

István Nándor Helmeczi and Gergely Kóczán: On trade vouchers called “local money”*

There is a lot of debate currently about local monies: the “soproni kékfrankos” (Sopron blue franc), the “rábaközi tallér” (Rába District thaler), the “pécsi korona” (Pécs crown), the “debreceni fantallér” (Debrecen fanthaler) and the “veszprémi korona” (Veszprém crown), all initiatives having been launched recently. Despite the insignificance of local monies on the basis of international experience, local consumers (companies and households alike) may have encountered such instruments every now and then in the recent past. In view of increasing media coverage of the issue, we deemed it timely and necessary to reveal the key facts about these initiatives, and what trade vouchers – commonly known as “local money” – actually are.

MISCONCEPTIONS IN RELATION TO THE MOTIVES BEHIND “LOCAL MONEY” INITIATIVES

With the vast majority of local monies around the world the need for introducing the instruments intended as money substitutes is explained with one or all of the following reasons:

- The traditional monetary intermediary system (that is: credit institutions and other traditional financial service providers) is unsuitable for adequately serving local communities, as they “disregard local interests”;
- The traditional financial system serves the interests of the global economy, and serves primarily these interests, which is in conflict with the interests of the local economy, and this calls for the establishment of a local monetary system;
- Economies are characterised by an “inadequate supply of money”, which is particularly detrimental to local communities, and also calls for the establishment of new monetary instruments;
- Monetary instruments used as traditional money bear interest, resulting in less-than-optimal circulation of money in economies – interest supports the accrual of wealth, thereby undermining economic growth;

- Trade between far-away regions (globalisation) is detrimental as globalisation serves local demand to the detriment of local businesses, thus generating unemployment in the region.

The theoretical results in modern economics (also supported by the practical experience of several decades) suggest that none of the above economic arguments have any merits, as the evaluation of the underlying situation and the causal relationship suggested by them are both wrong.

Financial intermediation in modern market economies based on private wealth is performed by a large number of financial institutions also privately owned. These institutions are operated in all countries under separate legislation with a view to ensuring that clients’ interests and claims are protected under the law; to avoiding bank failures and other financial crises the type of which emerged at the dawn of modern economies; or to ensure the possibility of managing them. Compliance with applicable regulations pertaining to all market actors alike are supervised in most countries by separate institutions performing financial supervision.

Modern monetary systems based on credit cannot find themselves in situations of shortage of money in the economy as described above in oversimplified terms. One of the reasons lies in the fact that interrelations and terms on commodity standard money systems quite simply do not

* The views expressed in this article are those of the author(s) and do not necessarily reflect the official view of the Magyar Nemzeti Bank.

have any relevance in monetary systems based on credit.¹ Monetary systems based on credit have replaced commodity standards (mostly based on precious metals) with the very aim of enabling economic actors to create money for themselves in a more flexible way, in the amounts necessary for effecting economic transactions. In modern monetary systems based on credit, money is not "created" by a central actor; therefore it is not in a position to issue money in "wrong amounts".

It goes without saying that situations characterised by shortage of credit may occur, which however means that private economy actors encounter (either due to a global or a national economic recession or crises) a fragility or a deterioration in mutual confidence. For this reason, they are much less inclined to extend credit to one another (e.g. extending credit on the part of commercial banks and accepting delayed payment of invoiced amounts, etc.). This situation is not improved by introducing another denomination, currency or other piece of paper, as this fails to address the lack of confidence forming the core of the problem. Two private sector actors will not have increased confidence in the other's creditworthiness by denominating their claims against one another in Cape Verde escudo or another new "local money" invented by them rather than in forints.

Another wrong conclusion is to attribute a detrimental effect to the interest bearing nature of monetary instruments, as the most common currency now in circulation bears no interest either, and, on the other hand, without interest on account money, or rather the deposit generated from such account money and credits, there would be no financial mediation. It would be naive to believe that any prohibition on the imposition or elimination of interest would generate an upsurge in consumption on the system level that could materially boost the economy. On the contrary, the imposition of a prohibition on the collection of interest would render financial mediation impossible, which means that efficiency in the utilisation of economic resources would fall to levels characteristic of barter-based economies. (The inefficiency of the latter need not be described in detail here.) The general level of interest, however, does affect economic activity, as modern monetary policy measures are based on this very fact. One

may therefore argue for the necessity to have high or low policy rates in place according to various economic theories; however, allegations about the detrimental effect of interest or yield as such for the purposes of monetary flows reveals a basic misconception about the operation of financial mediation. Criticism of modern financial intermediary systems with the above arguments is targeted many times at national banks themselves. In the modern system, national banks provide the base funds constituting denomination of the particular currency. The underlying claims on the base money are made against its value appraisal function and its common denomination role, rather than the quantity of money, which is usually significantly lower than the size of the entire financial intermediation system. Claims on the national banks acting as base money providers serve as an expression and denomination of credit claims between private economy actors, including sight balance of bank accounts held with commercial banks. In other words, a particular debtor in the private economy, in the case of account money held with a commercial bank, makes a promise to repay the debt in central bank money at its maturity (in the case of sight claims, at any time at the request of the claim holder). In modern economies, monetary flow in banknotes and coins (the modern form of cash) is much less significant than money transactions effected on commercial bank accounts. Accordingly, financial transactions in a modern economy are effected by way of transfers (that is, "private money") between e-accounts to a much larger extent, using no banknotes or coins at all.

Table 1 summarises the characteristics of various types of monies and cash substitutes.

GENERAL CHARACTERISTICS OF "LOCAL MONEY" SYSTEMS

Theoretical foundations of "local money" initiatives

As demonstrated above, one of the key characteristics of monetary systems serving modern market economies is that financial instruments and therefore "money" itself used in payment transactions materialise primarily in claims between private market actors. In the majority of countries,

¹ The essence of monetary systems based on credit lies in private economy actors' credit claims rather than a commodity standard (e.g. gold coins) performing monetary functions. While allowing the sensible creation of aggregates in commodity standard systems on the "quantity of money", no money quantity index compiled by statistical methods in monetary systems based on credit is capable of demonstrating the system's flexibility in settlement of and effecting transactions. Monetary aggregates (e.g. M1, M2, etc.) as an aggregate of balance sheets of commercial banks and the central bank in a modern economy as statistical indices may serve to demonstrate economic activity at the most, but are unsuitable for acting as permanent and solid direct variables for making decisions about the quantity of money. This applies all the more so as the grand totals for these aggregates – as indicated above – are determined by private market processes (e.g. decisions of households concerning their investment portfolio) and not directly by economic policy. For more details on the theoretical and practical limits of money quantity indices currently in use, see Komáromi (2008).

