis for a well-functioning national economy. This is why in the past the WIR Clearing Circle has been hesitant to highlight its developmental history. But attitudinal changes of the last few years have led to a general belief that all institutions, and therefore all business enterprises as well, should openly acknowledge their origins and their histories, even if these involve events or modes of thought that no longer fit current norms. Without Silvio Gesell there would obviously never have been a Clearing Circle. Therefore it is just as proper now as it was then to acknowledge him as the intellectual father of the enterprise, regardless of whether his theories have gained general acceptance. For this reason, we offer here the developmental history of the Circle openly and without apology. There is no reason to feel ashamed that a uniquely successful entrepreneurial idea took root in soil that proved otherwise infertile.

Chapter 6. The Founding of the WIR Economic Circle

Thanks to the free money movement's broad appeal, expectations ran high when in October 1934 the WIR Economic Circle Cooperative was brought to life by 16 founding members operating with startup capital of SFr 42,000. By early 1935 there were already 1700 participants, by the end of the year 3,000. Operating within the framework of a solidarity-oriented self-help organization, members were expected to draw as much as possible on other members to cover their goods-and-services needs, in order to trigger additional turnover within the Circle.

These exchanges were mediated by means of interest-free clearing deposits initially created by cash payment [1 SFr for 1 WIR franc] or sale of goods, but before long by the issuance of WIR loans as well. Therewith began within the Circle a cash-free economic circulatory system that supplemented other business activities. The WIR account functioned as a kind of entry ticket into the solidarity activities of WIR users. Many small-to-medium businesses, but also public servants, farmers, and even a few large enterprises spontaneously bought WIR deposits for cash in order to participate in the WIR economic circuit. For them, obviously, a WIR deposit of one franc was worth more than a cash franc.

The organization's dramatic success soon gave rise to a chorus of envious and critical outsiders. Before long the catalog of offered goods and services covered 850 categories. Already in the first year of operation, turnover surpassed one million francs, this amounting to ten times the volume of WIR accounts. In the absence of the Circle, the majority of these sales would either never have come about at all, or would have gone to outsiders [tr. note: i.e. to suppliers who would never have joined the Circle in any event -- ?].

Initial Success of the Economic Circle

A major tool in this initial phase was the participants' registry, which needed to be updated frequently in light of the explosive membership growth. With its help countless new business contacts were established. The need for personal contact with potential business partners led already in the first year to the formation of regional trading groups. To this day these groups continue to fulfill an important function for the membership, since businesspeople's relationship networks often make the difference between success and failure.

WIR trade fairs also date from the earliest existence of the Economic Circle. Already in the founding year, five Swiss cities witnessed the great success of these fairs. The first Christmas exhibition in Zürich in 1935 alone attracted 30,000 visitors.

The Experimental Period

The pioneering years of the Economic Circle were also a period of experimentation. For example, in 1936 purchase coupons in denominations of five and ten Rappen [1 Rappen = 0.1 franc] were introduced with which members could mediate even the smallest of purchases cash-free. These coupons circulated like regular coins, and thus at least in the framework of the Economic Circle could be designated genuine monetary tokens. But they didn't last. In 1938 local trade fairs were set up where payment could be made with special fair coupons. In the same year clearing certificates in denominations of one and five francs were introduced that circulated among the membership like bank notes and thus were simple to manage as exchange media. These clearing certificates were limited to 12 months' validity, and utilized a Gesellbased demurrage feature that required fixing a monthly stamp on the back for the certificate to retain its nominal value. This negative interest feature accelerated their circulation strongly and expanded the turnover volume within the Economic Circle markedly, though not in a way that could be statistically tracked. For this reason, we lack reliable sales data from the early WIR years. Since the WIR central office could not keep the certificates from leaving the official membership circle, nor hinder their sale for Swiss-franc cash, it was later decided to abandon them.

The experimental phase of the Economic Circle was also not spared some failure. In the stormy first years of recovery, regulations governing the granting of credit were altogether too lax; too little attention was paid to standard banking security measures. In 1939-40, therefore, the Economic Circle had to undergo reorganization. The outbreak of

the Second World War, meanwhile, had totally changed the contextual conditions. While in the founding period the main problem was the discrepancy between abundant supply and limited buying power, the war years were characterized by a scarcity of goods – at times complete unavailability – and a relatively abundant money supply. Under these circumstances the WIR clearing exchange lost a lot of its pre-war dynamism. Many members left the organization, and sales volume plummeted. The apogee was reached in 1944, when sales worth only 253,000 francs were realized. The war almost spelled the doom of the experiment, which was saved only by a small group of adherents intent on salvaging the entrepreneurial idea of the Economic Circle for the postwar years.

Chapter 7. Milestones in the Development of the WIR Economic Circle

The development to date of the Economic Circle can essentially be divided into three phases:

- The pioneer phase, characterized by constant innovation in numerous experiments and faced with serious practical hurdles, ran from 1934 to 1952. In this phase a long-term sustainable entrepreneurial concept was developed.
- The second WIR phase ran from 1952 to 1988. It witnessed tempestuous, near-constant growth and the targeted expansion of the branch network, with no major changes of the WIR credit clearing concept. Essentially this phase witnessed the harvesting of seeds sown earlier.
- The third WIR phase, running from 1988 to the present [1998] was and continues to be characterized by conceptual and structural modifications, with numerous innovations. The potential of the original entrepreneurial concept appeared to be running up against ever more limitations, and the management group began to rein in the turbulent growth of the WIR money supply in a targeted way, leading to the need for diversification.

Development Milestones

In the following paragraphs we shall focus on a few significant milestones of WIR's developmental history.

1936: The Economic Circle was subjected to [Swiss] banking law. This appeared unavoidable, as the Circle presided in its early phase over the issue of relatively large amounts of currency and also granted cash loans. For some time the Circle resisted this subjection to banking law for ideological reasons, in spite of the attendant solidity guarantee. It would take nearly 60 years before the Economic Circle openly acknowledged its bank-like nature and began to tap the full potential of that status.

1940: The hitherto very small, exclusive circle of voting members of the cooperative was broadened. Every active WIR participant was henceforth welcome to exercise decision-making power. 1948: End of the demurrage (negative interest) experiment. This decision

rid the WIR credit clearing method of its exotic character and moved the system closer to traditional business principles.

1952: The Economic Circle formally renounced the “free money” [Gesellian] doctrine, therewith freeing itself of unnecessary ideological ballast. Now the cooperative’s capital was free to earn interest, which provided the basis for reliable financing. Sales volume surpassed ten million francs for the first time.

1954: “Silent partner” status was introduced. At first it was intended only as a trial period for new members, but quite unintentionally it led to the long-term development of a very interesting and significant market segment.

1958: After a ten-year break from self-renewal the Economic Circle adopted a new mission statement, avowing its support for the “solidarity of the small- and medium-sized business community through pooled buying power”. Thus the Circle focused its activities on the concerns of small and mid-level businesses, emphasized the self-help nature of those activities, and strengthened the group’s cooperative status. Sales volume surpassed 50 million francs.

1964: For the first time sales volume of over a hundred million francs was reached: a doubling of turnover in only six years.

1973: The Economic Circle adopted strict measures to prevent trading of WIR accounts, and created an effective package of instruments to detect such trade. Earlier, it had been tolerated based on the theory that it created additional turnover and facilitated members’ ability to ride out periodic currency-liquidity bottlenecks. The public perception, however, that resulted from increased market trading of WIR accounts was that WIR money was of lesser quality, since it was offered publicly at large discounts [i.e. in exchange for Swiss francs].

1980, 1984, 1987, and 1991: Turnover levels of respectively 250 million, 500 million, a billion, and two billion francs were surpassed. This marked the provisional end of the period of turbulent expansion.

1992/93: The Economic Circle was provided a new capital base through the creation of cooperative capital of eight million francs. The issuance of the new common shares, which in contrast to earlier practice were now traded at market value on the WIR-internal stock exchange, gained for the Circle approximately 15 million francs’ worth of new own capital. This established a reliable foundation for further entrepreneurial free rein, especially for expanding business activity into cash sales.

1995: The Economic Circle initiated a diversification strategy, deciding to move toward cash sales with the introduction of the “Combi-Card” [presumably an embedded-chip smart card]. Cash transactions, of course, had been part of the WIR repertoire from the start, but they were the exception. As of 1995 this business area was consciously,

officially pursued. The concept “WIR Bank” began to replace the oft-misunderstood concept of the “economic circle”.

1997: The membership list was made accessible on CD-ROM, making it possible to integrate WIR credit clearing transactions into the Circle’s information management systems. In the same year the interest-bearing cash account [Kontokorrentkonto] was introduced as the first classical bank product available through WIR, completing the organization’s transition to true bank status.

1998: An exceptionally attractive savings account option granting minimum 4% interest was introduced. Additionally, the Economic Circle changed its company name, henceforth representing itself externally as the WIR BANK.

Chapter 8. Credit Clearing: the Key to WIR’s Success

From 1934 to 1997 WIR has filled its own market niche with practically no competition, thanks to one single mechanism: the WIR credit clearing system. To understand how this mechanism functions we must bring to mind the problem that it was designed to solve.

