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EDITORIAL NOTE

The present study will be followed by a second containing chapters on exchange control in Germany and the theoretical implications of the experience of the three countries.

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HOWARD S. ELLIS.

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CHAPTER I

THE NATURE OF EXCHANGE CONTROL¹

MAIN TYPES OF EXCHANGE CONTROL

In a broad sense of the term, exchange control embraces all measures directed toward stabilizing the market in foreign exchange. These measures may be divided into five major types and arranged in order of their severity, that is, according to their departure from the character of a "liberal" international system wherein payments are free. Of these five types, the first represents authoritarian interference in so mild a form as scarcely to be regarded as exchange control in its ordinary connotation. Directed toward neither the prevention of genuinely "economic" capital movements nor the maintenance of exchange rates at other than ultimate equilibrium levels, this control aims merely to eliminate speculative activity and sharp variations in rates. Measures of this sort may or may not involve monopolizing of devisen² transactions with a state authority, and they may be transitory or permanent. Both the pound and dollar devaluations in 1931 and 1933 were accompanied by temporary centralization of exchange dealings in official hands, coupled with understandings between the banks and the Treasuries that foreign bills for speculative purposes would not be forthcoming.³ To protect monetary standards from sudden turns of either appreciation or depreciation, national monetary authorities have also established more or less permanent systems, ranging from the pre-war *Devisenpolitik* practiced by the imperial Austro-Hungarian and the Russian central banks to the British, French, and American equalization accounts. With these systems of mere stabilization against short-run movements we shall not be concerned.

1. Part of the material of Chapter I was utilized in an address on "The Problems of Exchange Control," delivered to the Economic Society of Warsaw on May 20, 1935.

2. Used throughout instead of the longer English equivalent "foreign bills of exchange."

3. Bank for International Settlements, Monetary and Economic Section, "Note on Certain Monetary Aspects of the Liquidity Crisis, 1931-32," mimeographed (Basel, April, 1932), pp. 9-10.

The earmark of exchange control in a sense appropriate to Continental systems since the crisis of 1931 is not stabilization, but protection against *loss of value* in the monetary standard through *capital flight*. Common to all types of exchange control in this narrower sense we find by consequence a more or less categorical prohibition of all outward capital transfers except under official auspices, and a monopoly of devisen trade by the state to implement the prohibition. Even the mildest form of exchange control of this genus, a type which involves neither enforced official rate of exchange nor rationing of devisen, implies rather far-reaching interference.

In order that private persons should not employ devisen to send or bring capital abroad, it is necessary for the state to commandeer all domestic supplies of devisen or scrutinize their utilization in every instance. Not only existing stocks of devisen but also devisen receipts from the export of visible or invisible items have to be sold to the National Bank; they can be retained only for approved uses. Ordinarily this necessitates official insight into accounting records and bank accounts of individuals and firms. Capital flight need not be restricted to devisen, however: precious metals and currency may be sent out to establish accounts in foreign banks, goods may be exported and the proceeds left abroad, or the domestic bank account of a foreigner may be transferred within the country to pay an obligation which would otherwise have brought a devisen (short-term capital) transfer.¹ Accordingly, all such practices must be narrowly regulated or prohibited. Furthermore, since clearing and compensation automatically eliminate the possibility of leaving export proceeds abroad without being balanced by import, these devices — frequently imposed of necessity by the existence of exchange control abroad — may actually be welcomed as additional bulwarks against the flight of capital. All these measures are involved in the stoppage of capital flight, whether the embargo is enforced merely upon the country's nationals or upon them and foreigners as well.

The former and milder alternative seems to be the system which England has launched in the present war. "Sterling may be a controlled market, but the phenomena of blocked sterling

1. On these various possibilities, cf. F. W. Paish, *The Effects of Foreign Exchange Control on British Trade*, U. K. Memorandum No. 2, International Institute of Intellectual Coöperation (Paris, 1939), pp. 2-6.

balances and of transfer moratoria are not as synonymous with exchange control as totalitarian experience would seem to suggest";¹ payments upon pre-war foreign obligations in gold or devisa are to be transferred as required.² Quite obviously this milder form of our second type of exchange control is limited to a country with adequate gold and devisa reserves.