Table 1
Key features of monies and cash substitutes in Hungary

Form of money	Monies		Cash substitutes	
	Legal tenders	Commercial bank money	Trade vouchers	"Local monies"
Issuer	Magyar Nemzeti Bank (the central bank of Hungary)	Commercial banks and credit institutions	Companies	Local communities and cooperatives
Form	Banknotes and coins	Account money and sight account balance	Typically paper	Paper
Acceptance	Known and used in the widest spectrum of users, everyone shall accept them at face value within the country	Used outside the particular bank, prompt transfers outside the bank or acceptance of cash withdrawals at face value are guaranteed	Companies and merchants accepting such vouchers under separate agreement between them	Members of the community only, with redemption subject to commission only
Transferability to other currencies and vice versa	Transferable to any other currency or financial instruments easily without being subject to payment of commission	Prompt transfers outside the bank and cash withdrawal at face value are guaranteed (separately guaranteed under separate prudential supervision are appropriate bank liquidity management and, as a last resort, deposit protection)	Redemption or transferability to other currencies or financial instruments are generally not possible	Redemption to real money is subject to limitations or fees (generally in the form of a commission)
Quantity (total quantity issued as at the end of 2010)	HUF 2,464 billion	HUF 4,417 billion	HUF 150-200 billion (MNB estimate)	Approx. HUF 10 million (as revealed in the press)

state-controlled central banks are vested with the powers to issue banknotes in paper form. At the same time, for the purposes of the actual operation of economies it is of less significance which entity is actually vested with such powers, in contrast to the actual operation of the particular monetary system (which and how market actors generate account money in an economy). Cash substitutes are issued by credit institutions under prudential state control practically in each case. However, there are initiatives in a number of countries all over the world which are regarded as "local monies", "private money" or "supplementary money" and have broken ties with traditional financial intermediation. In these cases it is by no means a surprising development to see them as private initiatives, as credit institutions are themselves owned by private individuals and anyone with sufficient funds may establish credit institutions with the right to set its operational rules within legislative bounds.

The single novel element in these initiatives is linking their operations to the attainment of specific objectives, by establishing a "club" or community for the trade vouchers and promissory notes issued by them. These include, for example, promoting purchases from a merchant in some limited geographic area, or promoting the purchase of green products (that is, products manufactured without damage to the environment), or promoting purchase of

special products or services (e.g. catering). The formation of purchasers' clubs or community collaboration is not novel in itself. Looking back through Hungarian history, it emerges that the Védegylet (Defence Association), under the auspices of Lajos Kossuth, was also a community with voluntary commitment to attain its objectives. The particular financial schemes contain no novelty or new element from a financial perspective, as they involve issuance of a trade voucher generally constituting a credit claim on a non-state actor, in paper form or in a form recorded solely in account registries. This constitutes the very foundations of the traditional monetary system (where the payment transactions materialise in the exchange of monetary claims on private actors) which these "local monies" wish to replace. The majority of such initiatives are compelled to rely on the denomination provided by the central bank of the particular country, all the while giving grandiose names to these trade vouchers, unit certificates and other financial liabilities (e.g. "local money"). The claims should be denominated in some existing currency, therefore the rate of exchange of a particular claim materialised in a single unit of the local money against a legal tender used for value appraisal in a much larger scope of acceptance should be duly explicitly listed and advertised.

Put in another way, the question as to what conditions should be in place under which "local monies" could prove

successful in economic terms will lead us to emergency monies.

The precious metal commodity standards in place up to the seventies were detrimental in the sense that central banks were limited in their powers to issue money to the extent of their precious metal reserves, and precious metals constituting the basis for money issue were themselves products, with a separate price and demand for them. This is the case even today, with precious metals having their own markets. In the past, however, the very value of money depended on the then current market price of these precious metals. For example, in the Austro-Hungarian Empire market disturbances arose from a significant upturn in silver production – and, with the then currency of forint having a silver basis – it brought about the inflation of the forint after relative inflation of the currency due to the more pronounced supply of the metal (Sós, 1921).

As could happen typically during times of war, the prices of products and services would fluctuate considerably, resulting very easily in a shortage of cash, which could in effect paralyse the economy. The major reason giving rise to so-called emergency money lies in the difficulty of directly exchanging products with other ones in societies having surpassed primitive community systems (partly due to diverging needs, partly due to the impossibility of dividing particular products into smaller parts). Such emergency monies have been issued mostly by towns or regions of limited size. The 1848–49 Hungarian War of Independence saw a number of such examples, when the emperor’s money then in circulation could no longer be exchanged for precious metals for obvious reasons.

As reported by the Magistrate, we should take some measures for want of monies in small denominations, as this morning as many as three men from the lower part of the town appeared before him to urge us to do something, as they are unable to buy salt, fat or meat unless they buy in exchange for a full 15-Kreutzer banknote. Although they have money, and despite this fact, they can buy even salt under extreme difficulties only. To calm down the discontented people, the towns of Újhely and Patak already issued and distributed banknotes of small denominations. ... It would be very suitable and expedient for us too to arrange for issuing such banknotes of small denominations and to restore order among the town people. We have decreed to send the Magistrate and the Senior Town Clerk to Patak with authority to arrange for the printing of banknotes in the maximum amount of 300 Pengő forints (Högye, 1999).

Similar solutions emerged abroad between the two world wars, especially during the Great Depression. Supporters of

“local monies” prefer to cite the example of the village of Wörgl with 4300 inhabitants, where the mayor issued “stamp money” in July 1932, which – when left unstamped – lost 1% of its value each month and 2% on redemption (thereby rendering redemption uneconomical). It was accepted by the local government for the payment of local taxes. The issue was backed by the theory of the economist Silvio Gesell (1862–1930). Town employees (including the mayor) received half their salaries in stamp money, while casual workers received their remuneration in full in stamp money. The issue proved a success, the rate of unemployment fell, which however may instead be attributable to the public project construction works organised then by the local government (construction of apartments, a new bridge, water reservoir for the fire department and ski-jumping ramp) (Fisher, 1933).

Emergency monies contributed to solving local shortage of cash and economic circulation was restored. In this sense, it was an effective solution under the then current conditions of monetary system and war. Nowadays, however, central banks have all the means at their disposal to provide adequate cash to the economy, thus since the seventies “local monies” cannot be regarded as operating as supplementary money, even on a theoretical level.

