
NOTES

Monetary Inflation in Hungary during the Napoleonic Wars

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I. *Background*

After the liberation from the Turks, Hungary's economic situation was in European terms one of comparative backwardness, in which the conditions of the late middle ages were still strongly reflected although there were also indications of a slow capitalist "take-off". In the paper delivered to the IVth International Economic History Congress¹ we described this situation, and the ideas contained in the present paper follow on from this premises.

Despite the fact that the Hungarian state was organized entirely on a feudal basis and was also dependent on the foreign Habsburg dynasty, it is essential to bear in mind a fundamental difference between its economic and financial organization and that of the majority of other European states. This is a point which has already been made by Schumpeter in his posthumous work on the history of economic thought and method.² This difference lay in the fact that the state's finances were not in Hungary based around the separation of the treasury of the monarchy, but rather on a principle of public law which did not distinguish between the needs of the state and those of monarchy, in order to safeguard national interests against the pretensions of a foreign ruler and also to make possible the financing of the virtually

¹ R. HORVATH: The Interdependence of Economic and Demographic Development in Hungary (from the mid-XVIIIth to the mid-XIXth centuries). *Proceedings of the Section V of the Fourth Congress of the International Economic History Association* (1968), ed. P. Deprez, Winnipeg, 1970, pp. 127 ff.

² J. A. SCHUMPETER, *History of Economic Analysis* (Edited from manuscript by E. Boody-Schumpeter) 3rd edn, New York, 1959, p. 147.

unending wars against the Turks. Even before the Napoleonic Wars, although it was only then that the problem became really acute, it was this juridical situation which constituted one of the most powerful obstacles to the efforts of the central power of the empire to increase the state's revenues — including the revenues of the crown itself (the "*regalia*"). In face of the increased costs arising from the Napoleonic Wars, there was no other recourse than inflation of the currency, a measure first introduced to finance the wars of the earlier period (from 1761 onwards), in spite of the loud denunciations of the Hungarian feudal Diet.³

II. *The mechanism of currency emission*

The resort to currency inflation was facilitated by the primitive nature of the Hungarian economy. It was almost entirely a natural economy, having none of the legal or economic institutions required to organize a macroeconomic capitalist system. Not only was there no commercial law or financial regulation, there were not even banks or credit institutions, and the Diets of 1791 and 1802 argued in vain that these were essential to the country's economic life.⁴ The only banking institution was founded in the late XVIIIth century in Vienna, and was very closely tied to the state debts of the Habsburg empire even though it had originally been founded on the Italian principle of a "bank of circulation".⁵ Its main business became that of issuing bonds, which represented the state debts, in the form of mortgages on state lands and revenues and which bore interest, so in fact providing the state with a means of payment rather than providing capital for commerce or ease of circulation for private business. This form of financing, from a theoretical point of view, had the effect of increasing the volume of currency without at the same time increasing the rapidity of circulation — in other words its effects were the opposite of private credit.

It was as a result of their historical origins that the bonds issued by the Bank of Vienna, the *Wiener Stadt-Banco-Zettel* (and which in many ways resembled the bank notes of the future), became identified, as they became subject to inflation, with the modern notion of paper money, and the

³ G. KAUTZ, *History of Economic Doctrines in Hungary and their Influence on Public Conditions*, Pest, 1868, p. 140 & ff. (In Hungarian).

⁴ R. HORVATH, *Die Ansichten ungarischer Volkswirte über die Notwendigkeit einer Zivilrechtskodifikation in der Reformperiode (1790-1848)* (Rechtshistorische Konferenz Krems-Stein der Universität Wien), Kurzer Beitrag, 1974 - to appear shortly.

⁵ M. KUPA, *The precursors of paper-money in the Habsburg monarchy; two hundred years of our paper-money*, Budapest 1960, p. 13 ff. (In Hungarian).

Hungarian literature of the period constantly demanded the creation of an authentic "paper-money" which would be freely convertible into metallic coin — in other words, the modern bank note.⁶ This terminology, which differs from our own, is very important for an understanding of the problem under discussion, and was theoretically clarified only very much later in the history of economic thought. We shall return to this again in our conclusion to draw certain theoretical lessons from it.