The Problem...

During the economic crisis of the 1930’s, large companies and small-to-medium-sized traders as well suffered from bloated inventories and underutilized productive capacity. Sales had plummeted, owing at least in part to consumers’ lack of buying power. Large firms themselves suffered a lack of buying power for capital investments. Underutilized capacity meant insufficient income with no concomitant reduction in fixed costs. Better productivity would have quickly improved matters, since an increase of productivity from, say, 80% of capacity to 90% can mean reaching or surpassing the profitability threshold. Therefore the crucial question became: How can we increase turnover in the face of scarce money, and thereby secure our survival?

... and its Solution

Nowadays when tackling a problem like this, one would first cry out for government assistance. The national bank would need to pump dramatically more money into circulation, thereby jump-starting buying power. But this method is not without risks. Inflationary tendencies could be triggered, which would negatively influence the Swiss Franc exchange rate. Exports would become cheaper, but imports correspondingly more expensive, which could result in a socially undesirable redistribution of wealth. Furthermore, monetary policy measures do not take effect immediately, but with uncontrollable delays and unpredictable magnitude. And they do not benefit all sectors equally. Individual firms could therefore not be guaranteed increased turnover.

Therefore the founders of the Economic Circle chose the self-help route via a union of small and medium-sized businesses with the goal of reducing underutilized capacity

through a cashless barter system. This barter was not to replace the accustomed money commerce but to complement it, thus providing genuine increases in turnover. Self-help has the advantage, compared to ordinary politico-economic measures, that it can be realized quickly and unbureaucratically, and that it serves individuals according to the degree of their commitment. The Lord, one reads, helps those who help themselves. This approach excludes coattail-travelers who profit from a new idea without contributing anything to it. Cashless barter among a circle of domestic firms that take their fate into their own hands has the further advantage that it ideally will have no effect on inflation, interest levels, and the exchange rate. In medicine one would speak of a treatment with no unwanted side effects.

Barter is the oldest form of economic activity. It has never been fully displaced by the adoption of money. People and businesses have always fallen back on the advantages of barter, particularly (though not only) in hard times like the 1930's. But how does one organize a secondary cashless barter trade in an existing money economy? The problem demands a complex solution. The difficulties are not only of a technicalorganizational nature, but have financial, legal, political, and social aspects as well.

Simple Barter Transactions

The simplest thing is direct barter trade between just two parties. This form, however, can only in exceptional cases become the basis of longterm cashless trading between medium-sized businesses, since it is rare for two firms to experience a lasting constant-level need for the products and services of the other. Normally, then, direct barter is utilized only to meet occasional needs. A contractor might build a parking structure for a parking-lot entrepreneur, for example, and be compensated with a truck from the latter's fleet, together possibly with a monetary final adjustment. But the cashless business relationship is not expected to extend beyond that one transaction. Direct barter in most cases has this unique character.

In fact we may still speak of a direct barter transaction when two merchants "balance out" their respective charges to each other and exchange money only to the extent that those charges differ. This form of barter is widespread, though frequently the participants take no conscious note of its barter character. Therefore a statistical tracking of such transactions is impossible. Estimates of their significance to the national economy vary widely.

With cash payment the initiation of a business transaction is unproblematic, since without exception every firm is willing to accept it. But in the case of direct barter the two firms must first find each other, which can engender considerable search costs. Therefore direct barter is inconvenient for small transactions. Bilateral trades normally take place at an order of magnitude of several thousand francs or more. But their potential upward volume need not be capped, and indeed single barter transactions worth hundreds of millions of dollars are well known. Since the initiation of such agreements can be complicated, countless broker firms have come into existence worldwide which live from

commissions off the billions of dollars' worth of trade that they enable. New York and London are the most prominent centers of the international barter trade.

Barter Transactions with More than Two Participants

In theory, triangular direct barter transactions involving three partners can be effected. But it is unlikely that the three would find each other without help. Such transactions will either be planned and carried out by a brokering agency, or they presuppose the existence of a barter organization supported by the potential barter partners themselves, i.e. a closed barter circle. In that case, though, it becomes just as easy to realize manifold barter transactions that no longer need to take place at the same time. With that realization, barter takes on an entirely different character. Sale and counter-sale are completely separated from each other. Instead a multitude of single-sale processes takes shape.

Barter Clubs

By separating the barter process into two separate transactions, practically unlimited possibilities are opened. "A" can carry out cashless purchases from "B" even if B has no need of anything A has to offer. The number of potential traders rises exponentially compared to direct two-party barter. In principle, every member of an organized barter circle becomes a potential customer (and supplier) of every other member. And they may number in the tens of thousands. Barter thus becomes no longer a onetime process as in direct two-party exchanges; rather, a lasting, multifaceted trade relationship characterized by constant trade flows can emerge.

Thousands of barter circles of the type described exist worldwide. They are most numerous in the Anglo-Saxon countries. In the US alone there are over 400. For this reason the English term "barter club" has established itself in other languages as well. A bewildering array of organizational forms and variants exists, some more successful than others. The past is also full of examples of failed (or simply discontinued) organizations. The creation of a barter circle is an entrepreneurial challenge that faces the same kinds of risks as any other newly founded enterprise.

The main problem in organizing a barter circle is that on the one hand, every entrepreneur without exception is eager to accept goods and services offered by others for non-cash payment, but on the other hand the provision of goods and services on that basis is not particularly popular. In barter circles, however, "give" and "take" must maintain an equilibrium. Therefore all barter organizations must develop means to impede taking and encourage giving until a sustainable condition of equilibrium has been established. And that is much easier (and more quickly) said than done.

Perhaps the simplest form of an organized barter circle is found in postage stamp collecting clubs that utilize circulating pools of stamps, and that typically function as follows: Each member contributes his/her own stamp selection into the pool. That collection makes its way in regular intervals from member to member, until it finally returns to the original sender. As the pool circulates, each member is authorized to

withdraw stamps and record the withdrawal. Overall, the number of stamps removed always equals the number contributed, and at any given moment the totality of value-based creditor positions corresponds exactly to the number of debtor positions. Rarely, though, does the trade balance for any individual member equal zero at any given time, so that the problem of settling accounts arises.

Individual settlement of trade balances can take place at the end of a trade cycle in the form of cash payment. Experienced participants, however, develop a sense for how many withdrawals by others they may expect, based on the magnitude and the quality of their offer, and they themselves withdraw stamps of corresponding value. Thus settlement payments are minimized. This “feeling” for equivalence plays an important role in more sophisticated barter circles as well, as indeed in the WIR circle itself.

In the simple form of the stamp trading circle, the central agency – the “bank” or clearing house – has only an administrative function. It possesses neither assets nor liabilities. The barter activity has no effect whatever on its account balance. Accordingly, it also has no financing problems and runs up against no legal restrictions, in particular no conflicts with banking laws.

Function of the Clearing House / Central Office

Such a circular procedure can only function smoothly when the central office monitors transaction traffic and organizes account settling, including collection, in an appropriate way. But the most important condition to be met – and this holds again for more sophisticated barter circles as well – is the mutual trust and rule-based behavior of all members. The collective can be no better than its individual members. The equilibrium of giving and taking in the stamp trading circle stems on the one hand from members’ strong motivation to unload their duplicates and thereby to lay the foundation for cash-free new acquisitions (motivation for provision of services), on the other hand from the rule that at the end of a given trade cycle remaining balances are to be settled with cash payment (restriction of demand for services).

Standard behavior for stamp collectors ought to work also on a larger scale for small and medium businesses with their broad variety of goods and services. However, organizing general barter trade is more difficult, if only because the tool of a circulating commodity pool is inapplicable to most goods, and to all services. It is replaced by the catalog of goods, services, and sources and by the bilateral establishment of contact, initiated by either potential buyers or sellers. The central office can function either as a passive information bank or as an active broker of goods and services.

The “Talent” Experiment

A very simple but interesting barter circle concept was launched in 1993 in the town of Aarau, called the “Talent Experiment”. Its first targets were small businesses and private individuals looking for supplementary income opportunities, or whose “talents” were

lying fallow. For a modest membership fee one gains access to a clearing account with an initial balance of zero. The new member now can sell goods/services, resulting in a positive balance. These plus-accounts must be balanced by equivalent negative balances, however. To provide this negative function, each member is automatically granted an overdraft limit of SFr 700, with higher limits available upon approval by the central office. Disregarding this higher-limit potential, with 800 participating members as of early 1997 [shortly before this writing], in the extreme case we would observe 400 negative balances and 400 positive balances, each worth SFr 700. The central office has neither assets nor liabilities based on trading activities. It offers no loans, so avoids any conflict with banking laws, but only tolerates individual overdrafts chargeable to the other members. Central office costs are covered by annual dues, transaction fees, and by a 6% annual service charge levied on positive balances, while negative balances are not charged. (Silvio Gesell's demurrage doctrine obviously lives on in experiments of the 1990's.)