International examples of “local money” initiatives and the types thereof

The German regional trade voucher (or “money”) initiatives

Such initiatives have also emerged in a number of regions and towns in Germany (“Regiogeld”), with the declared objective of boosting local economic activity, more precisely of boosting the turnover of local merchants (naturally, to the detriment of turnover that could be generated by merchants located or deemed to be located outside the particular town). The initiatives usually list in their membership as places of acceptance low-turnover merchants and shops which are affected by the adverse effects of globalism, as represented by the competition imposed by large food store chains and supermarkets. The value of the trade vouchers is linked to the euro; 1 trade voucher unit is usually worth 1 euro. A number of initiatives are characterised by periodic (e.g. monthly) devaluation of the purchasing value (“Schwundgeld”) of the trade vouchers in circulation by a certain percentage to ensure higher turnover for the members and rapid utilisation of the vouchers by the holders. The issuers usually include cooperatives founded by local enterprises and merchants particularly for this purpose, or to promote the fulfilment

of other current objectives of theirs. Although the number of such initiatives in Germany is relatively high (the 2006 report of the Bundesbank lists 16 already existing and a number of prospective initiatives in this field in Germany), the volume of issued trade vouchers has failed to reach noticeable proportions even on a regional level. In 2006 the German central bank estimated the aggregate value of trade vouchers issued under these initiatives at EUR 200,000 (with the majority of these initiatives having been in existence for 3-4 years by then). According to sporadic data, in 2010 the aggregate volume may have surpassed that amount. The largest German issuer had managed to put "local money" into circulation in an amount corresponding to approx. EUR 460,000 (approx. HUF 126 million) by 2010.

The Swiss WIR Bank

The active promoters and supporters of "local money" initiatives often cite the Swiss WIR Bank founded in 1934 (as a cooperative). Today, WIR Bank operates as a credit institution and according to the Swiss central bank, it ranks among the smaller-sized credit institutions in Switzerland. The bank also engages in traditional banking operations (that is, denominated in Swiss francs), which, according to its annual report for 2009, significantly surpasses its operations linked to the "alternative" money it has created.

Its banking operations in alternative money are intended to promote trade between Swiss small and medium-sized enterprises, that is, its operations are not limited to a small geographical area. The trade voucher issued by the bank is called WIR (also with separate currency code: CHW) and exists in electronic registrations only, with no hard copy vouchers issued. An interesting feature of the trade voucher, in contrast to the German Regiogeld initiatives, is that this bank will not redeem the vouchers to Swiss francs, and expressly prohibits any redemption by its clientele. WIR money does not bear interest to ensure rapid circulation (the bank will neither pay interest on WIR denominated amounts nor may any WIR amount be tied up in term deposits, and no WIR exists outside the bank due to the system characteristics). An interesting feature is that the Bank also extends credits in WIR, with interest generally lower than credits extended in Swiss francs, but no material deviation exists as to the coverage required for credits in the two currencies: credits denominated in WIR must also have appropriate coverage (property or other assets). Merchants willing to accept WIR as a form of payment generally define in advance the percentage of invoiced amounts that may be settled in WIR. Membership of the system comprises 66,000 Swiss small and medium-sized enterprises, a considerable number, corresponding to

approx. 20% of Swiss SMEs. Strikingly, the balance sheet of WIR Bank reveals that the aggregate WIR portfolio amounts to WIR 800 million (that is CHF 800 million, as the theoretical exchange rate is 1:1, though it is a theoretical rate, because no conversion takes place in practice). This amount is insignificant compared to the magnitude of the Swiss economy, the SME sector or the traditional financial intermediation system in Switzerland. (The same applies to the annual turnover denominated in WIR in the approx. amount of WIR 1-2 billion). The extent of existing WIR units in the balance sheet of the WIR Bank itself represents a small proportion compared to its much larger CHF-denominated receivables (the balance sheet grand total of the bank amounts to approx. CHF 3.2 billion). According to press reports, prohibition of WIR-CHF conversion has given rise to a "WIR black market", where enterprises or persons wishing to exchange their WIR balance will sustain considerable losses (receiving approx. 60-80% of the WIR balance in CHF) (Graumarkt bedroht das WIR-System, 2003).

In addition to the foregoing, it is remarkable that the initiative has been in operation for more than 75 years and despite the number of crises in its history it has received considerable international acclaim among supporters of similar local or supplementary monies.

Local exchange trading systems (LETS)

Local exchange trading systems have been in existence since the beginning of the 1980s. They first appeared in Anglo-Saxon countries and have now spread to a number of countries. The purpose of LETS-type systems is very similar to those of "local money" initiatives. The underlying idea of organisers is that the traditional financial system is ineffective and is unsuitable for adequately supporting local economies. For this reason, local exchange trading systems introduce settlement units, where the value of services provided by system members to one another (baby-sitting, language courses, minor repairs, etc.) – less frequently the value of merchandise – is credited. The value of such a settlement unit generally corresponds to the national legal tender, to ensure ease of comparison of values. These systems differ from the mainstream financial system in that no central issuer is in place, but service users acknowledge the value of the service utilised by them; therefore, a positive account entry constitutes a liability on the part of the entire community (mutual credit). It also means that the aggregate amount of all account balances in a LETS system is always 0 (those having utilised more or higher value services from the community than they provided to the community have a negative account balance). The system – employing no hard copy vouchers – operates a central registry (accounts), which has developed into an

electronic system in each case by now. The system is thoroughly transparent, information on all balances held by members is available to all members. In the system, no interest accrues and there is a balance limit, to both the negative and the positive, beyond which no further increase in the balance is allowed. All over the world, hundreds of LETS systems are currently up and running. LETS supporters claim these systems may contribute to the development of the local economy, especially to the reduction of unemployment. Criticism of LETS usually highlights the instability in these systems, as they are susceptible to discontinuance due to fading interest or loss of trust in the system.

Time banking

Time banking in essence is a subcategory of LETS, where members provide one another with services as described above in connection with LETS. In time banking, the unit of settlement is labour time, assets and liabilities are recorded in work hours. The scheme is most common in the US, with the largest one having approx. 1,000 members.

Currency voucher systems

A number of currency voucher initiatives that may be deemed local money in actual printout form similarly to the German Regiogeld can be found all over the world. A common feature in each system is a central issuer, with identical denomination to the national legal tender, and in general (but not always) an offer of discount to those making purchases with these vouchers, most of the time by providing a voucher with a face value some percent higher than the face value of the real money paid for them. This discount is then paid off by the merchants who accept such vouchers, as they will receive on redemption an amount in real money some percent lower than the face value of such vouchers. As regards their form, these systems in essence do not deviate from a purchasers' club or a set of coupons granting discounts for purchases issued in a local newspaper. The only difference between the two lies in the reusability of the voucher by the accepting merchant; therefore, they are not compelled to redeem it for cash. An example of such a system is the Toronto Dollar, where the issuer's profit is put out for tender open for social organisations (e.g. engaged in children's catering or care of the homeless).