Even the more severe form, enforcing a capital-export embargo upon nationals and foreigners as well, still preserves relative liberality, since we have not yet arrived at exchange control which attempts to enforce an official and usually artificial parity rate of exchange. Nevertheless, the embargo on capital withdrawals by foreigners will cause the control country's securities and the various categories of blocked accounts to go to a discount abroad. Thus it is seen that discounts on *Sperr* varieties of a currency do not necessarily imply an overvaluation of the ordinary money or devisa.³ Once securities and blocked accounts sell at a discount, however, there arises a further characteristic feature of exchange control: the differential between the foreign and the domestic quotation upon a security or frozen account represents a windfall profit of exchange control involuntarily contributed by the creditor. The debtor, usually only by illegal means, may exploit the margin himself and pay off obligations at bargain rates; more frequently the state appropriates the gains of security repatriations or blocked account liquidations as a source of subsidy for exports. Exports financed in this way are called "additional," though there are other sources of "additional exports" yet to be explained.

From the autumn of 1932 until May 3, 1935, when the conversion of 11,000,000 Schillings of blocked accounts was announced for the near future, Austria presented a fairly clear example of the second subdivision of the second main type of

1. *Economist* (London), September 9, 1939, p. 493. Moratorium could indeed be regarded as a part of exchange control; but since the latter usually permits *some* repayments but, again unlike moratorium, allows *no* capital flight by nationals, I have adhered to the popular usage.

2. Explanatory Leaflet: Defence (Finance) Regulations (London, September, 1939). (This is presumably a government publication, but no source appears.) Later dispatches, however, indicate departures from this policy. "The diffidence of the authorities in giving their permission to such conversions . . . has already created the phenomenon of blocked sterling." *Economist*, September 23, 1939, p. 568.

3. Paul Einzig, *Exchange Control* (London, 1934), p. 128.

control. Clearings and the entire apparatus for preventing capital export by citizens and foreigners persisted from a more rigorous régime in 1931 and early 1932; but foreign exchange was dealt in upon a substantially free market and practically no resort was had to allocation of devisen. There was thus realized a system of capital-flight prevention which dispensed with so many of the major interferences involved in other systems that one may well hesitate to apply the term "exchange control" *sans phrase*.¹ Having in mind the further departures from a liberal international system to which we now turn, I have not refused to consider the Austrian case an example of "successful termination" of exchange control in any rigorous sense.

A third degree of intensity in control is reached when, beside prohibiting outward capital remittances and adopting the necessary complementary measures, a country sets official prices upon the foreign exchanges and tolerates no other quotations. The purpose of this measure is to reassure the popular mind, which is prone to identify exchange depreciation (including devaluation) with outright inflation. Now it is of course only too probable that any one of a number of circumstances may shortly cause the "real" rate of exchange for the controlling country to fall below official parity. The difference between the present or third type of exchange control and the fourth type lies in the divergent character of the *causes* of such a possible disparity. From the side of supply of and demand for bills of exchange *without reference* to relative price-level developments at home and abroad, the real equilibrium price may fall below official parity because (1) the state itself transfers interest or amortization abroad more rapidly than permitted by the current national demand for imports in terms of exports which the economy offers in payment; or because (2) evasion of the state prohibition of private transfers abroad confronts the same inelasticity. From the side of supply and demand for bills of exchange directly *dependent upon* relative commodity prices, real equilibrium may fall below official parity because (3) there has been monetary inflation or lagging deflation relatively to foreign countries; or (4) a flight from the currency into real value has produced price-level developments similar to the preceding ones (under 3); or finally (5) because through cost

1. Karl Schlesinger, "Kapitalfluchtbehinderung? Ja! Devisenbewirtschaftung? Nein!", *Österreichischer Volkswirt*, Vol. 24, pp. 290-294, 325-327.

or demand changes the barter terms of trade have shifted adversely. If the disparity of real and official rates arises from the forces described under (1) and (2), the exchange control belongs to the third type; if the disparity arises from forces (3) (4) or (5) either alone or in conjunction with (1) and (2), the fourth type of exchange control is present.