The Talent Experiment attempts to achieve the desired equilibrium between giving and taking first by limiting the acceptance of services through the general overdraft limit of SFr 700, and simultaneously stimulating the offering of services through the constant devaluation of positive balances. This motivates their owners to search actively and quickly for opportunities to redeem their credits, thus indirectly stimulating service offerings on the part of negative balance holders. In every transaction between two participants with previously zerobalanced clearing accounts, automatically a positive and an equal negative balance are created. The positive balance may be viewed as a money-like means of payment, and that perception gives the system the ability to create money. But the central office itself creates no money. It just sets and applies the rules. From another perspective the simultaneous emergence of a positive and a negative clearing account balance through value exchange may be interpreted as merely a variant of delayed payment schedules together with clearing functions within a closed circle of contractual partners.

Barter circles of the Talent Experiment genre, which have been springing up all over the world since the 1920's in this or a similar form, do have only a limited potential effect. The need to maintain positive and negative balances in equilibrium forces the setting of limits to the value of negative accounts, and thus indirectly to positive ones as well. When the latter are burdened with demurrage, the accumulation of large positive balances by individual members is further actively hindered. Thus larger transactions are de facto excluded, with the result that these organizations are characterized by limited turnover volume and only local or at best regional significance.

Barter Clearing and Information (BCI)

A European example of an internationally active barter circle is the BCI Organization (Barter Clearing and Information, founded 1986). It is active throughout Germany, Austria, Slovenia, and Slovakia. Prospective members first must pay an annual fee. The level of these dues depends on the total turnover of the participant (cash and barter sales); the dues cover all costs of the organization. Accordingly, the entrance threshold has

consciously been set high. Resultingly, only those people join who are convinced advocates of the organization's barter business; and given this fixed-cost basis of membership, the transaction costs of the participants drop as their barter volume rises. This is a further motivation for intensifying one's barter efforts. Each member receives an individually determined overdraft limit, chargeable to the members at large. In extreme cases the limit may be surpass a million DM, but in every case it must be covered either by a bank guarantee or a credit insurance policy. Neither positive nor negative clearing account balances bear interest.

As with a stamp trading club or the Talent Experiment, the BCI central office has a solely administrative function, i.e. it is not directly involved as a trade partner. Neither assets nor liabilities accrue to it as a result of the barter process. The creation of money takes place not at the will of the central office, but exclusively through the members' transactions. Positive clearing balances in members' accounts are always balanced by equal negative balances in those of other members. Legally, then, positive balances are demands made on a collective of debtors, not on the central office. Losses based on default of a debtor can hardly occur, given the obligatory bank guarantee or credit insurance. The central office is a pure service provider without any banking function. Thus it is not subject to banking laws.

The BCI Organization attempts to maintain the equilibrium between receiving and giving primarily by means of a quantitative and temporal delivery obligation. Every participant is pledged to redeem his purchases through sales of equal value within twelve months (in Austria only nine months), or at the end of this period to settle outstanding obligations with cash. The central office automatically applies every sale to the oldest outstanding obligation (according to the first in, first out principle), so that members maintaining regular, balanced business relationships never need to settle with cash. As in any business context, however, one must be prepared for possible blockages of the trade flow. Thus the weak link of the system is the danger that a member with a negative balance might be confronted with unforeseeable cash demands. While members are always capable of controlling their purchases within prudent limits, their sales are always subject to the actions of third parties over whom they have no control. At least in part, then, sales depend on external circumstances that cannot be predicted. The BCI example illustrates the modus operandi of a typical commercial barter club. The Anglo-Saxon barter clubs, however, live primarily not from yearly dues, but from transaction fees that may amount to as much as eight percent of sales.

Chapter 9. Unique Aspects of the WIR Credit Clearing System

The WIR credit clearing system is a barter system like the examples cited. Here too, upon opening a WIR account the new member can immediately establish a positive clearing balance by selling something for WIR, thereby gaining a means of payment for trading within the WIR barter circle. This process, it should be noted, only allows the new member to receive WIR credits from another member. It does not create money. In theory, the new member can also gain a positive credit balance by buying WIR with

Swiss francs. Only a small fraction of the WIR membership makes use of this possibility, however, since establishing WIR credits by paying cash partly negates the advantages of cashless barter.

The creation of positive account balances in a barter circle presupposes the creation of corresponding negative balances. The basic difference vis-à-vis a conventional barter club consists in the fact that negative balances in the WIR system do not come about by the member's utilizing an agreed-upon overdraft privilege charged to the collective membership, but through active loans provided by the central office. The office is authorized by the bylaws to grant loans to individual members against collateral, in accordance with standard banking practice. This implies bank status, and therewith unavoidably the applicability of banking laws.

Thus the WIR account balance looks entirely different from that of a barter club, since the Central Office itself is the reciprocal party for all outstanding positive and negative account balances of WIR participants.

WIR Loans as Basis of the Clearing Process

But while a conventional lending bank first must receive customer deposits before lending them out again – and thus doesn't create credit itself, but only transfers it -- , the WIR Central Office can grant loans without having received corresponding customer deposits first. Thereby it can freely create money-like clearing balances and put them into circulation. In contrast to normal bank loans, a WIR loan does not cause any draining off of liquidity, because all "circulating" WIR money in fact never leaves the Central Office, but rather stays on its books in its role as creditor. Thus upon the granting of a WIR loan, an asset and an equal liability are created simultaneously. Loan recipients, at the moment the loan is activated, take on WIR assets and liabilities of equal amount. They will, however, quickly put their assets into circulation through purchases, 1 [translator's note: This formulation is misleading. Conventional banks lend out much more money than they receive in deposits, in accord with fractional reserve banking principles. This "multiplier-effect" money is indeed created by the bank that makes the new loan.] so that in essence only their obligations remain, while the money-like WIR assets circulate among the other participants. Thus WIR members always show either a positive or a negative WIR balance, except when they hold more than one WIR account.

Only the tool of autonomous money creation through the granting of credit allows a barter circle to gain full access to the practically unlimited potential of the barter market. For example: Under the Talent Experiment, the 700 franc limit to negative account balances results in a de facto cap of positive balances among all the 800-odd members at about 30-40,000 francs. By contrast, in the record year 1994 the positive balance of all WIR members amounted to over 900 million francs. When employing uniform overdraft limits, to be safe the central office must gauge its generally allowable negative account balances according to the weakest link in the chain. With individually arranged overdraft limits secured by bank guarantees – as in the BCI Organization – strictly speaking, a division of labor exists between the barter central office and the bank, in which the bank

bears the risks and participates in the earnings accruing from corresponding commissions. When the central office itself plays the role of a loan bank, it bears the credit risk itself. In granting loans, though, it will serve its own interest by screening applicants carefully for creditworthiness and the quality of the proffered collateral securities. When in spite of this precaution loan defaults arise, in accordance with banking law the Bank's internal collateral [*Eigenmittelunterlegung*] serves as a cushion that protects non-credit customers against direct losses. Thus their accounts are as secure as deposits with a savings and loan company.

Active credit creation by the WIR Central Office necessarily also leads to an appropriate interest assessment for its loans, although in contrast to a bank the Central Office incurs no refinancing costs, aside from those engendered by the internal collateral. When in a simple barter club all participants are granted an interest-free uniform overdraft limit, no one is favored and no one penalized. When with individually established interest-free overdraft limits a balance is prescribed between provision and consumption of services over a period of months, then de facto not all participants are treated alike. However, the mobilization of high overdraft limits on the part of single participants, in view of the automatic plusminus balance of the system as a whole, serves the short-term interests of all other participants as well, so that it is possible for the system to function without interest payments. On the other hand, when [as practiced by the WIR Bank] longer-term loans are granted to a smaller selected group of members, this preferential treatment must be balanced out by charging a reasonable, negotiated interest fee. Since the WIR Bank operates in competition with conventional credit banks and a WIR loan is less universally useful than a cash loan, the cost of WIR credit must in any case be kept lower than normal interest rates.

Advantages of the WIR Concept

Structuring a barter central office as a credit-granting bank may be regarded as the pinnacle of development of the barter-club concept. In all, a barter circle based on the creation of credit is superior to a simple barter club without bank-like involvement in four ways:

- First, by means of the loan business the volume of the account balances that serve as means of payment for the participants can be controlled by the central office. A simple barter club with uniform limits gives its central office practically no such influence, and one with differentiated limits only a little more. The mere setting of overdraft limits creates no means of payment per se, but only allows them to be created through transactions with third parties. In the WIR system, by contrast, every franc of WIR credit automatically and immediately becomes a franc of WIR payment medium. Conversely, every franc of repaid WIR credit results in an immediate, corresponding reduction in the amount of circulating means of payment.
- Second, this control mechanism allows for the creation of an economically significant volume of means of payment, and thus of the needed liquidity for an intense level of barter business, one that can make a significant difference in the economic activity of the

individual participant. Thus it comes as no surprise that both in terms of turnover/sales and above all in relation to the size of the national economy, the WIR system with its credit-granting central office is the largest barter system in the world.