Systema de Trueke

Systema de Trueke is a South American local barter market based on Indian traditions, where barter is promoted with the involvement of its own money. In barter transactions,

agricultural produce and locally available services are typically exchanged.

Liberty Dollar

Liberty Dollar was a private money issued in the United States with silver and gold coin backing. As the authorities – and later also the courts – held the view that the issuer had committed a criminal act, they sentenced the issuer to imprisonment and seized the precious metal backing.

Characteristics of “local monies” and “local money” initiatives in trade voucher form

As the issue of banknotes and coins is a government monopoly and “local monies” exist most of the time in the form of trade vouchers, here we embark on the description of the general economic reasons underlying such trade vouchers, the most important concepts and the legal status of these systems.

In the course of exchanging commodities, payment and delivery of the commodity may take place at times apart, one of the most popular solutions to this end being trade vouchers, which are particularly useful for private consumers in arranging for gifts (e.g. books or clothes) and are also available to companies (e.g. fuel vouchers for truck drivers). A common characteristic of all trade vouchers is that the company wishing to sell merchandise or provide services receives payment for the trade voucher in advance, and the payer having provided the advance (or another person to whom the trade voucher is passed) may redeem it for merchandise or services available from the company.

In this sense trade vouchers represent an advance payment and a promissory note on the part of the company engaged in sales or service provision to deliver the merchandise in the quantity corresponding to the value of the advance. The voucher is a *monetary asset* in the sense that the holder in essence provides *commercial credit* to the issuer, which may as well spend the real money received for the voucher in the meantime. The trade voucher – following from its commercial credit characteristics – carries *credit risk*. This means that bankruptcy or insolvency of the trade voucher issuer before delivery of the merchandise or provision of the service will render the trade voucher worthless, and the current holder will lose the amount paid for the voucher. However, this risk is not apparent in everyday life, as only a tiny fraction of total turnover is effected through trade vouchers and this rate does not represent a significant amount in the budget of those concerned either.

Chart 1
Manner of operation of traditional trade vouchers

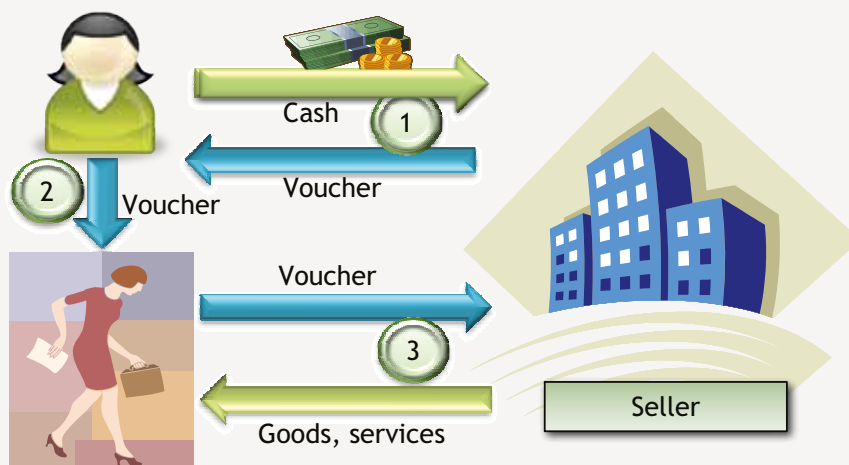
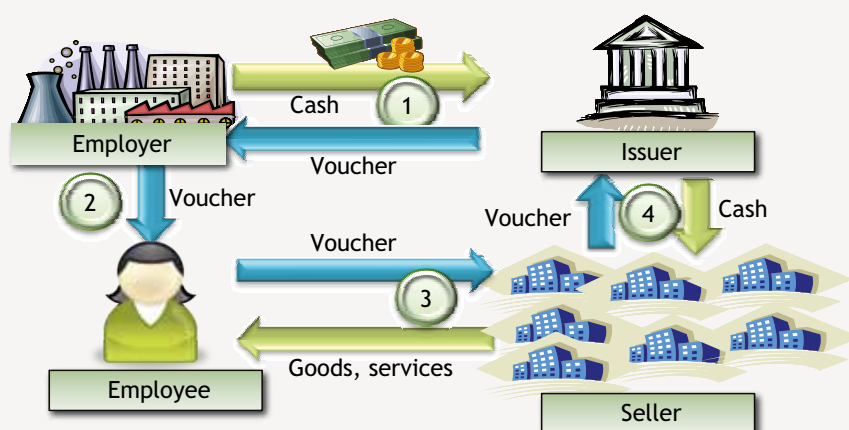


Chart 2
Cafeteria vouchers



Over the past decade, another form of trade vouchers has become widely used in Hungary, with more participants than in the above scheme (Chart 2).

This scheme is principally based on the tax allowance provided by the state on the use of such vouchers. The issuer puts into circulation trade vouchers for particular services and the state provides incentives for payments for these purposes by imposing lower tax rates. The scheme is special in the sense that the issuer provides no merchandise or service to the consumers at all, but enters into contract with companies capable of doing so in its stead. It will, however, result in a situation that differs from the underlying situation behind traditional trade vouchers, as the original transaction may not be deemed as a commercial credit. The issuer in essence acts as a financial agent for the accepting companies, but at the time of the voucher issue it will not know for whom it will operate as a financial agent. The credit risk will, however,

be present on the part of the holder vis-à-vis the issuer of the cafeteria voucher.

THE MARKETS FOR TRADE VOUCHERS AND LOCAL MONIES IN HUNGARY

Cafeteria vouchers

On account of the tax allowance provided by the state, cafeteria vouchers came into general use in Hungary within a very short period of time. The tax allowance is granted primarily to promote social policy objectives and may also contribute to the "whitening" of the economy to some extent (as the redemption of the voucher to legal tender is recorded). Assessment of the system as to whether it promotes the targeted social policy objectives is beyond the scope of responsibility of the MNB. One issue, however, is obvious, namely that the scheme is very costly – despite its aim of reducing administration costs. (For example, a

local transport pass could be financed for an employee by the employer, if the employer presents the relevant invoice, and it would not be a significant administrative burden to record an invoice for an annual pass; but – for example – administrating catering costs on a daily basis would definitely constitute an administrative burden. To our knowledge, issuers charge 5-6% of the voucher’s face value to employers and deduct 4-5% from acceptors when redeeming the voucher). In addition, the issuer generates revenues from interest accruing on the advance between the date of issue and redemption, as well as from outdated, lost or simply unused and unredeemed vouchers. On the other hand, issuers may incur considerable costs in the production of the vouchers, the related administration and from any forged vouchers or frauds.