How can this distinction, apparently of a rather formal character, possibly assume enough practical significance to constitute two separate categories of exchange control? The answer rests simply upon the fact that the two situations require quite different policies in several respects. For the former, the mechanically appropriate action would be a stoppage of the excessive outward capital movement; for the second, restriction of credit, reduction of costs, or an increase of production. In the former situation, the official rate represents no distortion from purchasing power parity or some other (more reliable) index of equilibrium, and consequently exports and imports at the legal rate are not, respectively, penalized and artificially stimulated. Finally, exchange control of the third type does not *necessarily*¹ involve authoritarian allocation of *devisen* for commercial purposes, since demand and supply for trade purposes naturally tend to equilibrium; whereas a disparity in price-level developments in comparison with foreign countries, unaccompanied by a downward adjustment of exchange rate, brings an excess in the demand for *devisen* over supply and the necessity for rationing.

Prior to April 26, 1936, Poland pursued a policy of deflation and free exchange on an open gold standard. The introduction of exchange control and official rates on *devisen* apparently ushered in a system of the third type: prices rose in Poland less rapidly than on world markets, the zloty showed no tendency to depreciate, no protection was afforded domestic producers, and though import *devisen* were allocated by a semi-official scheme, no complaints were heard as to a shortage of imported raw materials.²

In general all countries introducing exchange control immediately after the credit crisis of 1931 found themselves sooner or

1. *Devisen* rationing would become necessary, if the leakage of *devisen* by capital flight exceeded the amounts of *devisen* which the state can commandeer from existing private hoards.

2. Jerzy Nowak, *Le contrôle des changes en Pologne*, Comité Central des Institutions Polonaises des Sciences Politiques (Warsaw, 1938), pp. 11-13, 17, 21, 22, 25.

later in the fourth category, having not only official but, in the light of international price comparisons, also artificially high rates of exchange. This feature extends also to the fifth type, characterized by its metamorphosis from an instrument of monetary policy to a permanent device of commercial and political policy. An exchange control system belongs to the fourth type if the allocation of *devisen* proceeds upon some mechanical basis without ulterior aims as to the composition or direction of trade. With certain qualifications, the German exchange control system conformed to this description until the end of May, 1934. *Devisen* were in general allotted to importers in all lines upon the basis of a uniform percentage (which had successively to be reduced) of the average monthly imports in each line during the period July 1, 1930, to June 30, 1931.

Viewed from the angle of freedom in international trade and finance, exchange control reaches its nadir in being perverted to a weapon of commercial policy, particularly of autarchic policies. The first step usually comes in the innocuous form of favoring necessities against luxuries in rationing out *devisen* for imports. From this departure from purely monetary operations, the way leads by easy stages to discrimination against imports of finished products, to favoring imports needed in *Planwirtschaft* and rearmament programs, to shameless partisanship regarding particular vested interests at home, and finally, in conjunction with the weapon of bilateral clearings, to arbitrary deflections of exports and imports from one country to another as a method of political intimidation or bribery.¹ Exchange control lent itself readily to the designs of commercial and political policy when trade maneuvering by other means was precluded by existing trade agreements.² A maze of intricacies, mingling monetary considerations, producers' selling motives, and political strategy, is presented by systems of multiple exchange rates, culminating in different rates of exchange for every country and for nearly every article of export and import. At a minimum this might signify merely an

1. The maneuvers of Germany in Danubian and Balkan trade in this respect are the subject of Paul Einzig's *Bloodless Invasion* (London, 1939). From the analysis of German exchange control (part 2 of this monograph), it will appear that Einzig's account is not entirely free from exaggerations.

2. Alexander Yovanovitch, *Mémoire sur le contrôle des changes en Yougoslavie*, Institut International de la Coopération Intellectuelle (Paris, 1939), p. 46.

effort to offset inaccurate official rates of exchange in foreign countries and differential treatment of various commodities through subsidies, quotas, and the like. Frequently, however, differential exchange rates signalize attempts at discriminating monopoly; and the same motive lies behind the exaction of free devisen payment even from exchange-control countries for a certain proportion of exports of a commodity wholly or partly monopolized by the country of origin — as, for example, for oil exports from Rumania. Differential exchange rates may finally — as would be quite patent — afford a convenient, flexible, and at least partly secret method of political discrimination.

WHY WAS EXCHANGE CONTROL INTRODUCED?

