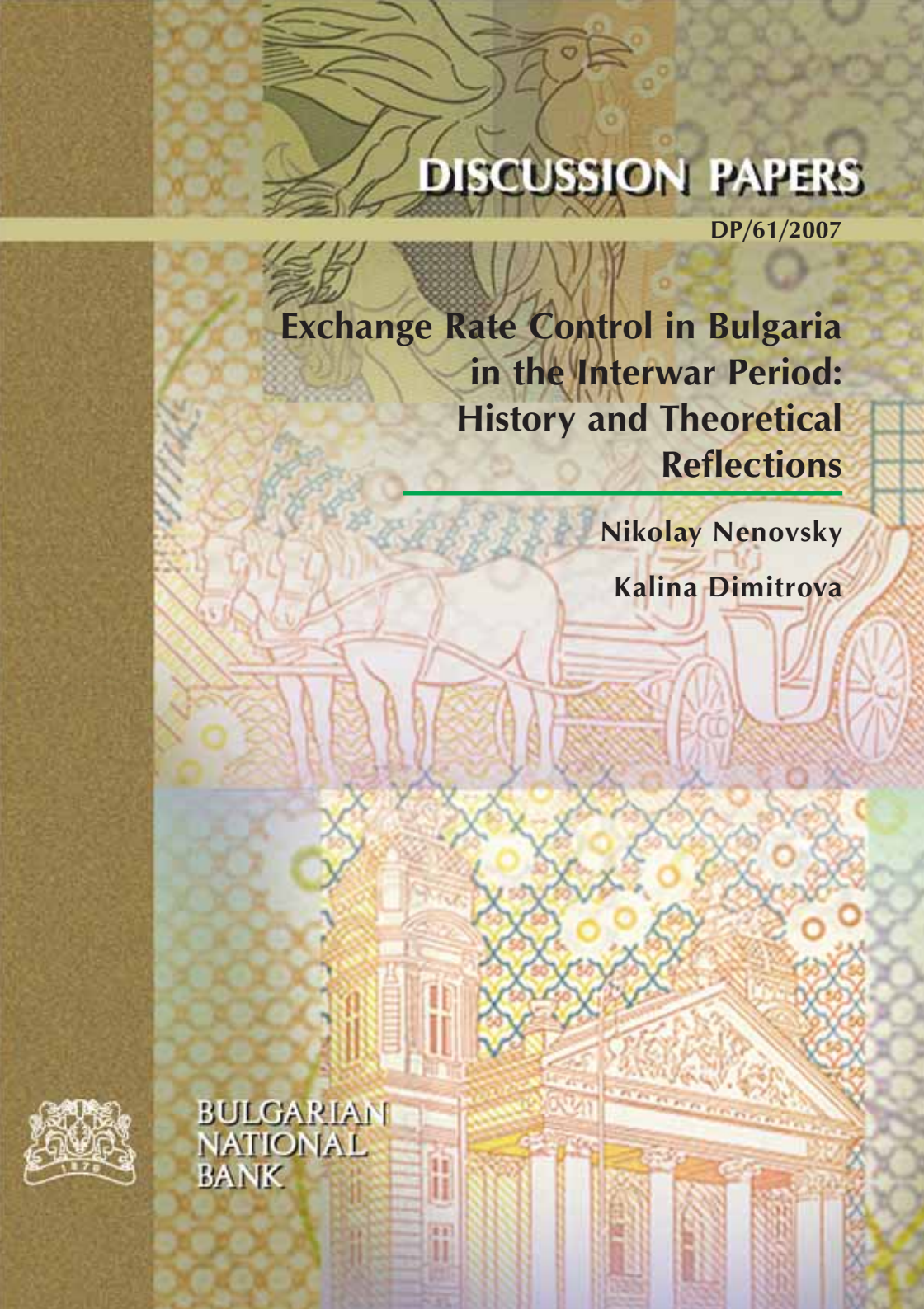

DISCUSSION PAPERS

DP/61/2007

Exchange Rate Control in Bulgaria in the Interwar Period: History and Theoretical Reflections

Nikolay Nenovsky

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Contents

SUMMARY. The paper analyses the exchange rate control measures implemented in Bulgaria in the Thirties among other European countries. The analysis starts with presentation of the events chronology and the specific economic and institutional environment when these measures were introduced in the country. The second section suggests a theoretical interpretation of the exchange control and clearing agreements stressing that these policies were a serious interference in market mechanisms. A further point is that the exchange control introduced and practiced in Bulgaria was an eloquent example of how serious the balance of payments constraint was at that time. Moreover, the exchange control choice of Bulgaria turned out to be a logical answer to avoiding intensification of the foreign debt burden and deflation at the same time. The paper also provides some economic arguments supporting the official decision against devaluation in the interwar period.

JEL Classification: F31, F33, B22
Key words: Exchange control, clearing agreement, international monetary relations.

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Introduction

On the 6 of September 1937 the BNB Governor Dobri Bozhilov sent a confidential message No. 166 to the Minister of Finance informing him that two Italians, Costantino and Camillo Vacaro had violated the Foreign Exchange Law in 1933 and they did it with the knowledge and assistance of the Italian ambassador in Sofia. Camilo Vacaro brought certain amounts of money in Bulgarian currency to the Embassy against which the Ambassador gave him checks denominated in foreign currencies and those checks were sent to Italy by the delegation itself. The Governor asked the Minister of Finance to discuss this delicate affair at the Council of Ministers before the BNB Governor brought it to trial for Foreign Exchange Law violation (BNB, 2004, No. 297).[1]

The history of the exchange control in Europe in the interwar period provides us with interesting insights into the current development of the European monetary union and of the perspectives of its enlargement, where the exchange rate and monetary regime have a central role. As in the past, in a different historical context and in different forms, of course, Europe today could also be divided into centre, semi-periphery and periphery or, in other words, groups of countries at different stages of economic development. Therefore, we find it challenging to study exchange control (exchange rate regime) in Bulgaria, a country on the periphery of Europe.

The introduction of exchange controls typified the general collapse and fragmentation of the international monetary system after the First World War, and put an end to almost 40 years of considerable economic and financial stability.[2] The world economy suddenly split into blocs of countries with different economic and monetary behaviour. Two major attitudes towards economic policy confronted each other. The first was held by those who thought that a return to the old semiautomatic regulatory mechanisms was possible and indeed necessary, and who viewed the gold standard as an integral part of these mechanisms. The second attitude was held by those who believed that a new era of economic relationships had come and hence new rules (active government interference) were required. This was a time when the world economy was going through a transition which was extremely unstable and which ended in the Second World War. It led to the creation of the IMF and the World Bank as new supranational regulators of the world monetary system.

[1] In fact, this affair is a typical case of avoiding exchange rate restrictions. According to Charles Kindelberger the ways to circumvent the exchange control are either to bribe an employee at the central bank or to export money with the help of diplomatic representative offices or to get involved in smuggling (Kindleberger, 1990 [1984], p. 531).

[2] See Fromkin (2004) for a general discussion on the outbreak of the First World War.

As predicted by several economists at that time, exchange control turned out to be an extremely distorting and discriminating form of interference in monetary relations. According to Lionel Robbins, "Tariffs, exchange restrictions, quotas, import prohibitions, barter trade agreements, central trade–clearing arrangements – all the fusty relics of medieval trade regulation, discredited through five hundred years of theory and hard experience, were dragged out of the lumber-rooms and hailed as the products of the latest enlightenment" (Robbins, 1935, p. 114). From a global perspective, while the different blocs managed to preserve their relative shares of world export and the members of each bloc tried (and succeeded to some extent) to balance their foreign trade within the group, the emergence of isolated blocs resulted in a contraction in the amount of world trade.

Table 1

PERCENTAGE SHARE OF CERTAIN GROUPS OF COUNTRIES (EXCLUDING THE UNITED STATES) IN THE GOLD VALUE OF WORLD EXPORT

	1929	1931	1935	1937
European exchange control countries	23.48	27.19	21.68	22.53
Gold bloc	14.53	15.86	13.41	12.01
Other countries	61.99	56.95	64.91	65.39
	100	100	100	100

Source: League of Nations (1938).