Although no official data collection takes place in this matter, the market size is said to be in the range of HUF 100-500 billion. The largest segment in the total volume of traded vouchers is that of hot-meal vouchers.

The market structure is characterised by:

- High concentration, with approx. 70% of the total turnover being generated by three large foreign-owned issuers;
- The state itself playing a significant role in the market with its recreation voucher scheme;
- A large number of low-turnover schemes in an electronic form, at times supplemented with bank card function.

“Local money” vouchers

Although there is a lot being said about plans to issue local money vouchers, the only scheme that operates in practice is the voucher named “kékfrank” (blue franc) issued by the Ha-Mi-Összefogunk Európai Szövetkezet (If We Stand United European Cooperative) of the city of Sopron. One blue franc equals one forint, but a commission of 2%+VAT is deducted from the client wishing to redeem the blue franc to Hungarian forint. The consideration for the vouchers is deposited by the Ha-Mi Szövetkezet at the Rajka és Vidéke Takarékszövetkezet (Rajka and Vicinity Savings Cooperative) as a term deposit. The National Bank has information at its disposal about the quantity of the issued vouchers; however, as it is unique information it may not be disclosed.²

The issuer is a cooperative as regards its legal form and no person other than the members of the cooperative may purchase and redeem the voucher at the savings cooperative

managing the deposit. Anyone requesting blue franc at the savings cooperative will first be checked for membership in the Ha-Mi Cooperative. When a person is granted membership, Ha-Mi provides an updated list of members to the savings cooperative. Pursuant to the regulations of Ha-Mi Cooperative, membership is granted under a resolution of the board of directors only, and board meetings are held every 2-3 months. This represents a strong barrier to those wishing to request blue franc, as it prevents access to the voucher on the part of prospective holders following an instantaneous decision. On exiting the scheme, Ha-Mi is responsible for notifying the savings cooperative and at such times Ha-Mi will collect the vouchers from the exiting member. The members of the cooperative are primarily from the city of Sopron and its vicinity, and its website suggests that the range of companies accepting the vouchers includes companies in Székesfehérvár, Budapest and Austria. Some of these companies provide a discount of 5-15% to the customer on the use of blue franc.

ECONOMIC ISSUES CONCERNING “LOCAL MONIES”

Promoters of local monies often claim that they have beneficial effects on the local economy. Below we will examine in detail the major aspects that should be taken into account when assessing the impact of “local money” vouchers on the local economy.

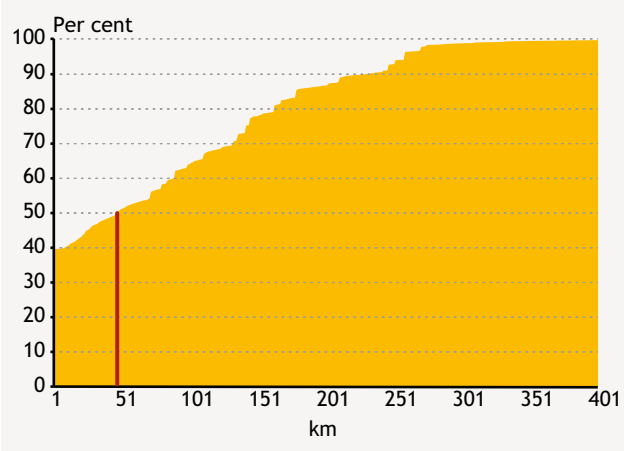
I. Misconception about the circulation of money in geographical terms

One of the advantages that “local monies” are often claimed to have is their role in promoting purchases by local people and enterprises in local shops and not elsewhere, thereby making the economy of the particular town or region prosper. This argument is wrong for two reasons.

One of the reasons is obvious: local people and companies use services available in their place of residence or registered seat and their immediate vicinity even without using “local money”. It is probably not wrong to assume that, for example, the majority of residents of Nyíregyháza will buy their bread in bakeries or shops located in Nyíregyháza, buy gasoline at local filling stations, have their hair cut by local hairdressers, and will typically not travel to other towns to obtain these goods and services. The MNB study entitled “A magyarországi pénzforgalom térképe” (Map of money transactions in Hungary) (Helmecci, 2010) has revealed that approx. 40% of credit transfers are addressed to recipients

² On entry into the market of another voucher, the National Bank will naturally have the right to disclose national aggregate data.

Chart 3
Aggregate number of credit transfers in relation to distance



located within the same city, and approx. 50% to recipients within 50 km of the particular city.

Chart 3 covers credit transfers only (a typical method of payment between companies), excluding payments in cash. For this reason, we can only have estimates about the total volume of money transactions; we hold the view that the amounts above 40% represent the lowest extent, because private individuals generally pay in local shops in cash rather than by bank transfer. This is supported by the research (Brockmann, 2006) which relies on the findings of a banknote tracking website in the USA.³ The research⁴ revealed that the overwhelming majority of banknotes (50-70%) will not travel more than 10 km from the most recent place of detection within two weeks.

It thus follows that "local money" initiatives are addressing a problem already solved when they cite consumption on a local level. As data suggest that private individuals and companies alike primarily spend their money locally, such initiatives alone will not boost the revenues of shops and service providers.

The second – seemingly contradictory – reason is that by now the division of labour and specialisation in the economy have become very intensive, much more than they were a hundred years ago, and no country – even those that are bigger than Hungary, even continent-sized countries – can meet *each and every* need that may arise in them, let alone

in particular towns. This means that local shops obtain the majority of merchandise from other towns or countries. That is, private individuals – although paying the local merchant for the merchandise – in essence "transfer" this amount to a producer located in another town or country through this merchant.

In the example of Nyíregyháza, local people obtain the majority of electricity, natural gas, gasoline, passenger cars, TV sets, (cell) phone services, coffee sold in a cafeteria or in general the majority of food from other towns and cities in Hungary or other countries through the local commercial outlets. Therefore, it does not matter if a local enterprise or household pays in "local money", they will support those producers; meanwhile, locals can export⁵ kitchen appliances and children's toys to other parts of the country and/or the world, which may also be paid for in the "local money".