The form taken by the *Banco-Zettel* bonds varied enormously — some were hand-written, others printed; some had coupons, others did not, which meant that they were later completed with hand-written coupons; some had no time limits while others ran for five years and the denominations differed. There were promissory bonds (*Zahlungsobligationen*), straightforward debt contracts (*Darlehensobligationen*), treasury advances (*Aerarische Anticipations-Obligationen*), and domestic bonds (*Domestical Obligationen*) issued by the different hereditary states of the empire — except Hungary, of course. One thing is clear, however, and that is that they were in general greatly favoured over private bonds or securities as means of payment. At first the state bonds were only used for paying certain taxes and duties, but later they were generally used by the public in all payments to the state and as ordinary currency, even though there was no obligation of acceptance.⁷

It was by means of these bonds, which enjoyed general public confidence, that the wars at the end of the XVIIIth century were financed to the tune of 46 million Rhenish florins needed to meet extraordinary expenditure incurred as follows:⁸

1762	12 million florins:	Six Years War
1771	12 million florins:	» »
1784	20 million florins:	Joseph II's reforms
1785/8	11 million florins:	Joseph II's Turkish wars

It was typical that at the time of the last of these issues of bank bonds, between 1785 and 1788, a redemption of 13 million florins worth of the earlier issues was ordered, and despite the economic and political disorganization created by Joseph's reforms 9 millions of this were in fact redeemed.

⁶ R. HORVÁTH, *Contributions to research on our Monetary Theory - The views of Istvan Vedres on monetary circulation and credit in the early XIXth century*, *Penzugyi Szemle*, no 8-9. 1969, pp. 767 ff. (In Hungarian): *Id.*, *Economic analysis in the work of Gergely Berzeviczy*, «*Acta Universitatis Szegediensis*», Sectio Juridica et Politica, vol. XVIII, f. 1, Szeged 1971, pp. 78 ff. (In Hungarian, with resumé in English and Russian: *Id.*, *Statistical Method and Theory in the Works of Gergely Berzeviczy*, Budapest, 1972 (In Hungarian, with an English resumé), p. 79.

⁷ M. KUPA, *op. cit.*, pp. 16 ff.

⁸ J. BÜKY, *The issue of paper-money in Austria from the mid-XVIIIth century to 1850*, Budapest, 1937, pp. 46 ff. (In Hungarian).

III. *The history of the inflation during the period of the Napoleonic Wars: The first phase*

With the Napoleonic Wars, starting from 1792 onwards, the situation described above changed at once. Until this time, it is calculated that on the basis of the silver Rhenish florin, the total volume of currency in the whole empire did not exceed 300 millions, and this included small currency. In fact the volume of currency must have been less than this, for the silver florins did not amount to more than 210 or 220 millions, and the small currency was less than 10% of this figure. The ceiling would then seem to have been around 230-240 millions.⁹ One should, also mention in passing that the figures given by Kautz (who estimates total volume in silver equivalent as 220 millions and small currency as 80 millions) are based on the situation after bank notes of 1 and 2 florins had been issued to increase the volume of small currency in face of the demands created by the Napoleonic Wars, a situation which did not obtain in the years 1792-6.

Hungary's quota is not apparent from these figures, but it cannot have been more than a third of the total, in view of the size of its national revenue and the backwardness of its economy, and of the calculations of quantitative historical political economists. We can base our calculations on the figures given by the Viennese statistician de Luca, which were drawn up in 1790, as these were judged reliable by the leading Hungarian economist and statistician, Berzeviczy.¹⁰ De Luca calculated that Hungary and the adjoining territories had a population of 12.7 millions and a national revenue of 25 million florins. In Austria and the hereditary lands of the empire, however, a population of 12.5 millions provided a revenue equivalent to 52 million florins. Before the Napoleonic Wars, then, the speed of currency circulation would seem to have been close to a factor of 3. This was upset, however, by the effects of the war on production and by the inflationary financial measures adopted for both productive and non-productive ends.

Agricultural production in Hungary increased considerably as a result of the war, and this affected both agricultural exports and industrial imports. The figures given by another Hungarian economist, Almásy, show that the

⁹ G. KAUTZ, *op. cit.*, p. 194 — in direct reference to the terms of the devaluation of February 1812, when the volume of 1061 millions of Banko-Zettel was reduced to 212.2 millions, and that of small coin from 80 to 16 millions.