- Third, the loan business generates welcome interest earnings that reduce costs for the other participants. In 1997 these earnings totaled 18 million francs, from which the non-borrowing customers of the WIR Bank also profited, thanks to the cross-subsidization of the account balance activity through the loan business.
- The most important advantage, however, is the fourth: the fact that the loan business is ultimately the most powerful driving force behind the barter business. Experience has shown again and again that in simple barter clubs, the members' activity after a period of initial enthusiasm with time falls off or even ceases entirely. With the WIR account balance trade this is technically impossible, since the WIR credit customers at expiration of the loan term pay back their loans in WIR, and up to that point must be building up their WIR accounts through regular deposits. This means that they must be selling their goods/services for WIR accordingly. Even if the non-credit traders' activities were to go completely dormant, still every franc of WIR credit would automatically lead to at least two francs' worth of WIR turnover, i.e. to the spending of one franc following the granting of the loan and to the spending of a second franc to create the basis for the loan repayment. Thus for the non-credit customers of the WIR Bank the loans granted amount to a guarantee of both sales for WIR and purchases with WIR in like quantity, without their having to take any particular conscious measures to promote this commerce.

Maintenance of Equilibrium under the WIR Concept

The equilibrium between giving and receiving in the WIR account balance trade, in contrast to the numerous organizational forms of conventional barter clubs, is based on a uniquely effective mechanism:

- Purchases are kept in check on the one hand by the absence of interestfree overdraft limits, and on the other by the interest requirement for WIR loans. This makes it impossible to build up the high volume of free shortterm debt characteristic of conventional barter clubs.
- The offering of goods and services for WIR is promoted by the fact that every official participant is obligated to accept payment in WIR for at least 30% of the first 2000 francs of the selling price, and every loan holder must amortize his/her debt by selling goods/services for WIR.

The autonomous money creation of the WIR Bank through the granting of credit secures for it a unique competitive advantage vis-à-vis both standard credit banks and conventional barter clubs without bank status. Through this mechanism it can access potential otherwise only available to national banks. Thus it is hardly surprising that the WIR Bank's monetary creation mechanism over the years has aroused its share of both criticism and envy. We shall investigate later the extent to which this criticism is

justified. First, however, we shall take a closer look at the business activities of the WIR Bank and their effects on the membership at large.

Chapter 10. The WIR Credit Clearing System from the Members' Perspective

Modus operandi of the Central Office

The activities of the WIR Bank can be understood in simplified terms through a juxtaposition of its balance sheet and its profit-loss statement. As of the end of 1997 the positive side of the balance sheet was dominated by WIR assets and mortgage assets totaling 885 million francs. They match the loans received by the WIR members, upon which the latter must pay interest. The interest stemming from the loan business appears on the profit-loss statement as approximately 18 million francs, representing average interest costs of 2.0%. Dominant on the liability side of the balance sheet, amounting to 844 million francs, are the WIR obligations to the members, i.e. the circulating WIR money. These obligations, being interest-free, appear in the profit-loss statement as a finance cost of zero percent. The WIR money furthermore is the basis for the profit from credit clearing activities, totaling 20 million francs.

Why, though, are the outstanding WIR assets around 41 million francs higher than the WIR liabilities, given that in the past assets repeatedly had to be written off as uncollectible? -- The WIR Bank has itself always been an active participant in WIR credit clearing activities. It can sell as well as buy goods and services. When it makes investments or buys goods and services from members, its WIR liabilities increase. Additional WIR money is created and brought into circulation. When it sells services in exchange for WIR, e.g. credit clearing services (sales commissions for coop members), loan services (loan commissions, in the past sometimes also loan amortization), or media services (advertisements in the WIR media), these sales have no influence on the extent of the outstanding WIR assets, but they do reduce the amount of circulating WIR money. WIR money is removed from the market.

Over the decades the WIR Bank has sold considerably more services for WIR than it has received. That is why today on its balance sheet WIR assets are greater than liabilities. This has the effect of increasing security. For if the WIR credit clearing system should ever be shut down, the difference of 41 million francs would have to appear in the form of official currency. The Bank's company capital would then be completely covered by holdings in Swiss francs.

Aside from its WIR assets, the active side of the balance sheet also shows liquid assets, claims, financial investments and stock shares in national currency worth a total of 140 million francs. Juxtaposed to these in 1997 were proceeds -- in national currency, of course -- of 15 million francs, rendering a gross profit of roughly 11%. The remaining positive positions, particularly the tangible fixed assets, support the Bank's business activities and are valued at 38 million francs.

In addition to its WIR liabilities, the Bank's balance sheet also shows cash liabilities of 35 million francs. This entry shows the effects of the cash account that was introduced in October 1997. The WIR Bank's entry into cash dealings will lead to a rapid growth of cash liabilities that will form the basis for the granting of cash loans.

In terms of volume the second largest entry on the liability side is the company capital, valued at 100 million francs. In contrast to the WIR assets it is not cost-free, since the capital donors, i.e. the common stockholders, expect appropriate proceeds in the form of net profit. The net profit in the amount of 7 million francs can thus be viewed as a block of expenses caused by the company capital; thus the on-the-books expense rate amounts to about 7%. Like all private economic enterprises, the WIR Bank strives to keep its own capital costs as low as possible. This means that the price-earnings ratio, which closed in 1997 at only 5.7:1 with a market capitalization of 40 million francs, ought to rise. This again would serve the interests of the common stockholders, who over the medium term would expect significantly higher prices.

The Advantages of the WIR Membership Community

From the perspective of the circle of WIR members, all positive account balances of the WIR Bank are liabilities and all its liabilities are positive account balances. If one were to summarize the balances of all WIR credit clearing participants in one consolidated account, in cross-section it would show the positions represented in diagram 3. The totality of WIR members at the end of 1997 held long-term WIR credits (stable advances) amounting to 792 million francs, plus short-term WIR credits (cash/current accounts) amounting to 93 million francs. On the assumption that equal advances in national currency would cost on average 6% for long-term and 7% for current account credit, while WIR loans carry only 2% interest, we see that the membership at large enjoys interest savings of approximately 36 million francs. Presuming average long-term interest proceeds of 1.5% on payment media held in conventional currency (i.e. roughly 13 million francs, were the WIR holdings conventional money), and recognizing that the membership's WIR holdings therefore represent opportunity costs of this magnitude, the adjusted ultimate benefit to the membership at large may be figured at 23 million francs, roughly three times the reported net profit of the WIR Bank.

The members' account-balance benefit, however, is only the proverbial tip of the iceberg. The primary benefit is enhanced sales and profits. In 1997 WIR turnover reached a volume of 2.1 billion francs. Assuming an average acceptance rate of 40%, the total turnover volume involved thus amounted to roughly 5.2 billion francs. If it were proven that this considerable turnover volume is attributable solely to participation in the WIR credit clearing process, i.e. that it represents from the members' viewpoint genuine additional sales, then overall, even assuming only a modest average rate of sales profitability for the membership at large, additional profits amounting to hundreds of millions of francs have been realized.

Types of Additional Turnover

The cited turnover volume of 5.2 billion francs, however, is not pure increase in turnover for the WIR members. Basically it can be reduced to the following four turnover categories:

1. Turnover that would have taken place in the same amount even in the absence of the WIR institution (i.e., WIR sales seen as mere substitution for lost cash sales);
2. Turnover based on domestic rather than foreign transactions, owing to the purely Swiss nature of the WIR (i.e. WIR members' purchase of Swiss goods and services instead of imports);
3. Turnover based on "buy-local" solidarity considerations that promote purchasing from small and medium-sized Swiss firms as opposed to large corporate sources;
4. Turnover stemming exclusively from the cash-free barter character of the WIR credit clearing system, i.e. that would never have occurred without WIR.

From the perspective of the closed circle of WIR members, only categories 2-4 represent genuine increased turnover that also yields additional profit. Categories 2 and 3 represent redistribution of market share to the benefit of the WIR membership, while category 4 implies enhanced GDP for the Swiss economy at large, not just growth generated exclusively for WIR members. It is impossible to measure, however, the distribution of the 5.2 billion francs over the four categories, as in order to do so one would have to research the historical development of the 1.8 million book-entry orders and the 500,000 instances of WIR card use. Nonetheless it may be assumed that all four categories have contributed significantly to total turnover.

A survey of the members of the relatively small German BCI barter circle in 1991 showed that 42 percent of the members made new business contacts, 30 percent gained new suppliers and 34 percent new customers. In a survey conducted in 1994 for the Swiss Trades Alliance [Schweizer Gewerbeverband] focusing on WIR money, 79 percent of the respondents indicated that their expectations of gaining new and keeping old customers had been partly or entirely fulfilled. Among official WIR members 92 percent so indicated. Increased turnover was reported by 60 percent of the respondents. Unfortunately they were not asked how many of them had succeeded in avoiding turnover reductions, i.e. whether they had at least been able to hold onto their existing customers. Logically it would have been at least another 19 percent, since 79 percent of the respondents indicated that their expectations had been fulfilled. But regardless of one's interpretation of the survey results, they clearly demonstrate beyond a doubt the turnover-increasing effect of participating in cash-free barter commerce.