It follows from the foregoing that the real option for those committed to the furtherance of their immediate area is limited to buying local products when available. This objective, however, cannot be achieved by using "local money" vouchers, as such would require a conscious decision on the part of consumers, which is much more influenced by the price of products.

II. Inadequacy of the amount of cash in circulation

Promoters of "local monies" furthermore argue that the amount of means of exchange (HUF) is less than required to be adequate, and the shortage of 4-5% will hinder or obstruct the proper operation of the economy in Hungary (Perkovátz, 2010).

As shown above, there indeed have been times when this statement was true for a certain period of time; in history such situations emerged only in the period of precious metal standard systems and within that only in times of war.

The problem referenced by the issuers of the voucher no longer exists, as the gold and silver standards ceased to exist some 30-40 years ago. The problem that may have emerged in times of war centuries ago can no longer do so, due to the monetary system operating on different principles. The amount of cash in circulation is not

³ On the website <http://www.wheresgeorge.com> people can voluntarily enter the particulars of banknotes in their possession by means their serial numbers and can check the former route of a banknote up to the time it reached them.

⁴ The original purpose of the research was to reveal the underlying patterns behind the movement of humans, primarily in the fight against epidemics. The authors used the data base on the said website compiled by volunteers in the context of the said project.

⁵ Nyíregyháza accommodates an Electrolux and a LEGO factory.

determined by the central banks but by market actors (including households) by the amount of cash they wish to withdraw. Accordingly, the amount of cash in circulation fluctuates on a seasonal level, e.g. it traditionally rises before Christmas and falls in January.

The more moderate lending activity of commercial banks as compared to pre-crisis levels is likewise not attributable to the "shortage of money" (that is, it is not as if banks were unable to extend credits) but to much more stringent credit appraisals by banks, and companies themselves strive to use less leverage than before.

III. Potential impact of "local monies" intended to promote consumption

"Local money" vouchers called "Schwundgeld" exist in a version widely used in German territories in particular. Their special characteristics lie in the monthly reduction in value when taken out of circulation, thereby motivating their holder to use them for purchases. Such a scheme could in principle promote the short-term growth of the local economy, although the theoretical father of the scheme established the system for another reason, to render accumulation of capital impossible, as such a voucher does not have the accumulating/hoarding attribute of money.⁶

As in Germany a very large number of Schwundgeld-type "local money" initiatives were launched, the German central bank, the Deutsche Bundesbank, prepared a study on the issue in 2006 (Rösl, 2006). The study gives an outline of the schemes then in place and in the pipeline, provides a criticism of the theory of Silvio Gesell and gives a calculation of the welfare loss sustained by a society were the whole of Germany to shift to the exclusive use of Schwundgeld. According to the study, this loss would amount to approx. EUR 1,600/inhabitant/year.

"Local monies" are in use even in Germany at an insignificant level (despite the numerous schemes, the aggregate value of vouchers issued in Germany was merely EUR 200,000 in 2006, approx. HUF 55 million; in other words, every 2,650,000th banknote denominated in EUR had 1 unit of a "local money" counterpart), so the Bundesbank came to the conclusion that these initiatives have no effect on the German economy.

IV. Costs of the various payment methods

Payment itself incurs costs and the costs of the various methods may vary considerably, which means that running payment methods involving low turnover may prove economically unsound. Last year the MNB prepared a detailed analysis on the social costs of payment methods (Divéki et al., 2010b). The findings reveal that the majority of payment methods have high fixed costs, and because of this fact they can only be cost-effective if a high volume of transactions are effected. In the MNB survey there seems to be an obvious correlation between the size of the acceptor base and the unit transaction costs of the particular payment method.

Although cafeteria vouchers were not included in the study, publicly available information (e.g. general terms of business) suggest that the situation is the same, namely that the scheme is run at very high unit transaction costs.

In its study on innovative payment methods (Divéki et al., 2010a), the MNB demonstrated that every new payment method faces "the chicken or the egg" causality dilemma, namely that as long as there are not enough acceptors, no one will want to use the new solution (e.g. touch-free payment by bank card). In other words, it is extremely difficult to recruit acceptors until the solution is used by a massive number of users. On the part of prospective acceptors, the underlying thought is that the solution would generate losses for them until the acceptors' base reaches an appropriate size.

"Local monies" probably face a situation that is similar to the situation of cafeteria vouchers, namely production, protection against forgery and handling of vouchers materially reduces the amount available for spending on local products, in other words, its aggregate welfare effect is negative as compared to payment in cash or by electronic means. Although "local money" vouchers differ from cafeteria vouchers in that the former may be re-used⁷ (which questions whether they may be called vouchers), the transaction costs are probably significant. In addition, they will remain a much more expensive method of payment than rival modes of payment in the long run, unless the number of units issued and the acceptor network are expanded at a very strong pace.

⁶ Economists have diverging opinions on this issue: some claim that even if something is capable of fulfilling a function at a very low efficiency, it nevertheless does fulfil such function in a formal sense.

⁷ The MNB has anecdotal information at its disposal suggesting that enterprises use hot meal vouchers among others as a method of payment.

V. Intra-town monies vs. supranational currencies

Technological development (transportation) brought a division of labour among countries in different continents. It rendered difficulties of conversion between national currencies a barrier in commercial relations, which made countries with a similar level of development within the same region think about the establishment of a monetary union. The majority of people in Hungary probably know only the euro zone, but the fact is that by now almost all continents have seen their own mutual monetary systems created (even in Africa), where individual countries surrender their currencies in exchange for economic advantages.⁸ A number of expert studies have underscored the beneficial impact of a larger internal economy for economic development and, as forecast by the MNB, the introduction of the euro will be followed by a growth of GDP in Hungary (Csajbók and Csermely, 2002). One should seek an answer to the question: what would happen in a country belonging to the European Union with individual local monies in and around each city rather than the entire union using the same money. This question may have already emerged for the pioneers of the “local money” movement in Hungary, which is seen for example in their plans for developing schemes now in the pipeline in a way that they will be accepted in the area of acceptance belonging to another local money and vice versa.

RISKS ASSOCIATED WITH VOUCHERS AND “LOCAL MONIES”

I. Business (regulatory) risks

“Trade vouchers” are neither defined nor regulated in Hungarian legislation. Although some laws do mention trade vouchers (e.g. the Act on Credit Institutions and Financial Enterprises,⁹ the Labour Code and tax laws), lacking any legal definition, a trade voucher is deemed as such when the issuer claims it as one. This also means that authorities are not in a position to unambiguously determine whether a particular scheme indeed involves a trade voucher, and as such whether or not it constitutes an exception to the definition laid down in the Act on Credit Institutions and Financial Enterprises on non-cash means of payment.