¹⁰ R. HORVATH, *The influence of the physiocrats on Hungarian statistics*, in I-II, « Statizikai Szemle », 1971, No. 1, pp. 75 ff. & No. 2 pp. 181 ff. (In Hungarian, with English and Russian résumés) which refers to I. DE LUCA, *Geographie des Königreichs Ungern und der angrenzenden Länder Illyrien und Siebenbürgen samt einer statistischen Übersicht der neuesten Verfassung derselben*, Vienna 1791, and also to G. BERZEVICZY, *De Commercio et de Industria Hungariae, Leutschoviae*, 1797.

situation of agricultural production, calculated at fixed prices for 1789, was dramatic when compared with the previous decade¹¹

	Imports	Exports	Surplus
	(in million florins - 1789 prices)		
1780-1790	10.1	12.7	+ 2.6
1795-1800	18.3	25.6	+ 7.3

From these figures Almásy argued in 1803 that an annual increase in currency of 6 million florins (calculated at stable prices) would be necessary to meet the demands created by the economic situation.¹²

The issue of obligatory bonds by the Vienna bank provided the means for financing every type of economic operation, no matter whether it was authentic, misguided or even purely speculative, and at the start this had a very stimulating effect. These bonds did not, however, truly constitute paper-money, because they represented the state's debts and yielded interest, even though the interest rate was reduced in subsequent phases of the inflation. The famous "Viennese scale" of 1806 devalued the state's debts held by the bondowners, that is its private creditors, by introducing a sliding scale using an empirical interest rate based on 1799.

In theory, the state's indebtedness should have been represented in equal measure by these bonds and by the increased volume of currency in circulation, due to the adoption of this means of financing — if one omits first the state debts contracted before 1796 and secondly the partial redemption possible. In fact the mechanism of the inflation could not be maintained in equilibrium due to the influence of a range of factors already discussed and others not yet mentioned. Amongst these was the eagerness shown by the authorities to use the mechanism to rid themselves by authoritarian measures of debts previously contracted — even those of a private or royal nature — which proved to have far reaching consequences. Factors such as these have not received much attention from historians, but they contributed in a very important — although as yet unknown — manner to exposing the real character of the inflation, in the truest sense of the word, in so far as it affected the financing of the state's needs and the *étatiste* concept of money and the function of credit.

The mixed and differentiated character of the inflation seems to have escaped the notice of economic historians from Kautz to the present,¹³ but

¹¹ *Ibid.* - reference to P. ALMÁSY, *Raisonnierter statistische Übersicht des Königreichs Ungarn, samt Banat, Slavonien, Dalmatien und Kroatien* (1803).

¹² *Ibid.* - reference to ALMÁSY, *op. cit.* and use of method of calculation adopted by Necker.

¹³ G. KAUTZ, *op. cit.*, p. 193, n. (2) - reference to SPRINGER, *Geschichte Österreichs seit den Wiener Verträgen*, Vienna 1863, Vol. 1, p. 154, and *History of Hungary 1790-1849*, edited by Mérei & G. Spira, Budapest, 1961, p. 93.

it is revealed by the double use of the bonds, employed both as a state debt and also as a form of currency on which to base the fiscal burden arising from the war.

The fiscal burden was so heavy that two successive issues were made in 1796 and 1801, both of which were made obligatory. This was unavoidable due to the increase in the number of bonds in circulation which led to speculation and an end to metallic coin convertibility. The issues and the rate of agio prior to the first devaluation of 1811, according to the data drawn from documents in the Hofkammerarchiv by Dr Schalk, followed the pattern given below:¹⁴

End of year	1796	46 millions;	agio: 100¼%
»	» 1799	141 »	» 107%
»	» 1802	337 »	» 120%
»	» 1806	450 »	» 175%
July	1809	651 »	» 315%
June	1810	942 »	» 395%
March	1811	1061 »	» 883%

The official exchange rate for metal coin was suspended as early as 1797 and the silver florin — the *Konventions-Währung* — disappeared from circulation in 1800. The shortage of petty coin was even more severely felt and was not solved by the issue of bills valued at 1 and 2 florins. The creation of self-styled "Market-price Commissions" and the imposition of severe regulations against usury did not succeed in halting the rise in prices or in reducing war speculation, in spite of the parallel increase in import duties and the prohibitions on various import goods. The authorities also failed to obtain precious metals by imposing authoritarian measures on the hereditary provinces in 1806 and 1809.