Manifest Additional Earnings of WIR Members

The genuine increase in turnover for the WIR membership must be responsible for a significant portion of the cited 5.2 billion francs. But how much *profit* is actually created by the increased turnover depends to a large degree on how one views it. If cash sales and cash-free sales are viewed as equivalent transaction categories, then the profit contribution of the additional turnover created by WIR can be reckoned by multiplying that additional turnover by the average return on sales. A billion francs' worth of extra sales at an average profit of five percent would render genuine additional profit of 50 million francs. If one views the additional turnover generated by WIR as only a serendipitous accidental gain over normal cash sales, so to speak as frosting on the cake, then it should be multiplied not by the average profit margin but by the maximal profit margin, which depending on the business may reach 30% or more. Even modest estimates of the extent of genuine increased turnover and the profit margin to be applied then result in a level of additional profit for the WIR membership that goes far beyond the 23 million francs cited earlier as the system's balance sheet benefit. With that, we arrive at the answer to the question put at the beginning of this discussion regarding the sense and purpose of the WIR credit clearing trade mechanism:

- **WIR is primarily an instrument for generating increased turnover, both by creating additional economic activity and by shifting market share to the benefit of the WIR membership with the goal of realizing increased profits.**

WIR is thus primarily a marketing tool rather than a financial management tool.

Chapter 11. WIR Credit Clearing Viewed as an Optimization Problem

Problems of barter circles that are too small...

As previously demonstrated, WIR participants enjoy genuine increased turnover in three out of four turnover categories and thus earn additional profits. These additional profits are not automatic features of all barter circles or whatever type and size, but result from particular preconditions. On the one hand, if the participants in a barter circle are too few, the probability of linking supply with demand will be slim, and a constant flow of trade at a significant order of magnitude cannot be generated. The potential for creating both enhanced turnover and a shift of market share benefiting the participants will be insufficient. A barter circle that consisted of just one participant could generate no turnover at all. One with just a few participants will soon come to a halt, after at best a brief period of initial trade. A barter circle only begins to create practical advantages after reaching a critical mass of participants. The threshold size of that critical mass is estimated variously by different commentators, ranging from several hundred to a few thousand. The innumerable failures of barter ring experiments over the last 60 years result to a large extent from not having reached this critical mass. The WIR system reached and surpassed it decades ago. Judged by the criterion of the most intensive

exchange flow possible, the attractiveness of a barter ring grows in direct proportion to its size.

... and ones that are too large:

However, a barter circle's effectiveness is influenced not only by its "floor" membership, but by a ceiling as well. Since the WIR Bank is the largest is the largest barter system in the world, this ceiling question could easily become problematic. If all market participants in a given national economy were simultaneously members of one and the same barter circle, then in theory turnover could grow as a result of the diversification of trade mechanisms, but it could not grow as a function of shifts in market share, since a market share of 100% cannot be increased. Thus a functional barter circle must remain small enough to realize increased turnover through gains of market share, i.e. through directing sales away from non-members. From this perspective a barter ring's attractiveness grows in direct inverse proportion to its size. A simple numerical example will illustrate this point.

In a closed market where a single economic product is traded, assume 100 participants of equal size, among whom 90 are organized in a barter circle. Further assume that one of these members needs the product and would like to acquire it through cash-free credit clearing. Using the registry of members he decides upon supplier X, i.e. one of 89 other participants in the barter circle. If he had wished a cash transaction, he could have chosen from among 99 suppliers – ten more. The probability, then, of the cash-free transaction redirecting the sale from an outsider to a barter member and thereby creating increased turnover within the barter circle, amounts to 10:99, or roughly 10%. Correspondingly, the probability of merely redirecting the sale from one member of the barter circle to another, producing no increase of sales volume within the circle, stands at 89:99 or roughly 90%.

If on the other hand only ten participants within the assumed closed single-product market are organized in a barter circle, and if the transaction is to be cash-free, then the purchaser can choose his/her supplier only from among nine other participants. In comparison to the cash transaction, for which the choice of supplier could have been made among 99 other participants, the probability of redirecting the sale from an outsider to a member (and thus increasing turnover within the circle) stands at 90:99, or about 91%. In a market made up of various-sized suppliers, the attractiveness of a barter circle results not from the number of participants, but from the share of total sales represented by the (cashfree) sales carried out within the circle. This holds also for individual business sectors. Therefore, in order for the WIR credit clearing trade to remain attractive, it is absolutely necessary for the WIR-based share of total sales in any sector to remain low enough for shifts of market share benefiting WIR members (and at the expense of non-members) to continue to take place. Additionally, the more evenly WIR turnover is spread over the entire national economy, the greater the benefit to the WIR membership.

WIR Turnover by Trade Groups

The WIR Bank differentiates among six main areas of activity, or WIR Trade Groups. In 1997 in the construction trade alone turnover of roughly 560 million WIR francs was realized. Claiming second place was the retail trade, with turnover of roughly 457 million francs. The smallest trade group, with WIR turnover of about 68 million francs, was the hotel and tourist industry. The WIR credit clearing system cannot possibly cover the entire national economy evenly, since large parts of the Swiss gross domestic product are realized in areas not characteristic of small and medium business. Chief among these areas are public administration and the para-governmental energy and water utilities, as well as the banking and insurance realm which is almost completely dominated by corporations. In fig. 5 the typical areas of activity of the WIR Bank are highlighted. Taken together, they represent roughly 65% of the entire Swiss GDP spectrum (before adjustments). This implies that the WIR credit clearing system is *de facto* conceptually limited to two-thirds of the national economy.

While the WIR Bank is able to calculate WIR turnover in the six primary trade groups right down to the last *Rappen* [≈the last penny], no aggregated turnover data for the corresponding areas of the Swiss national economy at large are available. It is possible, however, to extrapolate these officially unavailable data fairly accurately (cp. fig. 6). The most recent data on the structure of the genesis of the Swiss GDP, the so-called “Production Account” of Switzerland, relate to the year 1994. These data provide as a point of departure the entire GDP, i.e. the difference between total turnover and the cost of the requisite advance inputs, in billions of francs, as well as the employment figures for the six WIR trade groups. No distinction is made here, though, between wholesale and retail trade. The production and value creation statistics based on the evaluation of a representative sample of bookkeeping results of Swiss companies for 1994 provide turnover data per employee typical of each business sector.

Data from the two sources cited allow us to see the relations between the consistently higher turnover rates and the considerably lower gross productivity figures in the WIR trade sectors; for the differentiation of retail versus wholesale trade we rely on data emanating from the economic study of Northwest Switzerland for the year 1994. Although this study provides only data on net productivity per fulltime job for the two missing areas, we can extrapolate from these data to determine the gross productivity per employee. If we piece together all data in the manner thus outlined like tiles in a mosaic, the result is the computation diagrammed in fig. 7 of the share of the extrapolated total turnover represented by WIR turnover in the six WIR trade groups.

On average in 1994 the WIR turnover in all six WIR sectors amounted only to 0.37 % of the corresponding total turnover. Earlier estimates had arrived at a considerably higher share. But they were based on comparisons of the effective WIR turnover with turnover estimates of individual trade sector associations. Since only those enterprises that had joined to form associations were covered by this study, the resulting estimates tended toward the high side. On the assumption of a 40% average acceptance rate of WIR payment, and given the WIR turnover share of 0.37%, the total trade volume within the

WIR barter circle can be computed as two and a half times 37%, or 0.925% of the total turnover. Thus overall the precondition for the realization of higher turnover inside the WIR barter circle by redirection of turnover at the expense of outsiders is met in ideal fashion.

The desire for the greatest possible uniformity of distribution of WIR turnover among all eligible sectors of the Swiss economy has likewise been well fulfilled. The share of WIR turnover in the retail trade (0.55%), hotel and tourism trade (0.41%) and service trade (0.41%) sectors lies very close to the average. The fact that in the wholesale sector a WIR turnover share of only 0.17% has been achieved, can be attributed to the structure of this sector, dominated as it is by large corporations. A similar conclusion is justified in the manufacturing/production/crafts sector, which encompasses most Swiss corporations and furthermore is strongly export oriented. WIR trade is not applicable to the export sector.

Even in the construction industry WIR turnover is less than 1.5%

In 1994 the WIR share of turnover surpassed its average only in the construction industry, with 1.48%. Three factors may have played a causal role. First, the construction industry is an area populated almost exclusively by small and medium-sized firms, and thus positively predestined for a high volume of WIR trade. Second, the export share of the construction trade is disappearingly small and the domestic share, in which WIR money can be employed, correspondingly large. Third and last, the granting of credit to the industry provides it with a key role in the creation of WIR money. The strict security requirements of the WIR Bank for granting credit leads to a high percentage of its loans being secured with mortgage coverage. At the end of 1996 this share amounted to over 70%, of which the lion's share of the mortgages resulted from construction loans. Clearly, if construction loans are a significant tool in the creation of WIR money, this fact will necessarily manifest itself in a correspondingly high share of WIR turnover in the construction industry.