Thus far we have devoted our attention to exchange control through unilateral action by one country, with only passing reference to bilateral agreements in the form of clearing, compensation, and payment arrangements, which inevitably accompany the former regulation. This procedure is warranted by the fact that clearings and the like followed both chronologically and logically upon the imposition of exchange control in domestic matters. Before it can be shown how the bilateral controls developed from the unilateral measures, it seems requisite to examine why exchange control in the narrow sense was itself resorted to by so many countries in order to meet the capital flights of 1931.

Gustav Cassel once took the position that a flight of capital is nothing dangerous for a national economy, inasmuch as it represents either (1) a mere exchange of titles, of credits owned at home for values owned abroad, in which event the transaction is merely nominal; or (2) an outflow of real goods through a favorable balance of trade, in which event the transaction represents an export of real capital, but an outflow which, by reason of its limitation to new saving or undermaintenance of existing investments, is too slow a process to cause serious disruptions.¹ The equanimity with which Cassel viewed capital flights must be ascribed to a tendency to regard the position of exchange rates as determined exclusively by relative price levels — capital movements could at most cause temporary, and hence not very serious,

1. Gustav Cassel, *Money and Foreign Exchange after 1914* (New York, 1922), pp. 443-444.

deflections of market exchange rates from equilibrium, which he believed to be described under "purchasing power parity."

Now the truth is that the exchange of titles, which Cassel took to be "nominal" in two senses of the word, is really the occasion for disaster; and that the exodus of "real" capital, instead of being the real danger in the immediate situation, is actually one solution of the trouble. A flight of capital pertains in the first place to capital in the form of fluid funds; it consists in a panicky effort to get rid of values in terms of domestic money in exchange for values in a foreign currency. The impact of this demand for *devisen* will drain away the country's gold or *devisen* reserves as long as they last and thereafter result in exchange depreciation. These are the disaster — events outside the realm of real capital. To the degree that real capital is exported, i. e. to the degree that a favorable balance of trade develops under stimulus of the falling rate of exchange, the disaster to central bank reserves and to the currency standard through further depreciation may be checked;¹ but the response of exports through the "price-specie-flow" mechanism may be tardy and entail collapse of the domestic credit structure and the exchange rate. Letting the capital flight run its course — on the grounds that it is either nominal or, if real, negligible — resembles the therapy of letting pneumonia take its "natural" course.

Capital withdrawals from a national economy present an exact parallel with depositors' runs upon banks; if the phenomenon is sufficiently severe, the same remedy has to be applied, namely, a closing of the wicket. For England the magnitude of capital flight in 1931 relatively to resources, which had been bolstered up by the Banque de France, did not entail a breakdown of national liquidity; but the debtor countries on the Continent had to proclaim bank holidays because of a threatened disappearance of

1. Capital flight may take the form of leaving the proceeds of exports on deposit with foreign banks. In this case the export can at best *do nothing* toward supporting the country's exchange rate, if the export was made *ad hoc* and not in answer to ordinary profit motives. If the export would have been made anyway in line of ordinary business, the practice referred to actually *reduces* the exchange rate. Furthermore, the withdrawal of capital in real form may reduce the production of a nation, though in the widespread underutilization of capacity following 1931, this was probably not serious. Neither of the foregoing qualifications seems to impair the validity of the generalization made above.

reserves. It is in such circumstances that the problem arises concerning the future course: is it to be moratorium, currency depreciation, deflation, or finally, locking the wicket for the discernible future by exchange control?

Moratorium has sometimes been recommended as the simplest and most honest course, but in fact simplicity and honesty are its chief detractors. Its too great simplicity lies in its failure to cover the domestic flight of capital. In the summer of 1931, the runs upon the Credit Anstalt, Darmstädter, and other large banks and the domestic demand for gold and devisa revealed the psychology of mistrust within the country to be quite as crucial as foreign withdrawals. The too great honesty of moratorium, certainly in 1931 when creditors had not yet been humbled by vicissitudes of subsequent years, would have been the hostility engendered with foreign lenders and their governments. Unless moratorium signify outright repudiation, it eventually necessitates negotiation and agreement with creditors. Not without considerable plausibility do bankers and members of Treasuries and Ministries of Finance in central European countries argue that negotiation with foreign creditors could not come to any fruitful results until the effort at transfer, in the magnitudes initially demanded, had first broken down under the sheer force of disaster. Immediate imposition of moratorium would simply have postponed a test of transfer capacity, meanwhile subjecting creditors to a measure more properly regarded as the last resort.