These measures were not employed in Hungary, but nevertheless increases in the prices of state monopoly goods, the price of salt and tobacco, as well as the cost of the postal and customs service, were introduced in 1806-7 with the assent of the Hungarian Diet. The state's bankruptcy was virtually inevitable despite this and was openly declared in February 1811, when war bonds and coinage worth 80 millions were devalued by 20% of their original value. In 1812 the introduction of new Banco-Zettel bonds named "Einlösungsschein" or "Wiener Währung" created a new paper currency with a ceiling of 212.2 millions, and an additional 16 millions in petty coin. At the same time the interest rate was reduced by half and fixed at 4%.

This notion of stabilizing the currency by restoring the purified currency to the volume of circulation existing prior to the outbreak of inflation, devaluing the actual value by one-fifth of the original value, allows us to

¹⁴ J. BÜKY, *op. cit.*, pp. 47 ff.

draw two conclusions. The first is that the double use of the inflationary currency which we have described — its use as both a state debt and as Banko-Zettel bonds — was highly mistaken. The devaluation of these two similar forms of currency should have aimed at restoring the volume on the basis of one-tenth rather than one-fifth, in order to arrive at the situation existing before 1796. The new ceiling adopted for coin — 16 millions in place of 80 millions — indicates that this was not the case.

The second conclusion is that the imperial authorities' concept of stabilization did not take account of the development of real production when this "step backwards" was envisaged, for this was mainly financed by the inflation caused by the Napoleonic wars. The need to increase circulation for this reason, from 1796 onwards, is apparent from Almásy's calculations to which we have already referred — even though they do not make allowance for the effects of the increases in non-productive sectors. In other words then, even if hostilities had continued after 1812, a second phase of inflation, albeit a more modest one, could hardly have been avoided as a result of the unduly deflationary concept of stable monetary circulation.

IV. *The political struggles over the monetary system.*

How did the Diet react in face of this unprecedented inflationary situation?¹⁵ The Diet of 1802 had demanded that a national bank should be created in order to encourage commerce and industry and modernise agriculture, just as its predecessor of 1791 had done, and equally without success. The reason for the failure was unchanged. Because of their exemption from taxation, the Hungarian nobility would not contribute the funds needed to found a state bank nor would they supply the revenue needed by the state for improvements and investment.

This social group consisted of less than 20% of the Hungarian population and owned 80% of the land in the country.¹⁶ It was not touched by the increased fiscal burdens and it even refused to accept any increase in "public law" taxes — which Berzeviczy and Almásy calculated at about 9-10 million florins in 1802-3, and which were as a result born entirely by the serfs and the poor and, to a lesser degree, by the artisans and merchants of the free royal towns.¹⁷ The problem of currency inflation could not in fact be coped with on the basis of feudal law, and this was one reason why the Diet in 1802 accepted the Austrian currency exchange code and procedure (dating from 1792), where contracting parties would agree to this.

¹⁵ G. KAUTZ, *op. cit.*, pp. 183 ff.

¹⁶ R. HORVATH, *op. cit.*, (1972), p. 5 4- reference to G. BERZEVICZY, *De Conditione et Indole Rusticorum in Hungaria* (probably 1804).

¹⁷ R. HORVATH, *op. cit.* (1971), p. 85; *Id.*, *op. cit.* (1972), p. 54 ff.

The increasing rate of inflation in 1806-7, however, forced the Hungarian nobility to revise the position they had adopted in the previous Diet, and they provisionally renounced their fiscal exemption by conceding a tax of 18% on income from land, commerce and industry, and another tax of 1% on property and capital — including in this the increase in the price of state monopoly goods described as a tax on consumption. The revenue from “common law” taxes — that is “domestic” and “military” taxes combined with “regal” levies and other extraordinary duties — was estimated at about 30 millions in nominal terms for this period.¹⁸ As the situation grew worse, however, the Diet’s conciliatory behaviour quickly disappeared and the legality of the measures used by the government in its inflationary financial operations was bitterly attacked.