A WIR turnover volume of around 1 percent means that at an average WIR price acceptance of 40%, the portion of barter exchange happening within the barter circle amounts to only 2.5% of the turnover in the industry, and thus that the probability of redirecting turnover streams from outsiders to WIR members amounts to around 97.5%. Therefore the conditions for achieving added turnover and profits are still almost ideally met. This is of course only the case when members undertaking business transactions with each other make use exclusively of WIR.

To the extent that WIR members carry out pure cash transactions amongst themselves, the border between the members' community and the outside world is blurred, and the barter circle loses part of its exclusivity and the advantages of barter trade. In the extreme case, if in a particular trade branch the WIR turnover volume reaches only 1%, but all sellers are simultaneously WIR credit clearing participants, then no more outsiders exist whose purchases could be redirected to members of the barter circle by virtue of WIR use. In this theoretical case, WIR no longer functions as a marketing tool for producing

added turnover, but merely a cashenhancement tool functioning only as a medium of payment.

Importance of Obligatory WIR Acceptance

Viewed against the background of this danger, the obligation of official members to accept up to 100% payment in WIR appears in a completely new light. This obligation creates clear boundaries between the circle of members and the outside world, and secures the theoretical advantages of barter trade. Those boundaries are blurred, however, in the case of “shadow” participants who do not observe the acceptance obligation. For the system to function optimally, these shadow participants must voluntarily use WIR in as many transactions as possible with other participants. The self-discipline required by this state of affairs, which cannot be assured by regulatory means, is one of the few weak points of the WIR credit clearing system.

Chapter 12. WIR Credit Clearing from the Perspective of Fiscal Policy

The unique ability of the WIR Bank to provide new payment media via the granting of credit and the simultaneous creation of WIR money has occasionally given rise to the criticism that the WIR Bank represents an incalculable disruptive factor for the Swiss National Bank’s fiscal policy, since it is the only Swiss institution aside from the National Bank able to create money. As of late 1997 the WIR membership controlled WIR accounts totaling 844 million francs, which at any time can be employed as a money-like medium of payment. In order to accurately judge the fiscal policy implications of a payment medium of this volume, we need first to clarify the overall economic order-of-magnitude framework within which to judge it.

The so-called “circulating cash supply” [Bargeldumlauf] , i.e. essentially all outstanding Swiss bank notes and coins that circulate freely among the public aside from the banks and the postal service [which has its own banking branch – translator’s note], as of late 1997 amounted to 28.9 billion francs. Thus the WIR money supply amounted to a little over three percent of the circulating cash supply. WIR money, however, is of an entirely different nature from cash money, since it does not circulate freely but exists only as a bookkeeping entity. In the Economic Circle’s early period, when banknote-like clearing certificates and coin-like clearing stamps circulated among the WIR membership, one could have spoken of a certain similarity between circulating cash supply and WIR money supply; that similarity ended in 1948.

WIR money supply less than 0.5% of M1

A significantly closer relationship exists between WIR money and the so-called M1 money supply, which according to the National Bank’s definition comprises the totality of those Swiss financial instruments that can be utilized as recognized payment media with minimal transaction

costs. This M1 money supply contains in addition to circulating cash all domestic demand deposit accounts with banks and the postal service, as well as that portion of deposits in savings accounts and other deposit accounts that is retrievable on demand and thus also available for use as a payment medium. M1, so defined, thus comprises all payment media that like WIR money are available without time limitations or advance notice requirements. As of late 1997 the M1 money supply amounted to 185 billion francs. Therefore the WIR money supply corresponds numerically to only 0.46% of M1. Moreover, in terms of fiscal-policy significance this percentage must be viewed only as the extreme upper potential, since, first, the applicability sphere of WIR money is not as universal as that of cash, and second, the M1 money supply also includes the circulating cash itself, meaning that M1, unlike WIR money, is not limited to book entries.

It would be entirely permissible as well to judge the finance-policy significance of the WIR money supply in terms of higher levels of money supply aggregation, e.g. M2, which adds to M1 all savings account deposits, or M3, which additionally comprises all time deposits. In practice, WIR money is often used in sectors and situations where lengthy payment periods are standard even for cash transactions. Goods and services under such circumstances may still be received when no “sight” payment media are present, but only time-limited contracts, e.g. threemonth obligations. As a segment of M2, which as of late 1997 amounted to 392 billion francs, the WIR money supply made up 0.22%; as a segment of M3 (472 billion francs), 0.18%.

Slight fluctuations of the WIR money supply

In any event, for the National Bank’s fiscal policy it is not the outstanding WIR money supply *per se* that represents a potentially disruptive factor, but only the amplitude of its fluctuations. Official fiscal policy could be disrupted only by large changes in the WIR money supply. The disruptive potential that might conceivably result from WIR money supply changes can be estimated via a comparison of the effective fluctuations of the M1 and the WIR money supply. If we define the fluctuation spectrum of the two money supplies as the difference between the highest and the lowest monthly values over the span of one year, it turns out that the average WIR-money spectrum from 1994 to 1997 amounted to approximately 22 million francs, that of M1 money approximately 16.5 billion francs. The WIR-money spectrum thus made up merely 0.13 % of the M1 spectrum. The disruptive potential of WIR money is in fact even much smaller, given that in 30 of the 48 months under examination the WIR money supply moved in the same direction as the M1 supply, and counter to it only in the other 18 months. In 14 of these 18 months, furthermore, the WIR money fluctuation amounted only to tenths of a percent; only in four months did it rise above 1%. And significantly, these four notable changes of the WIR money supply all took place in the contraction/negative-growth direction, making them even less a concern from the perspective of fiscal policy. In sum, then, we can assume that not just the WIR money supply in general, but in particular its fluctuations, are entirely insignificant in fiscal policy terms.

WIR money not a fiscally disruptive factor

Thus a reining in of the WIR system via legislative action could be justified not by material arguments, but solely by legalistic ones. Even then, one should take account of the fact that the WIR system serves not only its own membership, but the entire economy as well, since like every other barter-trade organization it supplements conventional economic trade and thus facilitates jobs-creating transactions that otherwise would not transpire. And finally, the WIR Bank in its role as a business enterprise is just as valuable to the national economy as any other enterprise.

Chapter 13. Barter: An Economic System with a Future

Barter may be the oldest form of economic activity, but it is in no way antiquated. Over the last decades barter has experienced a true renaissance worldwide, and many innovations have emerged. The economic importance of barter trade in its diverse manifestations is much greater than generally assumed. Experts believe that some form of barter procedure may be involved in 15 to 30 percent of trans-border world trade. For individual countries and regions the proportion may be much higher. In total, the global trade volume based on barter-like transactions may reach the order of magnitude of a trillion dollars. All such estimates share an unusually wide margin of error, however. It is due not just to difficulties in statistical sampling, but more particularly to the bewildering variety of barter-like transactions.

Barter: Ancient yet modern

Barter plays an important role in the domestic trade of individual countries as well, though its share of the total appears to be considerably smaller than in international trade. For the U.S., for example, a market share of 15% is often mentioned, with specific sectors showing much higher ratios. No reliable estimates exist for Switzerland. But one may assume that here too, barter procedures are widespread, and that they reach economically significant orders of magnitude.

Barter is in no way limited to the classical trade realms. Indeed, barter transactions can be observed in all economic areas, though they are not always recognizable as such at first glance. Every convertible bond, for example, is based on a conscious barter transaction, in that bonds may be traded for stock shares. But shares are also bartered for other shares, especially in the case of acquisitions. Every year stocks valued between 500 and 800 billion dollars are traded in this way, and the trend is rising. As a recent example, witness the takeover of Winterthur Insurance in 1997 by the Credit Suisse Group via stock barter. This one barter transaction alone corresponded to a total value, at the time of the announcement, of 13.5 billion francs – roughly 600% of total WIR turnover that year.

Barter by the trillions

Greater by far is the extent of so-called “swap trades”. On the swap markets financial contracts in diverse currencies and/or with varying interest conditions are traded. At the close of 1995, according to statistics of the Bank for International Settlement (BIS), pending swap transactions totaled an almost unimaginable 18 trillion dollars. An example of this kind of transaction is the loan assumed by the Black & Decker Corp. from 1994 to 1996 in the amount of \$250 million, at 7% interest. In order to reduce the effective interest costs, the company placed this loan not immediately on the market, but traded it first in four slices for variably structured financial contracts. Three of these alternative contracts were formed as obligations at variable interest, the fourth as a yen-denominated bond with a firm interest rate of only 4.79%, but with additional currency risk. In the end, by trading the relatively high-interest conventional loan for less standard obligations, Black & Decker expected to achieve nearly a one-third reduction of its \$17.5 million annual interest payments. Over the entire term this corresponds to savings of approximately \$60 million. The trade partners, in exchange, took over the interest payments on the 7% loan and in this way protected themselves against unpredictable interest and currency risks on their existing obligations. Whether the strategy ultimately paid off for B&D, however, will only be known authoritatively on Feb. 1, 2006.