Michael Heilperin gives a working definition of exchange control: "Exchange control," he writes, "consists in the centralization of all dealings in foreign exchange in the hands of a public authority (a treasury, a central bank, or an institution created ad hoc)" (Heilperin, 1939, p. 238). Howard Ellis (1940, 1947) provides an extensive discussion of the instruments and forms of exchange control. He stresses the fact that exchange control "is not generally taken to include the following: tariffs, quotas, prohibitions and embargoes, subsidies, state trading and commercial agreements and treaties. It impinges upon these at point but does not include them" (Ellis, 1947, p. 877). According to Ellis, the main instruments of exchange control are: a government monopoly in foreign exchange dealing, government disposition over private holdings of foreign exchange and assets, enforcement of an overvalued or undervalued rate of exchange, multiple exchange rates, government licence to export and import, government disposition over the proceeds of export, government allocation of exchange to import, officially conducted bilateral clearing and officially conducted barter (Ellis, 1947, p. 877).

Various combinations of these instruments were used to achieve a mix of exchange controls either with respect to international economic matters (maintaining appreciated or depreciated exchange rates, attaining equilibrium in the balance of payments, allowing trade to go on without available foreign exchange, securing more favourable terms of trade, controlling or enforcing capital movement, and economic welfare) or to domestic economic priorities (controlling inflation and deflation, increasing domestic employment, fostering industrialisation and other protectionist measures, preparing for war, providing revenue for the state, and discriminating for or against certain persons or classes within the domestic economy). According to the classification of Ellis the most common and widely implemented exchange control instrument in Europe in the Thirties was the enforcement of overvalued rates of exchange as a device to avoid depreciation which would have ensued because of the withdrawal or flight of capital from debtor countries (Ellis, 1947, p. 878–879). Given the European experience of high inflation (hyperinflation in some countries) after the First World War, the original motive for exchange control was to defend a particular exchange rate as a counter inflationary measure. Since this exchange control instrument did not contribute to improving the balance of payments, other interference included active export encouragement and import restriction.

Given the complexity of this topic, we will start with a descriptive approach, exploring the chronology of events in Bulgaria supported by empirical facts. The purpose of this paper is to analyze the motives behind governments' decisions to introduce and maintain exchange controls, the economic consequences of these decisions, the techniques adopted, and the order of events (Ellis, 1947). From a theoretical standpoint, we study exchange control in the context of economic and monetary isolation (autarchy). To describe the motivation behind policy decisions, we introduce appropriate elements of institutional and political economy. We also take into account the macro and micro influences of exchange controls on the real economy. Our investigation considers balance of payments constraints as a main purpose.

The structure of the paper is the following. In the fist and second parts, we describe the history of exchange control in the interwar period in Bulgaria and illustrate it with data. In the third part, we propose some theoretical reflections and interpretations of exchange control (macroeconomics and microeconomics of exchange rate control). In the conclusion, we try to formulate some lessons from the exchange control in the Thirties' and to make a parallel with today.

Chronology of Exchange Control in Bulgaria

The Balkan Wars and the First World War put a severe strain on Bulgarian economy and finance. Under the Treaty of Neuilly, Bulgaria had to pay a huge foreign debt and above all reparations which came to a quarter of the national income.[3]

Inflation ("expensiveness" – the term used by the Bulgarian economists at that time to describe price increases) was very high and also devalued the national currency. The trade balance between 1919 and 1929 was at a deficit except for three years, with the surpluses far too small to make up for the negative balance in the rest of the period (Svrakoff, 1941, [1936], p. 300). The stages of Bulgarian stabilisation followed the stabilisation processes in other countries logically and chronologically, featuring the peculiarities of the periphery and of developing countries in general (for details, see Koszul, 1932 and Ivanov, 2001). As in other European countries, financial stabilisation was conducted in the context of orthodox monetary ideology which saw a stable currency and balanced public finances as the bases of economic development.

From its very beginning Bulgarian stabilisation was accompanied by a number of exchange controls and restrictions.[4] The Foreign Currency and Foreign Currency Receivables and Credit Trading Act was enacted on 12 December 1918. A week later, on 19 December, the Foreign Exchange Institute (*Kambialen institut*) was established with the main purpose of concentrating foreign currency inflows into the country and smoothing the very volatile exchange rate. The Kambialen institut having failed to improve the foreign exchange market (the exchange rate was subject to speculation and induced overall economic uncertainty), new exchange controls were put into practice. On 12 December 1923 the Foreign Exchange Act gave the BNB a foreign exchange monopoly. The foreign exchange market in Sofia closed and all bids and offers were directed at the BNB. The direct reason for this early form of exchange control was the depletion of foreign reserves, mostly denominated in Reichsmarks, by German hyperinflation in 1923.

Despite signing new trade agreements in August 1925 and introducing more protectionist tariffs in 1926, Bulgaria's balance of payments and foreign currency balances did not improve. The conventional methods of restricting import and promoting export were no longer efficient.

[3]For an extensive discussion on Bulgarian economic development in the 20th Century, see Avramov, 2001

[4]A detailed overview of the various foreign trade restrictions and exchange controls in Bulgaria is provided by Ivanov, 2001, Chapter 2.

New measures enforcing the exchange control[5] were introduced in May 1924, logically related with the *de facto* stabilisation of the Bulgarian lev. A 1926 law fixed the exchange rate at 139 levs to the dollar (the BNB bought a dollar for 137.20 levs[6]) and banknote cover was set at a third. In this case, exchange control genuinely fostered stabilisation which demanded foreign reserves (obtained in the form of a League of Nations' Stabilisation Loan) and balanced public finances with customs revenue a major item. A law of 22 November 1928 designated the BNB an independent monetary institution in the spirit of the international agreements.

Direct exchange market control invariably accompanied manipulation of the other two basic macro markets: import and export. Thus, the 1928 Wine Export Promotion Act, the 1932 Grape Export Promotion Act and the 1935 Meat Export Promotion Act followed. In 1931 an Export Institute was set up, transformed in 1940 into the Foreign Trade Institute (*Institut za vunshna turgovia*).[7] Alongside export encouragement, import restrictions were more often and more effectively used. It is interesting to point out that customs tariffs between 1918 and 1930 always involved administrative exchange rate manipulations. The customs exchange coefficient (the rate at which paper levs were converted into gold levs for the purposes of customs duties) was significantly different from the market rate. According to Toshev, government managed to increase tariffs by 80 per cent over just two years (1926 and 1927) through such manipulation.

[5]A sharp speculative doubling of the lev was recorded in June (Nenovsky, 2006) which hit Bulgarian tobacco sales abroad. Two type of lev were introduced – home and foreign – with the home lev becoming foreign (and usable to pay for import) only with the BNB leave. This dual national currency was not a Bulgarian invention as can be seen from the example of Romania (Royal Institute of International Affairs, 1933, p.115).

[6]On 24 March 1926 the bid rate became 138.80, falling to 138.50 on 24 September 1926 as the BNB tried to attract foreign capital by cutting margins.

[7]In 1930 the Hranoiznos (Food Export Agency) was established and vested with monopoly powers to buy and trade in cereals as a specific tool against deflation. Because of the negative price scissors between buying and selling prices, losses were accumulated and transferred to the budget. Initially half and then a quarter of the payments to farmers were in treasury bonds representing domestic government debt, which amounted to around 400 million gold levs (Berov, 1989, p. 465).

Table 2

CUSTOMS (IMPORT) COEFFICIENTS AND OFFICIAL EXCHANGE RATE OF THE PAPER LEV

1918		1919			1920	1921		1922		1928	1930
15 XI	1 VII	15 VIII	1 XI	1 I	1 VII	1 I	12 X	1 VII	30 X	26 VII	3 VI
Customs coefficient											
2	2.5	3	5	6	7	9	12	14	15	20	27
Exchange rate of the paper lev											
1.66	4.22	4.22	6.05	8.2	8.96	13.5	28.2	29.94	32.3	27	27
Exchange rate of the paper lev/customs coefficient											
1.2	0.59	0.71	0.83	0.7	0.78	0.67	0.43	0.47	0.46	0.74	1

Source: Toshev (1943, p. 67).