The Diet of 1811 denounced the declaration of February of the same year, declaring that it was not contesting the royal privilege of issuing money, but that there existed no royal prerogative to issue bank notes without backing which made all laws of taxation invalid, quintupled all existing taxes and destroyed all distinctions between private wealth and state wealth.¹⁹ In addition, the government in 1811 insisted that Hungary should pay a yearly sum of 12 million florins in extraordinary taxes as a “*subsidiium*”, another 2 millions into a fund designed to even out the agio, and finally that its revenues should be used to guarantee a redemption of 100 million florins of state debts. It was this attempt to redistribute the state’s debts to Hungary, which was part of the central government’s scheme of redeeming private debts by means of the “Vienna scale”, that led to the break-down of relations between the two political partners. In May 1812 the Hungarian constitution was suspended, the declaration of February 1811 was made law and the “*Einlösungsscheine*” were introduced in Hungarian territory.

V. *The second phase of inflation and the final stabilisation*

In spite of the inflationary situation in agriculture, and in particular its effects on food exports, the renewal of warfare in 1811 and 1812 prevented the paper money system in the Hungarian empire being stabilised.²⁰ In April 1813 the volume of compulsory currency, issued in the form of bonds on the land tax repayable in 12 years known as “*Antizipationsscheine*”, was increased from the envisaged ceiling of 46 millions. By 1816 they had already increased to 467 million — which when added to the “*Einlö-*

¹⁸ G. MÉREI & G. SPIRA (eds), *op. cit.*, p. 124.

¹⁹ G. KAUTZ, *op. cit.*, pp. 202 ff., notes 1 & 2, and pp. 205 ff., note 3 which contains the texts of the Diet.

²⁰ J. BÜKY, *op. cit.*, pp. 36 ff.

sungsscheine", made a total of 679 millions. The agio on this double paper currency also increased in parallel from 140 in 1813 to 372 by the middle of 1816, and terminated with the second devaluation, of 80% on the original value, which took place in June 1816. But the ending of the Napoleonic wars meant that some final solution to the financial disorder caused by the war was needed. It was for this reason that the "*Österreichische National-Zettel-Bank*" was founded in 1816 with the purpose of replacing the issues of paper-money with a nonconvertible currency, and in order to reestablish the parity between bank bonds and the former silver standard, the *Konventions-Währung*.

From 1825 onwards this bank operated under the name "*Privilegierte Österreichische Nationalbank*", so that its *étatiste* status and character was not in any doubt. The new bank note issued had an exchange parity of 250:100. It is worth noting that the reexchange of the state bonds was so vast that the agio on the new currency began to increase again, and between June 1816 and December of the same year it rose from 283 to 348, and then reached a maximum of 378 in January 1817. But thereafter it began to fall, and by the end of 1818 was only 200.

Following the terms of the report of the "Commissions of Redemptions and Amortizations" in April 1822, when they were dissolved, the bank had still to redeem about 450 millions of the old Wiener Währung, and of this the central administration, as public creditor, took over 110 millions as state debts — 60 millions at the reduced interest rate of 4%, the rest without interest. By the end of 1834 the National Bank had converted about 426 million into *Konventions Währung*, and by the end of 1842 there were only about 10 millions of the old Wiener Währung in circulation in the empire — which meant that the financial system was not cured of the last vestiges of the Napoleonic inflation until this time.

The recovery of the currency was assisted by the economically stable era of the Holy Alliance and also by the way in which the costs of the war were portioned out to Hungary due to the combined effect of the suspension of the feudal constitution and to the inflationary financing of the state bonds which were redeemed at a rate above Hungary's economic share — in place of a third, she received nearly half of the reimbursement, about 100 million old florins. An indication that stabilisation had been achieved was to be found in the use of loans from private bankers, such as the Rothschilds and certain English banking houses, to cover new budgetary deficits in the period after 1816, and these were then established as a consolidated public debt and quite distinct from monetary circulation.²¹

²¹ G. MÉREI & G. SPIRA eds, *op. cit.*, p. 124.

Severin, or at least some of them. Further information from Genoese archives is needed to clarify this, but there can be no doubt that it was normal for the Genoese to be present in both Giurgiu and Calafat — the name of this village is identical with the Italian name — and also in Severin, and can not in any way be seen as something exceptional.