In cross-border global trade, barter transactions are to be found primarily in areas where foreign trade is managed entirely or partially via official agencies or governments. This is the case both in countries that lack convertible currencies and wherever governments themselves act as clients -- especially in weapons sales, but also in connection with large investments such as harbor construction, power stations, communications systems, aircraft, locomotives, or fertilizer production facilities. Anyone hoping to do business as an exporter of the respective products is therefore almost inevitably obliged to use barter instruments of one sort or another.

Barter “compensation” transactions: A modern trade system

Armaments programs provide the main context of Switzerland’s own barter transactions. From 1975 to 1996, 39 contracts for procurement of arms from abroad were concluded in which the source countries obligated themselves to accept barter trades worth approximately 6 billion francs. In this case goods are not traded for goods; rather, the purchase of arms via conventional currency transfer is contractually “compensated” by the sale of Swiss manufactured goods to the arms-supplying country. Primary beneficiaries are Swiss machine tool manufacturers, who either gain favorable terms for orders from the foreign firms that sell arms to Switzerland, or are allowed to compete on an equal footing with domestic firms for contracts offered by the government of the source country. To date, the largest such compensation transaction involves the delivery of 34 F/A-18 Hornet fighter planes between 1997 and 2003. Compensation contracts total approximately 2.2 billion francs. This is the value of the contracts awarded to Swiss enterprises under the auspices of the acquisition programs of the F/A-18 Manufacturers’ Consortium.

As is the case with goods and services sold for WIR, we cannot identify precisely which export contracts stem from participation in a barter/compensation program, or conversely whether they would have been actuated even in its absence. But in either event, the emergence of the contract brings a significant competitive advantage to the enterprise in question. As a matter of competition enhancement policy, it is of course regrettable that ultimately only a small number of Swiss enterprises can profit from compensatory transactions. Nonetheless, the national economy as a whole is well served by this mechanism, since according to conservative estimates by the armaments agency the government receives taxes to the tune of roughly ten percent for all additional foreign sales.

Many exported products of developing countries are themselves in essence quasi-payment media. Gold, diamonds, crude oil, or copper are just as good as cash money. Anyone delivering turbines for crude can easily sell the latter on spot markets, sometimes already at the closing of the transaction on a buy-forward basis. Of course, the trading partner could do the same on his own account. This is why barter transactions of the type “investment goods for quasi-payment-media” have lost favor over the last few decades: They offer neither partner an appreciable competitive gain. Reciprocal shipments of, say, peanuts, goat hides, frozen sea fish, or even easily-spoiled fresh mangos may place much higher demands on marketing techniques; but anyone with easy access to resale of such goods can parlay that access into a competitive advantage in the struggle for attractive accounts.

Multilateral barter trades

Instructive is the case of Daimler Benz, who delivered trucks to Rumania in the ‘80’s. Rumania had no foreign exchange, and DB was not interested in Rumanian currency. So payment was made in Rumanian jeeps which, being unmarketable in Europe, were shipped to Ecuador in exchange for bananas. The bananas eventually landed at a German supermarket chain that sold them to German consumers. Thus the goal -- trucks for deutschmarks -- was reached via a detour. The final result of every barter trade, even the most complicated ones, from a bookkeeping perspective always corresponds to the direct sale of goods for currency.

Export-oriented large enterprises have long recognized that while barter trades of this sort are clearly more difficult to arrange than cash sales, they open up markets that otherwise would remain closed. Barter is therefore employed in a targeted way as a marketing instrument. ABB in Switzerland, for example, maintains its own barter department, whose task consists of the planning and implementation of all kinds of international barter transactions. Every year new obligations worth \$300-500 million are undertaken which trigger additional turnover in the order of \$2-3 billion. ABB doesn’t wait passively for barter offers from potential customers, but actively seeks out new business opportunities. If, for example, market research shows Mongolia to be a potential customer for power plant equipment, but a foreign-exchange-mediated delivery is impossible, then the ABB specialists on their own initiative seek sales possibilities for Mongolian products on world markets and then offer the Mongolian government perhaps

a barter deal of power plant equipment in exchange for goatskins. The latter then are made into leather in a third country, and in a fourth country into shoes, which then are shipped to a hard-currency country and sold. Obviously such transactions require a lot of expertise to arrange.

Offset transactions

The worldwide trend from seller's to buyer's markets of the last few decades has led to completely new trade modalities. Frequently goods are no longer traded for goods, but purchase agreements offered by the buyer are made contingent on counter-performance by the seller. In effect, market access is traded for additional performance. Take, for example, the delivery of 36 ADATS [air defense anti-tank system] units by Oerlikon-Bührle to the Canadian government. Oerlikon-Bührle hoped by this deal to force a breakthrough for a new product generation. Therefore the customer was in a relatively good bargaining position, and succeeded in securing as counter-performance from the seller a factory in Canada that opened 350 new jobs and an investment volume of over 200 million Canadian dollars. Such arrangements, also known as "offset" transactions, nowadays play an important role in international marketing of investment goods. The customer was looking not only to create new job opportunities, but especially to gain new technological expertise. As a further example, practically the only successful exporters to China nowadays are those that invest in China itself.

With exceptions such as Cuba or North Korea, domestic trade in all countries nowadays takes place on more or less free markets. Ordinarily trades are of the money-for-goods type. But even in countries with hard currencies and established market-economy traditions, barter is playing an increasingly important role. Not all economic branches are equally affected. While private consumers meet their needs for goods and services almost exclusively with the respective currency, businesses often acquire the goods and services they need in whole or in part via barter. Practically everything is traded in this way: advertising minutes in exchange for entertainment series, luxury articles for publication rights, golf club memberships for construction work, employees' vacation arrangements for indoor swimming pools, Olympic Games patent utilization and broadcasting rights for the building and/or delivery of stadiums, lodging facilities, and computers, entrepreneurial consultation for capital shares, ships for shipping services. The list could go on indefinitely.

In a world where the customer is king, every supplier is wise to take the customer's needs into account. And these needs are not generally limited to customers' spending their hard-earned money, but often place priority on opening up sales potential for their own products and services. The increasing intensity of market competition is therefore the ideal breeding ground for barter transactions of every conceivable sort. Anyone hoping to survive on a buyer's market has no choice but to master the marketing tool known as barter.

Barter transactions have their subtleties, however, and many an aspiring barterer ends up with the short end of the stick. When trading goods for money, only on the goods side is

quality a consideration. Trading goods for goods, by contrast, involves judging quality on both sides of the deal, which can become especially critical when businesses come into contact with unfamiliar products from other industries. The ads one encounters offering things like “counter-traded goods at great discounts” give us a strong hint that expectations on the part of direct traders sometimes go unfulfilled.

Large enterprises with their own barter staffs normally possess the requisite expertise to arrange profitable barter trades even of great complexity. For small and medium-size businesses, on the other hand, direct countertrade is fraught with risks. Take for example the building trades. In the 1990’s recession, construction workers often were able to get work only by accepting real estate holdings in payment, and the price collapse of the real estate market broke the neck of more than a few unfortunate traders. Thus the indisputable marketing advantages of barter trading are partly offset by increased risks.

Decoupled barter exchanges in the WIR credit clearing system

In the WIR trading system these extra risks are practically non-existent. Whereas in direct trades often goods must be accepted that one really doesn’t want and with which one has little experience, the WIR barter exchange – by replacing a goods-for-goods trade with a sales process of goods for WIR, then a fully decoupled acquisition process of WIR for goods – allows targeted selection of the acquired goods. This means that the acquisition is limited to precisely such goods as one would have had to acquire anyway. The WIR clearing account, thanks to this variable application potential, is far superior to any inventory resulting from countertrade. WIR thus allows a select circle of small-to-medium businesses to profit from the potential of barter trade without subjecting themselves to its object-specific risks.

As in any trade process it remains the responsibility of each participant to maintain his/her own equilibrium between giving and receiving. One must bear the risk of an imbalance oneself, or rather, one must manage this risk through carefully planned employment of the WIR tool. The vast majority of WIR members appear to have mastered this risk management. Occasionally encountered offerings of greatly discounted WIR, however, indicate that individual members now and again thoughtlessly sell goods for WIR without first planning how they will reuse their WIR credits. Such cases obviously demonstrate a lack of sound business sense.

Chapter 14. Evolution of the “WIR Bank”

For more than 60 years the WIR organization lived from a single package of services: the WIR credit clearing exchange and the associated granting of WIR-denominated loans. Although additional tangential services (such as advertising in the internal WIR media) were developed over the years, still the WIR Bank could only be described as a one-product business, and furthermore as the institution operating under the Swiss banking law that offered by far the narrowest band of banking services. True, nowadays

concentration on a few core competencies is seen as the ideal form of entrepreneurial operation – but long-term, that form only works well in growing markets.