Exchange premia, introduced for a limited number of private deals in 1933 and broadening considerably by 1935, acted in the same direction of depreciating the lev, "circumventing the fixed exchange rate", loosening deflation, and enhancing the inflow of convertible gold exchange. By performing a "market-determined" depreciation of the official BNB rate, exchange premia gave exporters the stimulus to export more at lower prices[8] (see box 1).

Box 1 **Import tariffs, exchange rate premia and the real exchange rate**

Let us consider trade and exchange controls together, taking into account import tariffs and currency premia. If t is the tariff and φ is the currency premium (usually $\varphi \geq 0$, but it could be $\varphi < 0$, in the case of the sperrmark in the Bulgarian private compensation market after 1935, for example), and considering the tariff as an addition to the foreign price level P* (P is domestic price level), and the currency premium as an addition to the nominal exchange rate level e, the well-known formula for the real exchange rate e_r becomes:

$$e_r = \frac{e(1+\varphi)/P}{1/P^*(1+t)} = \frac{eP^*(1+\varphi)(1+t)}{P}$$

The condition for real depreciation of the national currency (competitiveness gain) is:

$$(1+\varphi)(1+t) > 1 \quad \text{or} \quad t > \frac{-\varphi}{1+\varphi} \ .$$

[8] Christophoroff (1939, 1947) provides a thorough description of the mechanism and role of the exchange premia. At the beginning they differed across currencies which put them closer to Ellis' definition of multiple exchange rates as an exchange control instrument.

Returning to the international scene, efforts at monetary and financial stabilisation quickly yielded to the Great Depression which started in the USA and quickly reached Europe (first Austria, then Hungary, Germany and other countries). At that time countries used independent strategies to adapt to the crisis (Eichengreen, 1997, [1996]; Eichengreen and Sachs, 1985).[9] Three blocks were formed: i. countries devaluating their currencies (United Kingdom (1931), the USA (1933), and Greece (1932);[10] ii. countries maintaining the gold standard, with France in the lead, and conducting strict deflationary policy to limit wages and prices growth; and iii. countries preserving parity and exercising exchange control (Germany, Italy, Hungary, Austria).

Bulgaria joined the third group, being sceptical of the foreign trade liberalisation measures recommended by the 1927 Geneva Conference.[11] It is our general assumption that the reasons for Bulgaria's introducing exchange control and opposing devaluation and deflation[12] were as set out below:

First, Bulgaria was a debtor country which considered debt service a key priority (Leonidoff, 1966, 1969). In fact Bulgaria was an extremely diligent payer who pursued to preserve its reputation through debt service (Ivanov, 2004). Due to its political isolation after WWI, however, its endeavours as a good payer were not recognised and it had to shoulder its liabilities with almost no relief (Ivanov, 2001, 2004).[13] In his speech marking the BNB's 50th anniversary, then-prime minister Andrey Lyapchev said, "one would be hard put to find quite such a young nation in quite such exacerbated circumstances as ours these past fifty years, yet one which can boast that it has ever occupied the position of an exemplary payer to its foreign creditors" (BNB, 2001, p. 135).

With respect to structure, Bulgaria's debt was denominated in gold backed levs and was mostly owed to non-devaluing countries.[14] According to

[9]Many Bulgarian authors speak of a collapse of the world economy (Svrakoff, 1941 [1936], p. 310). A similar overview of the mechanisms of adaptation is given by Einzig 1934: "Countries who do not resort to inflation do not put themselves in a position where it might appear advisable to have recourse to those measures comprised under the term Foreign Exchange Control" (Einzig, 1934, p. 9).

[10]In late 1931 16 countries preserved the gold standard, 12 had currency parity, and another 11 kept gold parity by restrictions on trading foreign exchange (Svrakoff, 1941 [1936], p. 312).

[11]In 1926, however, there was a partial reduction of restrictions. In spite of much comment on the decrease of trade and exchange restrictions, the Andrey Lyapchev government did not have the political will to act.

[12]Christophoroff also points out that exchange control is a way of "fighting deflation" (Christophoroff, 1939, p.12)

[13]Bulgaria continued to pay reparations in 1933.

[14]French claims on Bulgaria were about 26 per cent of overall Bulgarian debt. Next in the creditors' list were Italy at 25 per cent, Greece at 12.7 per cent, and Romania at 10.55 per cent.

the Royal Institute of International Affairs, "in Bulgaria it is almost certain that the transfer question has predominated" (1936, p.98) and the purpose of maintaining the currency on a gold basis "has presumably been to avoid an increase in the costs of the foreign debt service" (1936, p.129). Even before reparation payments began in October 1923, foreign debt service reached the amount of 112 million gold francs in 1918 to 1922: 16.3 per cent of budget expenditure. Reparations under the 27 November 1919 Treaty of Neuilly were added to this, coming to 2250 million gold francs at 5 per cent annual interest over 37 years, plus occupation expenses. This represented a quarter of the national wealth. Sterling devaluation offered some relief to Bulgaria since its debt was predominantly in pounds. Debt service now accounted for 11 per cent of budget expenditure; there was no great BNB asset loss since a comparably small amount of assets was denominated in Sterling (the Royal Institute of International Affairs, 1936). Summarising the opinions of many economists at the time, a hypothetical devaluation would certainly increase national debt burden, while any possible advantages would be marginal (Sarailiev, 1937, p. 27).

Second, the balance of payments constraints were particularly tight, and not only as regards foreign debt service. The prices of agricultural products, which accounted for the major part of Bulgarian export,[15] fell sharply on international markets and aggravated terms of trade. The September 1932 Stresa Conference which focused on possible assistance to Southern European countries (a major part of the so-called "agrarian bloc") noted that the price drop reached 70 per cent (Bonnet, 1933, p.21). A fund concentrating revenue from the sale of agricultural products to developed countries was proposed to be used as partial debt service (the United Kingdom vetoed it).

Third, systematic exchange control could be interpreted as a defence against restrictions introduced by Bulgaria's trading partners. The farming price drop was combined with a number of restrictions on the import of agrarian products to Germany and France with a view to protecting indigenous farmers through economic and political means (Raupach, 1969). Turkey, an important Bulgarian trading neighbour, also introduced some limitations on Bulgarian import. In April 1932 the drachma joined the devaluers' club (Lazaretou, 2005) and Bulgaria lost its competitive and long-standing positions on the Greek market.

The fourth and direct cause of exchange control was the intensification of capital outflow from Bulgaria at the end of 1931. This followed the collapse of the fragile monetary and financial stabilisation of the late Twenties and

[15]Romania faces similar problems: Madgearu, V. (1939). For an overview of the economic situation for the Balkans in Thirties, see Royal Institute of International Affairs (1936).

Sterling devaluation. In addition to this global imbalance, Boshulkov (1927) provides a list of long-term domestic factors like the purge and confiscation of capital claimed to be illegally accumulated during the Wars, and political instability, which certainly contributed to decrease Bulgarian capital accumulation and foreign reserves.

Table 3

SOME MACROECONOMIC INDICATORS OF BULGARIA, 1927–1939

Years	Total reserves (mill of levs)	Coverage ratio (%)	Trade balance (mill of levs)[1]	Budget balance (mill of levs)[1]	Years
1927	13078	28.3	489		
1928	12897	31.2	-810	347	1928/9
1929	8984	42.2	-1928	185	1929/30
1930	9249	37	1601	1143	1930/1
1931	8620	36.6	1274	-891	1931/2
1932	7519	35.8	-88	-746	1932/3
1933	7442	36	644	-233	1933/4
1934	7278	35.3	287	-246	1934 (9 months)
1935	6549	34.4	244	-278	1935
1936	7158	33.8	729	283	1936
1937	8196	31.9	34	642	1937
1938	8250	31.8	644	510	1938
1939	11677	29.9	868		

Note: 1. Christophoroff, A. (1939), p. 139.
Source: Statistical Yearbooks of the Kingdom of Bulgaria, (1934, 1937, 1941).