This deficiency in regulations would not pose any problems in the case of traditional trade vouchers, as in this case the principal activity involves the sale of fuel, books or clothes and not the issuance of trade vouchers.

Currently, however, there are schemes in widespread application that go far beyond the simple commercial credit feature trade vouchers have. The issuers of such trade vouchers manage other people’s money outside the control of any and all supervisory authorities and under no limitations as to their operations.

As no statutory legislation is in place regarding trade vouchers, the general terms of business of the issuer is the sole set of regulations to govern the use of the trade vouchers. Without aiming to be all-inclusive, the following rules are missing:

- Rules on restricting change to the extent of redemption commission, deadline for acceptance (etc.) when the trade voucher is redeemed for legal tender;
- Rules on informing customers about these changes;
- Rules on changing the marketability of trade vouchers among members and on changing the deadline of redemption by issuer;¹⁰
- Prohibition on issuing unsecured trade vouchers (for the time being, this obligation is assumed on a voluntary basis and nothing prevents unsecured trade vouchers from being issued);
- Rules on security management (e.g. security kept on a custody account or in government bonds, etc.), protection of security in the case of bankruptcy of issuer;
- Rules on limiting the scope of operations of the company engaged in trade voucher issue (as any loss in other activities may reduce the security underlying the vouchers to zero);
- The distribution of profits from the security and/or commissions may give rise to revenue transfer among the members.

These rules not being in place, the issuer of the trade voucher may abuse its discretion to the detriment of its clients.

II. Credit risk

As trade vouchers represent a credit, these schemes involve credit risk. Acceptors of the credit face two kinds of credit risk:

⁸ The countries retain their powers over the issue of money. The European Central Bank, for example, is owned by national central banks – including the Magyar Nemzeti Bank – and the decision-making board consists of members acting as chairmen of the central banks.

⁹ Act CXII of 1996 on Credit Institutions and Financial Enterprises

¹⁰ This may be necessary when there is a wave of forgeries, which also applies in the case of banknotes.

- Risk associated with the issuer of the trade voucher: the risk involving the bankruptcy of the issuer, or of the issuer issuing unsecured vouchers and the holders of trade vouchers not being able to recover a significant part of the money spent on the vouchers;
- The risk associated with the credit institution where the security of vouchers is kept: the risk materialises in the bankruptcy of the credit institution managing the underlying security.

In the first case, the amount of money recovered will depend on the range of people having obtained the particular type of trade voucher. In the legal form applied in these schemes in Hungary, where the trade vouchers may be circulated among the members (or, in other words, owners) of the cooperative, the holders will have access to the assets to be distributed among themselves that are left unpaid after the satisfaction of all other creditors.

In the second case, deposit protection in principle would provide compensation for part of the losses, but protection – under deposit protection – will only apply to amounts under EUR 100,000. When the issue of a "local money" voucher exceeds EUR 100,000,¹¹ any amount in excess would be lost by the users of the trade voucher in the case of a bankruptcy.

III. Risk of forgery

Despite the fact that some of the "local money" vouchers are manufactured in the Hungarian Banknote Printing Company, which also produces banknotes, the technology and security features used in the production of "local money" vouchers represent a much lower standard than those applied for legal tender.

As these are much more easily forged than HUF banknotes forgers could decide to forge these trade vouchers rather than the legal tender if they can get the same benefits and goods through them. In addition, they will face much less severe legal sanctions as forgery of trade vouchers is not deemed forgery of banknotes, which comes under severe legal sanctions.

We anticipate a pronounced increase in the risk of forgery to be borne by those wishing to redeem the trade vouchers to forint once the issue of "local money" vouchers exceeds

a certain limit and they become widely used by the population.

IV. Risk of misleading consumers

Further risks are associated with different presentations of trade vouchers and their characteristics by the issuer to the authorities and to the general public. Both in the general terms of business and to the authorities, it is claimed that what is involved is a local trade voucher and not money, while to the general public and to companies it is clearly positioned as money. This is suggested by the following:

- The fancy names given to the trade vouchers, including former Hungarian and foreign monies: franc, thaler, crown;
- Resemblance to banknotes;¹²
- The rationale on the use of such trade vouchers ("inadequate supply of cash in economy") and the term "local money" itself.

These factors may create a false sense of security in consumers, as they may assume that "local money" is also backed by the state, yet they have to bear the risks associated with the issuer.

RISKS ASSOCIATED WITH CAFETERIA VOUCHERS

Issuers describe "local monies" as trade vouchers, therefore we deem it reasonable to examine whether the risks described above also pertain to cafeteria vouchers with their much more pronounced economic significance.

I. Business/regulatory risks

Trade vouchers are not regulated under current legislation and this also applies to cafeteria vouchers. In contrast to "local money" vouchers, however, cafeteria vouchers:

- are for amounts denominated in HUF;
- have expiry dates;
- can only be used for purchase a specified type of product.¹³

¹¹ The Ha-Mi Cooperative – as revealed in the conference entitled "Helyi pénz a helyi gazdaság erősítésére" (Local money to support the local economy) (held in Sopron, on 23 February 2011) – intends to reach issues in a total amount of HUF 100 million.

¹² Resemblance to banknotes is meant in general terms and we do not mean they are imitations of specific forint banknotes.

¹³ The MNB has unofficial information about companies making payments to one another in hot-meal vouchers due to the high redemption costs.

Besides these differences, issuers of cafeteria vouchers themselves “manage others’ money”, therefore the deficiencies in regulatory framework described above also apply to them (with the weight of risk categories differing in the two cases).

II. Credit risk

With the annual turnover in cafeteria vouchers in all likelihood exceeding HUF 100 billion, the associated credit risk is of material extent (in the magnitude of HUF 10 billion)¹⁴ and economic actors would suffer considerable losses in the case of the bankruptcy of an issuer of cafeteria vouchers. No information is available as to how the issuer of the trade voucher manages the amounts transferred by employers (in government bonds, bank deposits, etc.) before payment of the amount to entities accepting the vouchers. Due to lack of applicable legislation it is reasonable to assume that these issuers act in accordance with the relevant policy elaborated by them.

III. Risk of forgery

We have no official data at our disposal regarding the forgery of cafeteria vouchers. These vouchers are also characterised by considerable turnover, widespread acceptance, less advanced technical layout as compared to banknotes and less severe sentences when an offender is caught forging such vouchers. At the same time, an argument against forgery lies in the typically small denominations (to our knowledge these include: HUF 200, 300 and 500) of such cafeteria vouchers, as banknotes themselves are forged in their large denominations.