How long did the Genoese continue to sail up the Danube? As long as there were Christian states on both banks of the river there was no great danger, but once the Ottoman Empire put an end to the Bulgar state in 1393 and occupied the right bank of the river then the danger began to increase. Ships could be attacked and goods plundered at any moment. This I believe is the main reason why Genoese navigation on the Danube came to a halt after the Turks became established on the right bank. The Genoese then began to use the more difficult land route from Zara on the Adriatic across the mountains of the Balkan peninsula to Buda.⁶⁷

At the same time the fierce competition from goods arriving along the continental route from Flanders via Cologne, Prague, Buda, Brasov, Tirgoviste, or else via the Polish branch (Prague, Cracow, Lwow-Suceava), meant that the long up-stream journey on the Danube from Vicina became less and less worthwhile for the Genoese. Lombard cloth was now overtaken by Flemish cloth from Ypres and Louvain or else by cloth from Cologne or from the Czech lands, as is evident from the privileges granted by the Roumanian *voivodes* in the early XVth century. And in this way, the chapter of Genoese expansion along the Roumanian Danube drew to its close.

⁶⁷ The route to Zara is also mentioned in the document of 24 June 1349, but only after that along the Danube.

It was due to the competing strains of developing capitalism and surviving feudalism within the Habsburg empire that no "bourgeois" inflation, on the model of the French "assignats" for example, which might have mobilised the entire resources of society and the state, could have occurred. As a result the theoretical economic laws of the Napoleonic war inflation were not discovered in this period, in spite of the attacks made by the representatives of the Hungarian nobility and in spite of the serious social consequences of the inflation which are fully described in the literature of the period and have been ably reconstructed by Büky in his book.²⁴

It was only later that Marx and Engels, at the time of the bourgeois revolution of 1848 in Hungary, came to appreciate that Kossuth, the minister of finance in the revolutionary Hungarian government, had outlined these laws and formulated their nature and characteristics in his own economic writings.²⁵ However, the outcome of the 1848 revolution prevents us drawing a complete parallel with the model of the French revolution in so far as the mechanisms of financing are concerned.

The experience of the Habsburg empire during the Napoleonic wars was neglected by economic theorists until the second half of the XIXth century, when the financial difficulties of the empire were met with measures very similar to those applied in 1811, as Kautz claimed.²⁶ It was this that Knapp took as his starting point for the extensive research into paper currency which in his « *Staatliche Theorie des Geldes* » was to lead to a very different form of monetary theory in 1905²⁷ which was to influence Keynes strongly in his famous *Treatise on Money* of 1930.²⁸

But, continuing this line of argument, it is important to emphasize that these theories were concerned mainly with the function of a world currency using a certain monetary standard. But this was not a problem which existed in any obvious way at the time of the Napoleonic wars, nor even in the 1860s, in the Habsburg lands, for the almost total autarchy and the backwardness, in terms of international capitalist commerce, ruled out speculations and worries of this nature. It was only rather later, towards the end of the XIXth century, that Kautz, while acting as governor of the Austro-Hungarian bank, developed the theory of a "gold-exchange standard" — that

²⁴ J. BÜKY, *op. cit.*, p. 30 ff.

²⁵ R. HORVATH, *Kossuth's Views on Economics in his Lectures on National Economy at the University of London*, « *The Journal of European Economic History* », Vol. 2, No. 2 Fall 1973, pp. 339 ff. (original Hungarian version in « *Acta Univ. Szegediens Jur. et Pol.* », vol. x, f. 3, Szeged 1963) in reference to the article by Marx & Engels in the « *Neue Rheinische Zeitung* ».

²⁶ G. KRAUTZ, *op. cit.*, p. 212.

²⁷ G. KNAPP, *Die Staatliche Theorie des Geldes*, Leipzig 1905.

²⁸ J. M. KEYNES, *A Treatise on Money*, New York, 1930.

is of a monetary system which for international purposes was based on gold but on *étatist* principles as far as domestic circulation was concerned. As I have suggested elsewhere, the ideas of Kautz also seem to have influenced Keynes — most notably in his *Indian Currency and Finance* of 1913.²⁹

²⁹ R. HORVÁTH, *The contribution of Gyula Kautz to Hungarian statistics*, in « I-II Statisztikai Szemle », 1971, No. 7, p. 736 ff. & No. 8, pp. 894 ff. — which refers to J.M. KEYNES, *Indian Currency and Finance* (London, 1913); see also R. HORVÁTH, *Some problems of the monetary system*, in the volume « The Principal Problems in Hungarian Financial Law », ed. R. Horvath, Budapest, 1954, pp. 103 ff. (Both texts are in Hungarian, the former with English & Russian resumé).