Systematic exchange control came into force in Bulgaria[16] with the 15 October 1931 Foreign Exchange Trading Act and BNB Ordinance No. 1 of 20 October.[17] These instruments gave the BNB a strict foreign exchange monopoly, defining in great detail how foreign exchange was to be submitted to the BNB and how it could be dispensed for import. Lists of luxuries whose import was limited began to be compiled and amended. To keep foreign capital in Bulgaria and halt depletion of foreign reserves, the BNB raised interest rates in 1933 imposing further import restrictions. As other countries (including major trade partners Greece and Turkey) imposed exchange and trade constraints, the only reasonable way of letting foreign trade "go on" was through bilateral clearing and even officially conducted barter (Ellis, 1947).[18] In a sense, exchange control was *unilateral*, while clearing – an instrument to overcome the disadvantages of exchange control – was *bilateral* with some

[16]In June 1931 the Naroden Blok government came into office after the Demokratichen Sgovor.
[17]Also followed by Ordiance 4.
[18]A similar "going on" argument is stressed by Jacque Rueff (Rueff, J. 1966, p. 79).

prospects of becoming *multilateral*.[19] Thus clearing followed exchange control as the latter inevitably hampered international finance and trade.

Bulgaria signed clearing agreements with Austria (October 1931), Switzerland (April 1932), Germany (June 1932), and Italy (1933). At first clearing covered a small share of foreign trade but it soon became widespread and according to Michaely (1962) and Friedman (1976) occupied two thirds of trade turnover in the Thirties. Benham (1939) and Neal (1979) argue that Bulgaria, together with Hungary, was the country which used bilateral forms of international trade to their utmost, while being the sole country managing a fixed clearing exchange rate for the entire period of restrictions. In Michaely's calculations (Michaely, 1962, p. 691) Bulgaria ranked last in a sample of 60 countries, with bilateralism representing some 87 per cent of its foreign trade in 1938 compared with an average of 70 per cent. It is interesting to note that in successive rankings for 1948, 1954, and 1958, Bulgaria kept the last position, this time in the context of the Eastern bloc.[20]

Many authors like Friedman (1976, p. 117) shared the opinion that Germany was the logical clearing and bilateral partner for Central and Southern European countries (Table 4) as a natural reaction against British and French tariff and non-tariff restrictions under which trade with Bulgaria was bound with foreign debt service.[21] Moreover, Britain and France did not extend credit lines as did Germany and did not have similar markets and domestic demand. It was natural for the contraction of trade with France and Britain to be compensated partially by expanding trade with Germany and Austria.

Under clearing importers pay in their national currencies, depositing money with their central banks, while exporters get paid in their national currencies by their central banks. Settlement is at an exchange rate agreed in advance. At first glance, the country with a stronger or appreciating currency loses out by accumulating positive clearing balances which cannot be settled (for details see Neal, 1979) and thus attempts to increase trade outside clearing agreements.

The difficulties of clearing and the need for more flexibility prompted the appearance of a new institutional form of international trade: bilateral private trading with exchange rate premia; in 1933 compensation offices were established at chambers of trade. Bilateral private compensations were paid directly to importers in their national currencies.

[19]This Nazi wartime project (1940–1942) was never put systematically into practice. In the case of Bulgaria trilateral agreements were used more after 1935 (see Christophoroff, 1939, p. 36).

[20]Christophoroff (1939) provides his own calculations of this indicator.

[21]See for example the Royal Institute of International Affairs (1936, p.131). Heinrich Hunke, chairman of the Council for German Economic Encouragement underlined the differences between French/British and German Southern European policy in a 1942 Sofia speech which stated that trading with Germany had saved Southern Europe and the Balkans (Hunke, 1942, p. 16–17).

Table 4

CLEARING AND NON-CLEARING TRADE OF BULGARIA

Years	Export (shares, %)				Import (shares, %)			
	Clearing in total export	Germany in total export	Germany in total clearing	Non-clearing total export	Clearing in total import	Germany in total import	Germany in total clearing	Non-clearing total import
1934	78.97	48.05	60.84	21.03	78.3	48.87	62.43	21.7
1935	77.25	49.48	68.09	22.75	80.19	59.82	75.11	19.81
1936	69.44	50.53	72.78	30.56	81.7	66.67	81.58	18.3
1937	65.52	47.11	71.91	34.48	79.9	58.22	72.82	20.1
1938	77.24	58.86	76.21	22.76	74.02	51.43	70.22	25.98
1938a	71.68	51.49	71.78	21.4	74.74	54.1	72.38	25.32
1939a	72.81	59.43	81.63	27.19	80.89	61.04	75.46	19.05

Note: a. export/import data refer to the first five/four months of the year.
Source: Christophoroff, A. (1939) "The Course of the Trade Cycle in Bulgaria, 1934–1939", p. 46, p.48.

Studying the clearing mechanism in more technical detail, however, reveals two forms of payment. The first implies that the foreign bank (the BNB in this case, providing there was a clearing surplus for Bulgaria) had Reichsmarks (Sperrmarks) at its disposal and paid to the importer in levs (*i. e.*, it bought Reichsmarks, called "blocked marks"), thus increasing Bulgarian money supply and income and hence driving up import demand. In this case the BNB supported the Reichsmark by not allowing it to depreciate. The foreign currency was on the asset side of BNB books. This was "the principle of immediate payment."

The second form, described as "the principle of delayed payment" implied that Bulgarian exporters waited for the sale of German goods and then bought Reichsmarks with their blocked levs.[22] In this case the BNB refused to buy blocked marks until they had been requested by importers of German goods. Until such request the Reichsmark depreciated on the Bulgarian market. In this case the holding of blocked Reichsmarks did not create money, being off-balance sheet.

According to the literature dedicated to the subject, the principle of immediate payment was advantageous to depressed Southern Europe because it was widely believed that expanding money supply would cut unemployment rather than lead to sharp price rises. According to Neal (Neal, 1979, p. 393) the bigger the clearing surplus and the higher the mark rate under the principle of immediate payment, the stronger the expansionary effect for Central

[22]For more details see Lindert and Kindleberger (1983 [1982]) and Kindleberger (1988 [1973]). Sometimes the two methods are termed the financing and waiting principles.

and South European central banks. Thus Hungary, which adhered to the principle of immediate payment, experienced economic growth and an improving balance of trade. Romania, in contrast, exercised the principle of delayed payment which impacted its economic development (Neal, 1979). Bulgaria, as Hungary, applied the principle of immediate payment in clearing, and the effects on money supply expansion can be studied in balance sheet data (Table 6). The increasing value of Other Foreign Currencies on the asset side of BNB books closely followed receipts of non-gold bloc foreign exchange from clearing and other agreements (BNB, 2001). The growth of this item was much faster after 1938 when huge positive balances in German clearing were recorded.

Table 5

BNB BALANCE SHEETS 1928–1938 (MILLIONS OF LEVS)

Assets	**1928**	**1930**	**1932**	**1934**	**1936**	**1938**	**1940**
Gold and silver holdings[1]	1598	1879	1874	1900	2049	2586	2301
Receivables in gold foreign currencies (article 10 of BNB Law)	2736	481	92	26	0	0	4
Other foreign currencies	534	152	116	174	772	1279	2336
Domestic credit[2]	5362	4267	3913	3724	4336	4829	8021
Treasury bonds	0	0	130	310	0	0	0
Other items[3]	164	375	247	252	215	146	557
Total assets	**10394**	**7154**	**6373**	**6386**	**7372**	**8839**	**13219**
Liabilities							
Capital	500	500	500	500	500	500	500
Reserve funds	1149	1169	1191	1240	1241	1188	1207
Banknotes in circulation	4173	3296	2635	2449	2571	2800	6518
Deposits[4]	3862	1817	1813	1872	2382	3707	3785
Other liabilities[5]	637	287	203	277	546	443	937
Profit	71	83	32	48	133	202	272
Total liabilities	**10393**	**7154**	**6373**	**6386**	**7372**	**8839**	**13219**

Note: 1. Gold and silver holdings including coins. 2.Domestic credit comprises receivables from government, banks, commercial paper, and effects. 3. Property and other assets. 4. Demand, time and other deposits by government and banks. 5. Liabilities in gold and other foreign currencies.