REGULATIONS ON “LOCAL MONIES” AND VOUCHERS IN HUNGARY

In the chapter on trade vouchers, we described how the holders of “local money” vouchers and cafeteria vouchers bear credit risks vis-à-vis the issuers of these vouchers. This means that under such schemes, the issuer is engaged in service provision that should be subject to prudential supervision (as the primary activity of such issuer in essence covers “management of others’ money” and issue of cash substitutes). However, the relevant EU Directive¹⁵ removes this activity from the scope of money transaction services and thus the scope of prudential supervision (unless performed electronically).

Directive 2007/64/EC of the European Parliament and of the Council had to be adopted in EU Member States by 1 November 2009. The content of the various financial services are described in Annex 2 to the Act on Credit Institutions and Financial Enterprises. Pursuant to Article 9 (1) (g) of the Annex, payment by paper-based trade vouchers shall neither be deemed as a financial service, nor shall such trade vouchers be included on the list of cash substitutes. Trade vouchers are not regulated in any other statutory legislation (and even the definition of such trade vouchers is missing from Hungarian legislation).

When somebody buys a trade voucher, that person exchanges an asset of unlimited acceptance under the law to an asset of limited acceptance. For “local money” vouchers, this means that payment by such trade vouchers is to be regarded as fulfilment of a payment obligation if the parties have preliminarily come to an agreement to this effect.

The risks associated with cafeteria vouchers are significantly higher in terms of the amount involved than risks associated with “local monies”, as such trade vouchers are used by a wide range of employees (even millions of people) due to the tax allowance on these trade vouchers, and accordingly, bankruptcy of an issuer would inflict considerable damage to the economy.

CONCLUSION

“Local money” initiatives are launched with the express objective of promoting the local economy, to be attained as credit-based money. As we have demonstrated, in 1970 (in the case of the forint, in 1982) the gold standard was eliminated and therefore legal tender is also credit-based money. “Local monies”, therefore, do not have any extra feature in addition to the features of current legal tenders that could facilitate fulfilment of the objectives of issuers, which however are regarded as very positive.

The issuers’ reasoning is marred by a number of misconceptions, such as:

- Only “local money” will remain in the local economy – both Hungarian and foreign research has confirmed that monetary ties are becoming less significant with the increase of distance between business partners; at the same time, 50-70% of money will not leave a particular area;

¹⁴ As the employer pays in advance, the employee does not use all the vouchers same day, and the merchant receives his/her money after 10 days delay we estimate that the credit risk is roughly equal to the vouchers issued in one month.

¹⁵ Directive 2007/64/EC of the European Parliament and of the Council, 13 November 2007.

- The economy has an inadequate supply of cash, which prevents it from growing – central banks, such as the MNB, are capable of meeting demands on a continuous basis and are prepared to meet increased demand.

Although unprecedented in Hungary, there are "local monies" abroad (especially in Germany) that promote consumption and are devalued on a continuous basis; however, the German central bank has revealed that widespread application of the scheme would result in considerable welfare losses. "Local monies" in Hungary are also in use at a high assumed rate of administration costs, which may render them a loss-generating business enterprise for issuers and participants.

Worldwide, there are a number of "local money" initiatives up and running; however, with no positive impact to be documented. In contrast, an opposing process can be observed: the appearance of monies used by a number of countries jointly (monetary union) promotes the removal of trade barriers, thereby contributing to the growth of welfare. The closest example is the euro, which – according to expert studies – has clearly contributed to increased competitiveness of the European Economic Area; as revealed by analysis of the MNB, the introduction of the euro in Hungary would add an annual 0.6-0.9% to GDP.

"Local monies" have taken the form of trade vouchers, which became widely known in Hungary in the form of meal vouchers and recreation vouchers under a favourable tax regime. Trade vouchers, however, are not regulated under legislation and therefore the holders of such trade vouchers bear risks, which – due to lack of regulations and prudential supervision – is only limited by the self-constraint of issuers.

We do not deem the spread of "local monies" likely, due to the high transaction costs and non-materialisation of expected benefits (as supported by international experience). At the same time, the risks associated with cafeteria vouchers may affect millions of employees.

Based on the foregoing, we suggest that the regulatory authorities formulate regulations on trade vouchers, as a result of which prudent operation on the part of issuers would be more than voluntary and the risks borne by clients could be reduced considerably.

REFERENCES

- BROCKMANN, D., L. HUFNAGEL AND T. GEISEL (2006): 'The scaling laws of human travel', *Nature*, 439, (26 January 2006), pp. 462–465.
- CSAJBÓK, A. AND Á. CSERMELY (ed.) (2002): 'Adopting the euro in Hungary: expected costs, benefits and timing', *NBH Occasional Papers*, 24.
- DIVÉKI É., MRS KESZY-HARMATH Z. AND HELMECZI I. (2010a): 'Innovatív fizetési megoldások', *MNB-tanulmányok*, 85.
- DIVÉKI É., MRS KESZY-HARMATH Z. AND TURJÁN A. (2010b): *Fizetési módok társadalmi költségei felmérés*, manuscript.
- FISHER, I. (1933): *Stamp Scrip*, New York, Adelphi Company.
- 'Graumarkt Bedroht das WIR-system' (2003): *Basler Zeitung*, 04. sept. 2003.
- HELMECZI I. (2010): 'A magyarországi pénzforgalom térképe', *MNB-tanulmányok*, 84.
- HÖGYE I. (1999): 'Hegyaljai szükségpénzek és forgalmuk 1849-ben', in: NÉMETH P. (főszerk.): *Numizmatika és társtudományok*, III., Nyíregyháza, Jósa András Múzeum.
- KOMÁROMI A. (2008): 'A monetáris aggregátumok szerepe a monetáris politikában', *MNB-tanulmányok*, 71.
- PERKOVÁTZ T. (2010): *Sopron és vonzaskörzetének fizetési eszköze a kékfrank utalvány*, 2010. május 27., url: http://www.kekfrank.hu/letoltes/fizetoeszkoz_a_kekfrank.pdf, downloaded: 21 March 2011.
- RÖSL, G. (2006): 'Regional currencies in Germany – local competition for the Euro?', *Discussion Paper Series 1*, Economic Studies, Deutsche Bundesbank, No 43.
- Sós A. (1921): 'A pénz lényege', *Nyugat*, 14. évf. 19. sz., url: <http://epa.oszk.hu/00000/00022/00302/09168.htm>, downloaded: 21 March 2011.