Changing business parameters of the 1990's

During the 1990's it became increasingly apparent that the original concept of WIR credit clearing was reaching its limits. Not only was the conservative risk policy of the Bank leading to a partial stifling of credit issuance; other, primarily external factors as well were setting limits to the growth of credit clearing transactions. Among them were the following:

- Traditionally, WIR credit clearing was rooted especially strongly in a few business sectors that today are viewed as largely saturated. Most significant among them are the construction industry, retail trade, and the hotel-restaurant sector.
- By contrast, WIR credit clearing has been insignificant for concept-related reasons in certain Swiss growth industries, e.g. patient care, care of the aging, investment management, insurance, and the export economy in general.
- The concentration process prevalent in the Swiss economy with its striking wave of mergers has turned many medium-sized businesses into large enterprises that no longer belong to WIR's conceptual target area.
- The corporate strategy focusing on increase of shareholder value in many cases has led to business reconceptualization and a resulting concentration on core areas. This has led to large-scale spinoffs and outsourcing. Many enterprises have sprung into being whose prime function is as subcontractors of the large firms, whose respective business dealings are not consummated in WIR.

WIR Bank at a crossroads

In view of this market development, the WIR Bank found itself in the mid-1990's at a crossroads. A strategic orientation pointing consciously either toward a defensive or an offensive stance was called for. The defensive strategy would have amounted to the WIR Bank's continuing to promote solely concepts that had already reached their potential. Short-term, probably no significant disadvantages would have resulted. But experience shows that over time, businesses operating in stagnant markets run into a cost-price squeeze that produces downward profit trends and sooner or later forces them to abandon their entrepreneurial independence.

A forward-looking strategy

The general shareholders' meeting of 27 May 1998 therefore resolved, on the recommendation of the Board of Directors, to adopt an offensive strategy, and laid the groundwork for a sustained expansion of the WIR Bank into classical banking services. Formally the only action taken was to change the firm name from "WIR Economic Circle

Cooperative” to “WIR Bank”. As of 1998 the Economic Circle, while preserving the legal form of a cooperative and thus also the self-help character of the organization, was to present the official face of a bank to the outside world. In reality this involved much more than a mere name change, since in agreeing to that change the shareholders also indirectly gave their blessing to the first steps toward diversification into cash transactions that the directors had already initiated. (The 1992 statutes had been formulated so broadly as to give the directors authority to expand business activities.)

This orientation favoring an offensive strategy of diversified conventional bank services was from a long-term point of view surely the only correct course. That said, it required not only farsightedness but also entrepreneurial courage on the part of the shareholders. The “old” Economic Circle, given the uniqueness of its services, had never had to face direct competition in the over 60 years of its existence. Now, by entering into the cash arena the WIR Bank for the first time took on the challenge of competing against powerful, established opponents. Furthermore, the Swiss banking industry since the late 1980’s had successively removed the cartel-like provisions of its price and rates policy, with a resulting intensification of competition. The number of independent banking institutions sank from over 600 in 1990 to fewer than 400 in 1998. The Swiss banking industry was seen generally as in need of restructuring and especially redimensioning; Switzerland’s reputation was that it was “overbanked”, i.e. littered with too many banks or bank branches. The forced entry of a neophyte into a largely saturated market vehemently defended by established institutes was therefore an entrepreneurial gamble in the truest sense of the word.

Positive signs

Meanwhile, positive signs as well soon became apparent in the events surrounding the reorientation of the WIR Bank. The mainstream Swiss banks in the 1990’s required reserves for outstanding loans amounting to scores of billions of francs. It later turned out that the domestic credit industry had in reality been operating at a loss for several years. The result was a systematic rethinking, and a sudden reluctance to renew old loans and approve new ones. Hardest hit were small-to-medium enterprises which only a few years earlier had been actively courted with easy credit. Now, by contrast, credit limits were suddenly frozen, loans called in, or – by the introduction of individually “risk adjusted” interest rates – credit costs disproportionately raised. The authority of loan officers in the field was drastically cut back, relegated to anonymous organizational units at the central office. Huge mergers underscored the large banks’ intent to move their focus to the global banking scene, backing away from all but the most profitable players on the domestic market. Among small and medium-sized businesspeople who were the principal victims of the banks’ reworked credit policies, a grim cantankerousness began to take hold. Growing numbers felt obliged to dissolve banking relationships of many years’ standing. A Swiss business journal’s headline hit the nail on the head: “Switzerland Needs a Small- Business Bank.”

The WIR Bank's trump cards

Thus while on the one hand a newcomer to the Swiss banking industry had serious challenges to deal with, on the other hand the chances for a small/medium business specialist could not be characterized as unfavorable. Additionally, the WIR Bank possessed certain trump cards that made its entry into the cash business easier:

- The WIR Bank already counted about 90,000 client relationships from the time of its pure credit clearing operations. Given that for every bank the development of promising client relations is a complicated and expensive process, this advantage doubtless played a key role. The WIR Bank's existing customer network is, to use a bridge analogy, its "trump king" in competition with rival banks.
- The loyal clientele make a difference not only in terms of their numbers, but perhaps even more because of their quality. They make up a quite homogeneous core customer group centered around small and medium-sized businesses. They bring favorable qualifications for the development of custom-fit small-business bank products; they share a common business-scale ideology; and they can be reached and courted by the Bank's advertising in a targeted way, with little wasted effort.
- The second, related trump card is the existing body of employees who are already well-versed in their clients' needs. Their many years of experience granting and overseeing WIR loans and the credit-clearing mechanism can immediately be put to good use in the cash loan and payment business without having to invest large sums procuring the requisite expertise. This pre-existing knowledge and skill profile are the WIR Bank's "trump queen", one might say.
- With its six branch offices, the WIR Bank is already represented in all of the country's provinces. While nowadays many banks complain of having to maintain overlarge and expensive branch networks, the WIR Bank with its small but efficient, appropriately dimensioned network possesses the ideal structure for the future – a future that will be characterized less by physical contacts in bank buildings, more by telecommunications. It is in the enviable position of being able to offer new cash-based banking services without needing to invest beforehand in setting up a network. Thus it can introduce new cashbased services at a lower cost than the competition, since the existing infrastructure is supported fully by the Bank's credit-clearing trade. The existing infrastructure, then, is the WIR Bank's ace in the hole.

Evolutionary trend ...

These three "trump cards", viewed in 1998 against the background of the Swiss banking industry as just described, allow us to predict the further evolution of the WIR Bank with a fair degree of confidence. The current customer base, strongly anchored in the small/medium business sector, suggests strategies keyed to the current and future banking-service needs of this interesting clientele. The general public sympathy enjoyed by this segment of the economy creates the best possible breeding ground for a successful

positioning of the WIR Bank as the only national-level champion of small/medium-enterprise interests. Clearly a useful strategy will be to revitalize the original self-help credo of the Economic Circle and to communicate it clearly in the Bank's marketing efforts. A targeted promotion of small/medium businesses by limiting credit issuance exclusively to clients from within this segment could engender sympathy outside the segment as well, leading to solidarity-based investments such as have been enjoyed in recent years by eco-banks.

... and tempo

Regarding the range of future offerings, we may assume that in accordance with past practice, new products and services will be introduced in carefully considered small increments. By breaking out of the competition-free market niche of WIR credit clearing and into the fiercely competitive cash area, the WIR Bank is leaving safe ground and entering a terrain where slipups can never be fully avoided. Success will depend crucially, then, on taking small, careful steps forward. The WIR Bank will not distance itself too quickly from its safe territory, and will introduce only such new products as build on the foundation of its previous experience and expertise. The development process will commence with just such products, further requiring that explicit demand for them exist among the targeted clientele, and that they be matched to the "trump ace", i.e. the small, efficient branch network, so as to require few person-to-person contacts.

Regarding contract terms, the WIR Bank will always need to be better than the competition. The most favorable conditions for this advantage exist in the areas of investment products and credit instruments: areas where interest-rate advantages can be played out. The WIR Bank, thanks to its three trump cards, can afford to offer more attractive rates than others. In the loan credit area this advantage does not extend to risk premiums, but it does hold for basic interest rates. On the other hand, in banking areas where the WIR Bank enjoys little advantage vis-à-vis the competition, due for example to the need to hire specialists at the same market price, sale of the respective services will not be emphasized for the foreseeable future. Foreign exchange transactions, export financing, securities issuance, investment banking and rare metals transactions will likely be among the de-emphasized services.

WIR: Soon to become a conventional bank

For the reasons stated, the WIR Bank will position itself actively on the market as a bank focusing on small and medium-size businesses, but simultaneously will make itself available passively to investors of whatever stripe. For its core clientele, initially it will offer most of its banking products and services in a form and at rates that are geared to the specific needs of small/medium enterprises. The WIR Bank will not slide willy-nilly into the status of a universal bank with the corresponding specific risk profile. For unusual, seldom-requested services, typical WIR Bank clients will therefore maintain parallel relations with other banks, though the WIR Bank will remain their "home". On the other hand, thanks to its increased involvement in cash transactions, the WIR Bank will collaborate more closely with other banks than previously, thereby expanding its

range of products and services to those “produced” by partner banks. It appears only a matter of time, then, until it has metamorphosed from its earlier outsider status to a firmly established, valued member of the Swiss banking system.

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