Source: Original balance sheet data from BNB (1999) 120 Years Bulgarian National Bank, p. 130.

In late 1939 exchange control was transformed from an instrument of stabilisation into a lever for marshalling war resources. The military logic of exchange control was apparent much earlier in Germany and Italy which in the late Thirties subordinated foreign trade to war needs. The final point in the relationships with Bulgaria for instance (and before that with Romania) was the 1940 clearing agreement (the BNB did not participate in negotiations because of its specific position) which was extremely slanted in favour of Germany (the Reichsmark rate was unfavourable, for one thing) allowing it to transfer resources from Bulgaria. Since 1934 Bulgaria had scored positive

clearing balances which were not covered either by import of machines and goods, nor by capital inflow from Germany. In principle Bulgaria exported agricultural products and imported commodities and industrial materials (Table 7).[23]

Table 6

SHARE OF GOODS' CATEGORIES IN TOTAL IMPORT (PER CENT)

Goods' categories	1921	1923	1927	1929	1931	1933	1935	1936
Commodities and raw materials (incl. fuels)	38.5	50.2	54.3	56.4	58.9	70.2	63.4	63.8
Final manufactured goods	59.6	48.1	43.3	41.1	39.2	28	34.9	34.4
Food and drinks	1.9	1.7	2.4	2.5	1.9	1.8	1.7	1.8

Source: Toshev (1943, p. 90).

In Bulgaria, as elsewhere, exchange control performed another function alongside monetary and financial stabilisation and balance of payments restrictions.[24] Though considered only implicitly, this function was growing in importance. It entailed using exchange control to stimulate or restrict sectors and branches of the economy; according to Paul Einzig exchange control became a "weapon of commercial policy" (Einzig, 1934). Moreover, the League of Nations' report on exchange control noted:

"... the control is now applied as an active instrument of commercial policy and for the further purpose of placing a barrier between world and domestic prices, so that monetary and general economic policies could be chosen and executed without regard to their effects on the balance of payments" (League of Nations, 1938, p. 22)

Though the initial reason for this kind of industrial policy was to limit expensive import (thus the BNB argued in favour of importing commodities and materials rather than machines because the former were cheaper; BNB, 2004, p. 91), the necessity of protecting indigenous industry and cutting unemployment in time moved to the fore.[25] In other words, exchange control and foreign trade restrictions in general (quotas and tariffs) obtained predominantly domestic functions. Economists often argued that "encouraged industry" and overprotection hit consumers and general entrepreneurship since protecting domestic production hampered competition and led to the rise of mo-

[23]Some economists criticise increased dependence on imported materials.

[24]Ellis (1947) describes the purposes (domestic and external) and instruments of exchange control in detail.

[25]The 1928 National Industrial Promotion Act provided various encouragements and duty waivers before losing effect partly due to exchange control in 1931. A new 1936 Act made customs regulations particularly important for protecting industry (for details see Toshev, 1943).

nopolistic domestic industries.[26] In Toshev's opinion "the importance of international trade agreements was diminishing after 1932 with respect to domestic industry since another very effective instrument compensated for trade concessions, and namely BNB exchange rate policy" (Toshev, 1943, p. 85).

As a result of exchange control maintained throughout the Thirties, and of intensified trade with Germany, the lev rate appreciated gradually during the thirties reaching 18.5per cent in 1937 in nominal effective terms with respect to the base year 1929 (Ivanov et al., 2007) (Figure 1).[27] The nominal effective exchange rate (NEER) calculated with exchange rate premia illustrates the path of an alternative devaluation or the market determined path of exchange rate development. Bulgarian exporters, however, faced stimulating development of the real effective exchange rate which starts to devalue since 1930 due to the diverging inflation differential of the lower price level in Bulgaria with respect to the weighted price level of its main trading partners. Nevertheless, Bulgaria was unable to benefit from this competitive position due to universal foreign trade restrictions. Moreover, the agricultural price drop was so sharp and sudden that the increasing volume of export did not resulted in an increase of the value of total export. Therefore, the exchange rate premia applied to a limited number of private deals and estimated at a quarter depreciation of the officially maintained nominal exchange rate on average between 1935 and 1939[28] had a smaller real effect (5.7 per cent) and a very marginal effect on total export[29] development, if any.

[26]It is often said that increasing discrepancy between industrial and agricultural development translates into price scissors, different income levels, and hence wealth redistribution.

[27]Interestingly, arbitration calculations (across the Romanian leu) of Christophoroff generated some 20 per cent appreciation of the Reichsmark against the Bulgarian lev after 1934, i. e. a mark was worth 25 levs while the official exchange rate was 33 levs (Christophoroff, 1939, p. 20).

[28]Data available in the Statistical Yearbooks of the Kingdom of Bulgaria.

[29]As a result general and particularly exchange restrictions became a focus of conflict between interest groups (industrialists, merchants, farmers). The course of the debate shows that little attention was paid to consumers. Simple evidence of this is the lists of goods subject to import restrictions, among which cobbling leather, sugar, cotton, wool, and others of definite interest to consumers. Charles Kindelberger (see textbook by Lindert and Kindleberger, 1983 [1982]), develops the idea of the redistributing effect of trade and exchange restrictions in detail.

Figure 1

EFFECTIVE EXCHANGE RATES OF THE BULGARIAN LEV (INDEX 1929=100)

Source: autors' estimates. For more details see Ivanov et al., 2007.

Theoretical Reflections: the Macroeconomics of Exchange Control

Before proceeding with the analysis, it is important to point out that the theoretically postulated relationships we study are questionable in themselves due to the complexity of exchange controls. Moreover, empirical estimates are often far from conclusive, not only because of the lack of consistent disaggregated data, but also due to government interference at the micro level (estimates of centrally planned economies are similarly inconclusive). The complexity of exchange controls requires simplification; therefore the reasoning below addresses an "idealised" exchange control model.

The studies of how exchange control was introduced and practiced in Bulgaria like in other countries (Nenovsky et al., 2007) are eloquent examples of how serious the **balance of payments constraint** was at the time and how difficult it was to circumvent it.

Before the First World War the balance of payments constraint was overcome by the relatively automatic mechanism of the gold standard and the so-called "rules of the game." Even when these rules were violated, the London

financial centre and the Bank of England with other major central banks, allowed for the functioning of the Lender of Last Resort (LLR) on an international scale. The War, however, destroyed this institutional framework and led to the formation of different political and economic blocs and the spread of political and economic nationalism. As pointed out, despite attempts to restore the pre-War situation, during the Twenties many European countries had severe current account and budget deficits and followed diverging political and economic objectives, independently or within a bloc. Under these new circumstances, exchange control can be interpreted as an example of the new economic paradigm which attributed an active role to government in the economy. We should remind the reader that before the War governments' and central banks' discretionary powers with respect to the exchange rate were rather limited and used under set extreme conditions, like wars.

Exchange control in Bulgaria as well as in countries like Italy, Germany, Austria, and Hungary, was a specific alternative both to devaluation and to deflation, which for various reasons were much more economically and politically costly. In this context exchange control was a form of isolationism which protected domestic capital markets from international capital flows. Devaluation was unacceptable to countries which had experienced inflation and financial crisis, and which had just stabilised their currencies. What is more, most countries with exchange control had been defeated in the War and had considerable external liabilities. They were debtors who not only wanted to preserve their reputation as good payers but most probably also tried to extract maximum profit from their appreciated currencies. As currencies in which foreign liabilities were denominated (the pound Sterling, dollar, and French and Swiss franc) devalued, they decreased debt burden directly by automatic recalculation of foreign liabilities.[30] Debtor nations wanted to preserve their reputation as good payers (Bulgaria) or among the electorate (Italy).[31]

There is no doubt that the basic question is, to what extent exchange control as a form of government interference helps or harms macroeconomic stability and economic growth.[32] Before answering it, however, let us first ad-

[30]In Heuser (1939, p. 26–27) "Although in general import restrictions are determined by necessity to defend the stabilized national currencies, the reasons slightly differ between debtor and creditor countries. For instance for debtor countries like Bulgaria, Greece, Romania and Estonia the constraint on the balance of payments is dominating, while there are also other reasons as important as the deterioration of the foreign trade balance in creditor countries".