We must consider next the proposal to counteract loss of reserves and decline of exchange by deflation. Writing for the International Chamber of Commerce, Professor Mises maintained that "Countries which 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.'"¹ Ostensibly this opposes inflation and does not actually recommend deflation. But when world prices are falling, mere passivity spells relative inflation: a country experiencing capital withdrawals must deflate absolutely, and indeed to a greater degree than foreign countries.

Deflation is the remedy of economic orthodoxy, since it

1. Ludwig von Mises, "The Return to a Free Foreign Exchange Market," mimeographed report to the Vienna Congress of the International Chamber of Commerce, May 30, 1932 (Paris, 1932), p. 2.

dispenses with breaching the international money and finance mechanism through departures from gold parity, through defaults upon loans, and through direct authoritarian interference with exchange dealings and commerce. Where a reasonable hope can be entertained for bridging over a flight of capital through a temporary loss in reserves and a subsequent activation of the trade balance by reducing prices, the ends striven for through deflation — integrity of monetary standards, inviolability of contracts, free private initiative in trade and capital movements — are worth substantial sacrifices. Unfortunately from several angles many countries found that, in the midsummer crisis of 1931, deflation promised too little or bid fair to cost too much.

(1) For the weeks of intense panic, credit restriction would have been very limited quantitatively by reason of widespread illiquidity within the several countries. The operation of a high bank rate was, practically speaking, reduced to penalizing new borrowing from the banks on the one hand, and to attracting new supplies of devisen, either from short-term loans from abroad or from domestic hoards. But, as Marschak pointed out at the time of the first German exchange control laws in August, 1931, a 15 per cent or 300 per cent rate can be nullified for any of these purposes by a "flight psychology" of sufficient intensity.¹ At best it seems probable that exchange control of some degree was necessary as a provisional measure, even for a policy of eventual free payments, parity, and deflation.

(2) Once the acute stage of crisis had passed, would it be possible to develop by means of deflation adequate price differentials and sufficient exports to counterbalance the egress of capital? The ordinary forces making for downward inflexibility of prices, such as cartelization in industry, collective labor action, and irreducible "social" budgets, were especially potent in Central Europe in 1931. In foreign countries the inflows of gold and foreign exchange failed to produce any sensible effect upon prices — bank reserves increased without stimulating investment. Deflation would have tended toward balancing out the capital exports more largely by reducing imports than by increasing the export of goods and services. Finally, the price-specie-flow mechanism could not

1. Jacob Marschak, "Diskontpolitik," *Der deutsche Volkswirt*, vol. 46, p. 1553.

be trusted to work without lagging behind the export of capital far enough to force currency depreciation.¹

(3) Let us assume that, despite these very real difficulties, deflation can actually develop an adequately favorable balance to equilibrate with the flight of capital: does it necessarily follow that the policy is socially desirable? By the summer of 1931 depression had already prevailed for two years, and there is good reason to suppose that it had already reached a stage of "secondary deflation,"² wherein any imaginable corrective value had disappeared and a mania for liquidity had begun to carry the volume of output and employment with cumulative momentum downward. The counsel of academic economists was probably generally in this direction, although this Draconian severity must have been weakened by Keynes' two *magna opera* since that time. Economic practitioners in central banks and Treasuries have, at all events, rather generally testified that the cost in unemployment counted heavily against the deflationary method of securing equilibrium.

(4) In point of fact, whether a country suffering a capital flight actually did set in upon a rigorous régime of deflation without exchange control, as in the case of Poland to 1936, or whether it adopted exchange control without being able to support the existing parity, as in the case of Austria during 1931 and 1932, or finally, whether it introduced exchange control and carried through substantial deflation, as in Germany under the Brüning ministry — these divergent courses have to be explained, not in terms of a nice calculation of advantages, but rather in terms of political forces and vested interests. Subsequent chapters upon particular countries will elucidate the factors at work.