[31]For more details on exchange control in Bulgaria and Italy in a comparative perspective see Nenovsky, et al. (2007).

[32]Ellis (1940) provides an interesting exposition of exchange control theory and macroeconomic consequences.

dress some technical details of the exchange control mechanism which would help us to explain the main macroeconomic interrelations, and particularly the forms of control over the balance of payments and different types of clearing.

The methods of foreign reserve accumulation and exchange rate pegging could be classified into two types of balance of payments control. The first, trade control, involves indirect influence on the foreign exchange market through the basic markets determining foreign currency supply and demand, i. e. import and export markets for goods, services, and capital. The second, exchange control, involves direct control of the foreign exchange market by determining the volume of traded foreign currencies.[33] In the first type, the volume of foreign currencies depends on import and export flows which are limited or enforced. In the second type we have the opposite: there is an *a priori* determined amount of foreign currency, once that necessary for debt servicing has been earmarked, and import is constrained by this amount. The government further interferes directly on import and export markets to accomplish its goal of foreign reserve accumulation. Despite the fact that both mechanisms give similar long run results (both interfere with the efficient allocation of resources), we have to consider that direct control of the foreign exchange market is considerably more complex to enforce and has remarkably adverse overall effects.[34] Both methods of exchange control could be illustrated in the following Chart 1.

[33]Technically, exchange control is a logical continuation of import tariffs and quotas which have failed to fulfil their purpose of improving the balance of trade (Kulicher, 2002 [1929] and Kindleberger, 1988 [1973]). Diminishing foreign reserves threaten stabilised national currencies and regular foreign debt service. Consequently, trade difficulties lead to the evolution of exchange controls from unilateral to bilateral clearing and on to private exchange barter and exchange premium (in the case of Bulgaria in 1935) in order to direct trade towards free currency countries.

[34]See international trade textbooks (for example Vanek, 1962; Lindert and Kindleberger, 1983 [1982]).

Chart 1

LOGIC OF EXCHANGE CONTROL: BASIC IMPORT AND EXPORT MARKETS, AND THE FOREIGN EXCHANGE MARKET

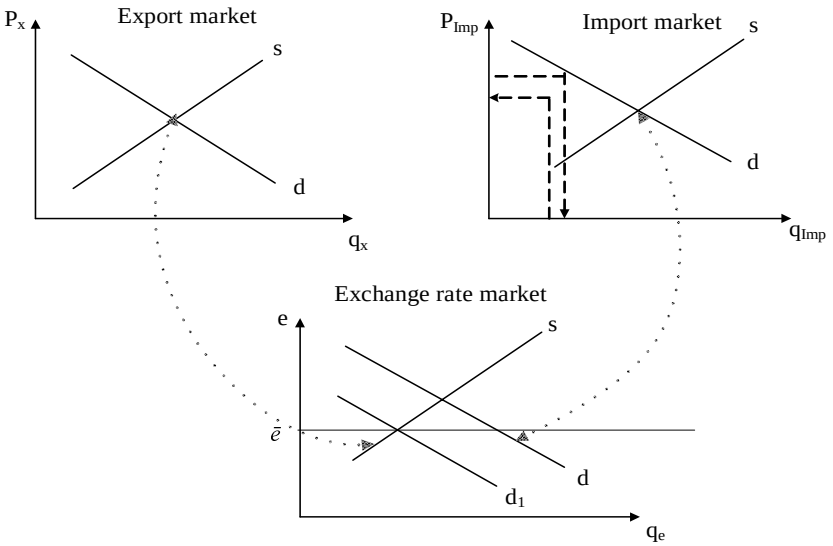


Chart 1 simplifies the logic of the exchange control, where p_x is the price of export, q_x is the volume of export, p_{Imp} – price of import, q_{Imp} – volume of import, e is the exchange rate (levs per one unit of foreign currency), and q_e is the volume of foreign currencies at the foreign exchange market. The import market determines the supply of foreign currencies by non-residents, while the export market determines the demand for foreign currencies by residents. Focusing on the trade balance only, given the purposes pursued by the government by implementing any form of exchange control (monetary stabilization, based on fixed exchange parity and a certain volume of foreign reserves), it is necessary either to stimulate the export, i.e. to shift the expand the supply of foreign currencies (shift to the right) (which is considerably more difficult when all countries apply such measure) or/and to restrict the import, the contract the demand of foreign currencies (demand for foreign exchange shifts to the left, d_1). The fixed parity is $\bar{e}$, and the rate is such that upward movements imply devaluation/depreciation and downward movements mean revaluation/appreciation.[35] In this case we do not take into consideration capital flows and if we want to incorporate them, this will add an-

[35] Christoforoff (1939) makes a distinction between appreciation and revaluation.

other market (for the demand and supply of capital) and its respective impact on the demand and supply of foreign currencies. For example, in the case of capital inflow the foreign currency supply expands, and foreign currency supply curve shifts to the right, and vise versa.

Under the Type 1 of exchange control, the influence is on the basic goods markets and the equilibrium of the foreign currency market is derived. With respect to the import, however, two types of restrictions can be identified, and namely price discrimination (tariffs and customs duties) and volume discrimination (quotas, barter). In the former type the import price is fixed above its equilibrium level by adding customs duties and tariffs and the volume becomes a function of this fixed price level. In the latter case, the volume is fixed (usually lower than its equilibrium) and the price is determined accordingly. The historical record proves that the exchange control of the first type does not always accomplish directly the aims pursued at the foreign exchange market because of the decentralized behavior of importing and exporting agents.

Type 2 of exchange control exerts a direct impact on the foreign exchange market as the supply and demand of foreign currencies is monopolized by the state (of a certain public institution). In the case of Bulgaria it is the central bank through the functioning of the foreign exchange institute. By the means of foreign exchange monopoly the central bank can fix directly the demand in d_1. Under these circumstances, if the goal is to impact the foreign currency supply, the exchange premia are an appropriate instrument. The exchange premia are a form of violation of the static foreign exchange monopoly, allowing fora rate (which is fixed by the virtue of law) with only purpose to stimulate export (to some extent). In principle, when the volume of foreign exchange and the exchange rate are given, the next logical step is to control totally (through permissions and licenses) the volumes of import and export, hence, the goods markets become a function of the predetermined equilibrium at the foreign exchange market. No doubt that exchange control Type 2 is considerably stronger and violates much more market mechanisms of efficient distribution of scare resources. It is also more difficult to maintain, as evidenced by the presence of black exchange market, smuggling, corruption and other forms of violation (like the story of the two Italian citizens in Bulgaria).

The other technical detail concerns clearing. We shall take the example of Interwar Bulgaria and try to narrow things down to the role of clearing with Germany in the development of the Bulgarian economy after 1932.[36] There are different opinions about the German impact on Southern Europe, from

[36]Details about the interrelations between the dynamics of the Bulgarian and German economies see Christophoroff (1939) and also Fisher (1939, p. 154)

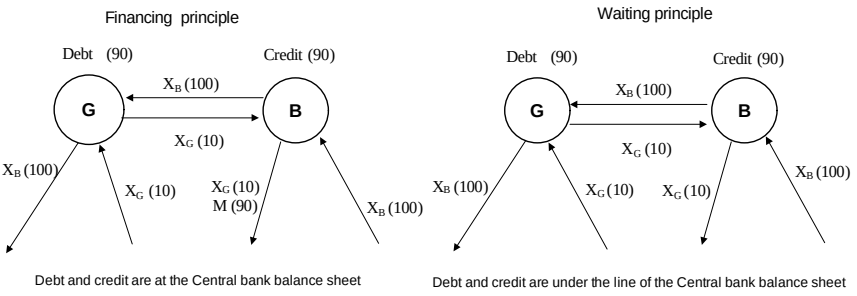
unqualified support of clearing to the opposite extreme of its total denigration alongside accusations of German exploitation.

Here we would like to remind the reader the scheme of clearing (Chart 2) which we discussed in Section 2 (the immediate payment or financing principle, and the delayed payment principle). *G* stands for the German central bank, *B* for the BNB, X_B for Bulgarian export to Germany, X_G for German export to Bulgaria or Bulgarian import from Germany, and *M* for additional monetary flow created by the Bulgarian central bank due to the clearing surplus (in our case 90). In the case of immediate payment (the financing principle) applied in Bulgaria (the same as in Hungary) as a result of the positive clearing surplus [$X_B(100) > X_G(10)$], domestic money supply automatically expands (the clearing surplus is multiplied by the clearing exchange rate (assumed at unity).[37]

Under this financing principle the central bank bought the receivables from its exporters at the fixed clearing exchange rate. Under the other postponed payments principle (as employed in Romania)[38] the central bank waited for the counterparty to settle the clearing balance, hence the positive surplus was not immediately monetised and there was no monetary expansion at home. In the first case the positive surplus appeared as debt/credit respectively on the books of the German central bank and the BNB. In the second case there was no additional monetary creation and the clearing debt/credit position was not on the books but below the line (off-balance sheet). In this waiting principle the clearing surplus (90) had a depreciating effect on the mark (as mentioned by Larry Neal).[39]

Chart 2

TWO METHODS OF CLEARING SYSTEM



[37] In the real Bulgarian case the rate was 1RM = 33 leva).

[38] See for instance Neal (1979).

[39] In this case we could assume the clearing rate to move from 1 to around 0.1, ceteris paribus.

First, we note that clearing substantially impacted money supply and price levels. As noted above, due to the specific method of clearing with Germany (in contrast with, say, Romania),[40] Bulgaria maintained a flat clearing rate of 33 levs to the mark. The positive clearing balance Bulgaria accumulated led to the expansion of money supply and inevitably to price and income increases, and consequently to economic expansion. This scenario had positive features given the fact that Thirties' deflation had severely hurt agriculture.[41] This expansion through the immediate payment method can be accommodated within the overall German "contagion" of the Bulgarian economic cycle as described by Christophoroff (1939). As the National Socialists come to power in Germany in 1933, the economy was experiencing credit growth and expansion of government spending. This logically followed the 1932 clearing agreement between Bulgaria and Germany and the consequent BNB departure from strict deflationary policy and the introduction of exchange premia in mid-1933.

The actual development of the Bulgarian cycle (see Christophoroff, 1939) confirms the above logic of exchange control development. In a comparative perspective, Larry Neal (1979)[42] argues that the different methods of payment explain higher Hungarian growth in contrast with the difficulties faced by Romania. Paul Einzig (1955) describes the different mechanisms by which Germany first exported inflation to South–Eastern Europe and then pursued deflation at home. Germany accumulated positive clearing balances and used the financing principle nations (Bulgaria and Hungary) to finance German economy by inflation or devaluation. Therefore it was against the German interest to introduce the mark into South–Eastern Europe as this would deny it the inflation/devaluation levers. (Interesting parallels could be drawn with the present refusal of older eurozone countries to put the euro into circulation in new accession states.)

[40]Romania tried several times to renegotiate its clearing rate with Germany.

[41]Interestingly, in the financing principle adjustments are realised by price levels, whereas in the delay principle by the fluctuating Sperrmark rate. Thus in Bulgaria domestic price rises due to monetary expansion cut Bulgarian competitiveness in Germany, i. e. they reduced mark appreciation. In Romania there were no price rises but the Sperrmark depreciated in the Romanian market. When the waiting period ended the Sperrmark rose to approach its previous level. We could also assume that the financing principle affected Bulgarian competitiveness not only in Germany but also elsewhere, prompting exchange premia to stimulate trade with free currency countries. Neal (1979, p. 400) saw financing principle countries as being politically closer to Germany.

[42]Friedman (1976) tried to measure the welfare benefits and the losses for Hungary clearing with Germany, comparing the term of trade in the clearing area and outside the clearing area and comparing the deferent export elasticity for the two areas.

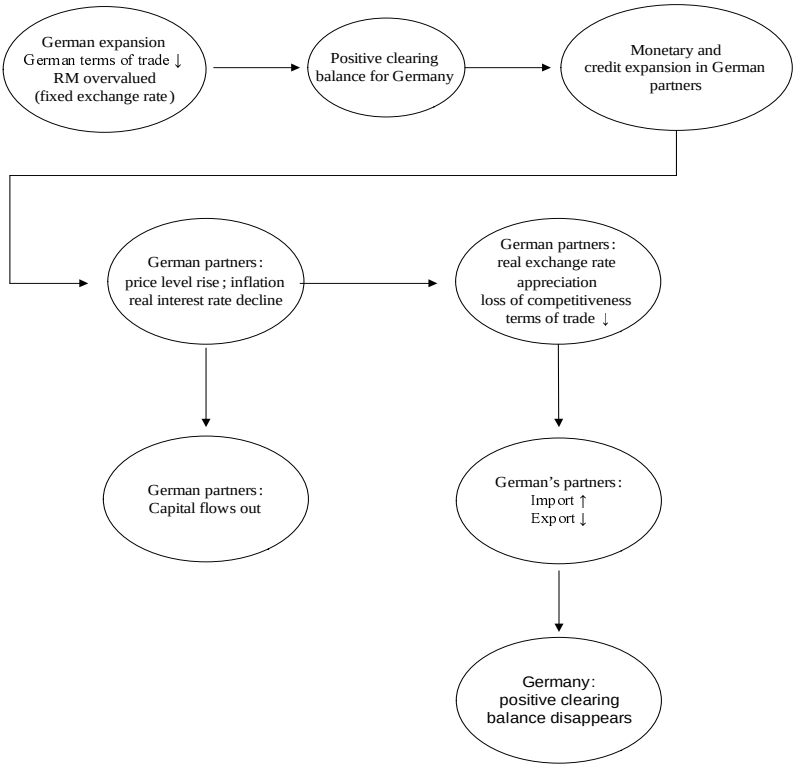
Second, we note that exchange control in clearing influenced the real exchange rate and overall national terms of trade. Despite the many difficulties in calculating terms of trade in the framework of clearing and exchange control (see Neal, 1979, and Friedman, 1976), there is consensus among researchers that German terms of trade developed unfavourably for Southern Europe (i. e., the ratio of export prices to import prices fell). This is supported by the overvaluation of the Reichsmark in clearing exchange rates.[43] Under these circumstances immediate payment and hence money expansion in clearing creditor countries (e. g. Bulgaria) postponed real Reichsmark appreciation against the lev and boosted lev appreciation against the Reichsmark. In a sense, this was a compensating mechanism in the context of trade flows between Bulgaria and Germany given the fact that both sides opposed devaluation.

As a whole we dare argue that exchange control and clearing in particular stimulated the Bulgarian economy under the circumstances of global deflation and international trade restrictions. Importantly, exchange control was also significant for national industrial development which falls outside the scope of this paper. Therefore, there are reasons to argue for a peculiar semi–automatic mechanism of overcoming the disequilibria within the clearing bloc, as the channels of this mechanism could be described in the following way:

[43]The problem of the overvalued Reichsmark was solved by private clearing agreements with Germany through the flexible exchange rate of the ASKI marks and through the mechanism of Sperrmarks (Neal, 1979).

Chart 3

THEORETICAL MODEL OF SEMIAUTOMATIC ADJUSTMENT UNDER CLEARING AGREEMENTS



It is interesting to note that the proposed clearing system as a general form of building the international financial relations is later on again put forward by Keynes as a part of his plan for reforming the international financial system after WWII (Dam, 1982, Triffin, 1969 [1968]). In his plan Keynes explicitly shared his conviction that a balancing mechanism was feasible in the frameworks of a global clearing, and his wish for this mechanism to be relatively symmetric (in contrast to the gold standard). This means part of the burden to be spread among the creditors. In a sense, Keynes' proposal is confirmed that the exchange control was a weapon used by debtors, regardless of whether they were producers, consumers or whole countries.[44]

[44]There is no doubt, however, that the exchange control destroys the market mechanisms of distribution of resources and creates conditions for their ineffective use. And this is most obvious from the microeconomic analysis of the exchange control.