A variant of the policy of deflation, as formulated by Machlup, would consist essentially in an iron-clad refusal of the monetary authority to create loans for purposes of a flight into foreign currencies, and a readiness to accept some temporary depreciation.³ The financial wherewithal for purchasing *devisen* could come from three direct sources, according to Machlup: hoards, income including new savings, and business turnover; and from three indirect sources, namely, sale of property, termination of loans,

1. Herbert Gross, "Ausgangspunkte, Formen, und Wirkungen der Devisenzwangswirtschaft," *Archiv für Sozialwissenschaft*, Vol. 69, p. 54.

2. Wilhelm Röpke, *Crises and Cycles* (London, 1936), pp. 119-134.

3. Fritz Machlup, "Die Theorie der Kapitalflucht," *Weltwirtschaftliches Archiv*, Vol. 36, No. 2, pp. 512-529.

and new bank credit. Each of these, with the exception of the sixth, is rather narrowly limited unless the sixth comes into play. If the central bank refuses to supply new credits, the capital flight would rather quickly burn itself out by reaching the limits of available funds.

No doubt with an absolute limitation on total credit, the amount of purchasing power which can be deflected to a given market, be it for *devisen* or for a specific commodity, encounters limits of the sort described by Machlup. No doubt, furthermore, the longer the period the greater is the volume of its total liquid resources which a society can direct to a given purpose, even if the total is fixed. A desire to effect an outward capital transfer being given, the society would progressively switch the destination of expenditure from other things to *devisen*, causing a deflation in the prices of goods and an inflation of *devisen* prices. Deflation of this character is bound however to be relatively small, since the market for *devisen* constitutes a small fraction of the total turnover in a national economy. Consequently, while Machlup's policy of fixing the total credit volume would certainly bid fair to support the flight country's rate of exchange better than a policy of inflation, it would not guarantee the necessary deflation, if prices at the same time were declining abroad. The proposal does not consider the problem of the possible shrinkage of income and employment, nor the political aspects of the situation.

Deflation has been examined at some length for the reason that, whether actually attempted or not, the idea was always entertained seriously. The third alternative to exchange control, exchange depreciation — whether through letting the rate sink to its "natural" level or through an act of devaluation — was of course proposed in some quarters outside the sterling bloc, but in the debtor countries was never seriously considered until exchange control had been in effect for many months. That a reduction in the monetary unit would have increased the real burden of foreign debts, aside from possible favorable repercussions on national productivity, weighed heavily against such a solution. Sterling devaluation had indeed reduced the real burden, but this did not show that it should be increased again. Throughout exchange control history the "real burden" argument has deterred devaluations or the recognition of *de facto* depreciations.

The really crucial point, however, was another, the fear of a

"velocity inflation" through a domestic flight from the currency into real values. It is maintained with almost universal consensus in the countries having experienced post-war inflations that a depreciation of the currency unit on foreign markets would have meant inflation to the man on the street, and that the "inflation conscious" public knows the appropriate line of action. In vain does the monetary theorist insist upon the distinctness of devaluation and inflation. If the ordinary citizen fails to understand this piece of "academic subtlety," then it becomes precisely that; the flight creates inflation. No government in central Europe could face this risk. It must not be forgotten that in 1931 deliberate devaluations were something relatively new, at least within the memory of this generation; sterling devaluation had not yet demonstrated its distinctness from the post-war currency debacles.

BILATERAL AGREEMENTS CONCERNING INTERNATIONAL PAYMENTS: THEIR CHARACTER AND THE CAUSES OF THEIR EMPLOYMENT

Clearings, compensations, and "payment agreements" in the narrow sense represent the three varieties of international payment under bilateral agreement. As the League of Nations investigation reveals, they grow directly out of exchange control;¹ indeed, so intimate is the association that it is practically impossible to conceive one without the other. This has produced a certain embarrassment in terminology. When the specific measures are being considered, "exchange control" designates the unilateral, and "clearing" and the like the bilateral actions. But when economic results are the subject of discourse it is frequently impossible to distinguish those flowing from unilateral measures from those arising from bilateral agreements, and the term exchange control is used to refer to the nexus of both sets of regulations. I have not attempted to improve upon this somewhat elastic usage; the context usually reveals whether exchange control should or should not be understood to include bilateral agreements.