Theoretical Reflections: the Microeconomics of Exchange Control

The standard neoclassical microeconomic approach provides us (to some extent) with the opportunity to conduct cost-benefit analysis of the exchange control with respect to different groups of economic agents, inevitably defined in quite aggregate terms[45] (Chart 4). The different forms of exchange control are reduced to a simplified model since they are based on a common philosophy. The following model is very similar to the traditional model of monopoly that could be found in most undergraduate textbooks.

Chart 4

MICROECONOMICS OF THE EXCHANGE CONTROL

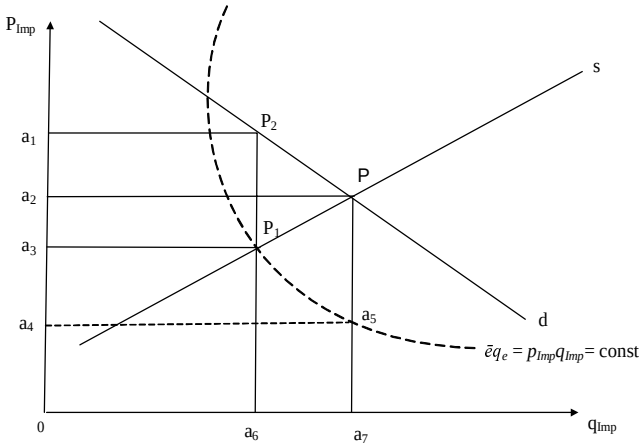


Chart 4 shows a stylized market for import. The symmetric parabola $\bar{e}\,q_e$= const illustrates the predetermined level of foreign exchange market equilibrium (the volume of the foreign currencies multiplied by the exchange rate officially maintained and announce by the central bank) given a certain demand of import. We do not take into account the export, i.e. $q_e = p_{Imp}q_{Imp} = const$. The parabola illustrates the artificially set volume of de-

[45]The microeconomics of trade and exchange control has also been subject to analysis by Machlup (1939), Heuser (1939), Lindert and Kindleberger (1983 [1982]) among others. Our model is close to Heuser's model.

mand exchange (for import) while the true demand is determined by *d*. If we assume that demand for foreign currencies (for import) should be contracted by let's say 60 per cent, i.e. form square a_2Pa_7O to square $a_4a_5a_7O$, the new price is set at P_1 – cross point of the supply of import and the parabola. The new volume of import is Oa_6, and not Oa_7, and the square $a_3P_1a_6O$ is equal to $a_4a_5a_7O$. The buyer of the import goods can pay also the higher price P_2 for the volume Oa_6 as the consumer surplus will decrease on account of importer's profit up to the square $a_1P_2P_1a_3$. It is interesting to note that in both types of exchange control some of the consumer surplus is wasted: in the case of applied tariffs and customs duties some part of the consumers' income goes to the state/government while in the case of direct exchange control it goes to the importers.[46] The higher the share of the country imposing exchange control in overall international trade of a certain goods or commodities, the higher the profit to importers.

The destruction of price mechanisms and market mechanisms in general, results in the discriminating character of the exchange control (Ellis, 1947) and is accompanied by a number of other problems like the process of redistribution, corruption, cronyism, and some political processes which hamper the economic development. Some win, while others lose from the exchange control, not only as a consequence of the economic efforts but also as a result of some individuals'actions. The story about the corruption at the beginning of the paper is not an incident; it is rather common of that time. BNB archives are exuberant of such documents, permissions granted by the central bank, which are by far away from the claims of the pioneers of the exchange control to be objective.

The close intertwining of economy and politics in the case of exchange control could be appropriately studies by the instruments of the public choice and new political economy approaches. Although the main purpose of this paper is not to analyse the interests and behaviour of different groups of individuals, we would like to mention and remind the reader that the short life of the monetary stabilization and resumption of the stable (fixed) exchange rate in Bulgaria, as well as the resistance not to devalue are the main reasons behind the introduction of the exchange control. It could be also interpreted as a consequence of the increased economic and political influence of the growing middle class, small producers and peasants who do not want to loose their savings like in the past, and who would not support political elite which will initiate devaluation. The exchange control is also in favour of the new national industries, which are closely linked to the political powers.

[46]Christoforoff also makes this distinction (1947, p. 196).

To summarize, the First World War caused a sudden collapse of the world economy. Money supply, relative prices, and the structure of the balance of payments irreversibly changed. New social and political subjects appeared whose interests were related to those of the debtors and those who opposed deflation. Money became fiduciary, while capital movements dominated the balance of payments. Failure to revive the pre-War situation and the Great Depression accelerated national isolation and war preparations. This line of reasoning shows that the exchange control is an organic element of the closed economy. At the beginning it was viewed as an alternative to devaluation and deflation and a way of overcoming the balance of payments constraint; in time it became an instrument for mobilising war resources. In this aspect Bulgaria followed similar trajectories: she was forced to opt for isolation and exchange control as an alternative to devaluation and deflation.

Today Bulgaria is a member of the EU which, at least in principle, is a framework for avoiding economic isolation and war in Europe. In a sense, the balance of payments constraint, which was felt at the national level, is now partly transferred to the European scale. By adopting the common currency a euro area member country cannot any longer improve its competitiveness through devaluation, while the currency board in Bulgaria (which is not a eurozone member yet) commits it to low inflation and restrictive fiscal policy. Today as in the Interwar, European economies can prosper in the long run only by adopting healthy fiscal and monetary policies and increasing productivity. Yet, unlikely as economic isolation and autarchy may appear, we should remember that these pathologies were also unlikely at the beginning of the Twentieth Century.[47]

CONCLUSIONS

We can summarise the main results of our study thus: first, Interwar exchange control resulted from balance of payments constraints which were particularly severe for peripheral and semi–peripheral countries given the collapse of the world economic and monetary equilibrium. During the Thirties the relatively automatic mechanism of the gold standard and the LLR functions performed by the Bank of England and central banks in the financial core no longer existed, while ideas of a global LLR like today's IMF were nascent. The League of Nations lacked the authority to restore pre-War financial relations and implement a new system.

Second, peripheral and semi peripheral countries like Bulgaria, which had a long record of poor discipline and lacked good monetary management tra-

[47] See Fromkin (2004), Frieden (2006)

ditions, preferred fixed exchange rates which symbolized monetary stability and enhanced credibility. For this they needed foreign reserves which, however, rapidly decreased through balance of payments deficits. The latter were caused mainly by dramatic drops in farming prices and capital outflows. Moreover, most countries opting for exchange control had been defeated in the War and laboured under a heavy debt burden.

Third, the exchange control bloc included countries with similar problems, similar preferences and characteristics. Together with the Sterling bloc (which included Great Britain and its colonial system) and the Gold bloc (with France at the head), the exchange control bloc, with Germany at the centre, had its own basic equalizing mechanism. From a technical point of view the exchange control can be seen as an alternative strategy to devaluation (pursued by the Sterling bloc) and to deflation and wage decreases (pursued by the Gold bloc). At a more disaggregate level, when we study the techniques of the exchange control, we find several details (like exchange premiums for example) which are *de facto* in conflict with the fixed exchange rate principles.

Fourth, our study of exchange control reveals interesting macro interrelations. While there is some obvious macroeconomic asymmetry within exchange control countries (in fact there was a similar asymmetry during the pre-War classical gold standard), we observe certain equilibrating processes with respect to the main macroeconomic parameters and to foreign trade. Of course, such processes could only be regarded as secondary. There is no doubt that exchange control was a serious interference in market mechanisms. Furthermore, history shows that exchange control was characterized by corruption and political favouritism and had strong priorities in one way or another. These microeconomics and sociological aspects, however, constitute a new chapter of this complex story.

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