To prevent evasion of the embargo against monetary transfers of interest and amortization abroad, exchange control prohibits all payments not specifically included under its own auspices. Two reasons for international bilateral action immediately put

1. League of Nations, *Enquiry into Clearing Agreements* (Geneva, 1935), p. 10.

in their appearance: (1) foreign creditors desire to arrange for some repayments even if payments must be conditioned by the size or existence of an export surplus on the debtor country's side; the authorities of the latter are anxious to limit repayments to capacity to pay in goods; (2) importers in the exchange-control country and exporters in the foreign country desire that the blocking of payments by the exchange-control country shall not simply terminate their activities. Clearing, compensation, and payment agreements in the narrower sense provide a solution of complementary desires under (2); while clearing and payment agreements provide the outlet for complementary desires under (1). If arrangements can be struck whereby (1) existing debts can be gradually liquidated out of current trade despite exchange control, by the same token such an arrangement permits (2) current trade to go forward. Let us see how this can be done.

Foreign creditors can force consideration of their claims, whether financial or commercial, if the creditors belong to a country which on current account buys more than it sells to the exchange-control country, provided the creditors can persuade their government to hold up payments on current account and divert a fraction of them to debt liquidation. This can be done by forbidding importers, even in the free-exchange country, from remitting directly in *devisen* to the foreign exporter, and by requiring importers to pay the sums in home currency into a central agency, which, after abstracting a certain amortization quota, holds the remainder as an account to the credit of the foreign exporters. The exchange-control country, on its side, will submit to a greater or smaller repayment quota according to its estimate of the importance of this particular export market and of the elasticity of demand for its products.

This was in general the setting for the introduction and persistence of clearing and payment agreements between the western European creditor and the central and eastern European debtor countries. But at the outset of exchange control the debtor countries refused to pay in *devisen* except for the case in which they had no choice, i.e. for current imports from a free-exchange country with which they had *unfavorable* balances. Accordingly, the western European countries had, as the price for exacting payments on capital account, to agree to the erection of a central agency in the control country, which should receive importers'

payments in home currency and hold them to the account of foreign exporters. In this way the control country could dispense with *devisen*, enforce its official exchange rate and create a recognized channel of non-flight-payments. The arrangement is called clearing if no *devisen* are employed in settling one account against the other. A sufficiently one-sided balance (after allowance of repayment quotas) leads either to direct limitations on its exports by the country with a net credit balance in the clearing, to agreement by the other country to increase its export quotas or extend the list of goods or services purchasable through the clearing, or as a last resort, to a complete stoppage of exporting by the clearing creditor until imports have liquidated the balance. The "payment agreements," appearing after the first access of exchange control severity, require all payments to pass through a central agency in each country — on the debtor (exchange-control) side to enforce its official exchange rate and its embargo on transfer by private initiative, and on the creditor (free-exchange) side to insure the application of the agreed-upon proportion of receipts to debt liquidation. But payments in both directions are made in *devisen*, so that the settlement of accounts is continuous.

Compensation, like clearing, dispenses with *devisen* entirely; but unlike clearing, trade does not proceed against open book-account involving a *periodic* balancing of *all* items, but rather an *immediate* offset to *each* parcel of export by an import of equal value. In two respects it is less "liberal" than clearing. It narrows the field of choice for exporter and importer: both must first discover the difficult "double coincidence" necessary to barter. And it makes no progress toward the liquidation of frozen claims. In other respects compensation proves less confining than clearing, for it frequently allows some trade to proceed when clearing stands at an *impasse* because of an unliquidated balance; and secondly it sometimes permits, in the concealed form of private bargaining, departures from an artificial rate of exchange enforced in the clearings.

In brief outline these are the modes of bilateral arrangements for international payments and the two reasons for their original introduction.¹ It need scarcely be said that an amazing variety of

1. Heuser gives two *types* of clearing agreement paralleling the two *reasons* for introduction; cf. Heinrich Heuser, *Control of International Trade* (London, 1939), pp. 68-71. I have reserved the idea of type to differing tech-

combinations of motives and types characterizes the actual scene. Central European countries stood in a debtor relation to the West, but in a creditor relation to the East and Southeast, and the clearings of Germany, for example, reflect both circumstances. Compensation frequently appears as a subdivision of a payment or clearing agreement. Clearings differ in all imaginable ways, concerning organization, items admitted, transit trade, rate of exchange, duration, settlement of balances, and the like, described by Einzig and the League Enquiry. Occasionally clearings even provide for triangular trade, either directly through triangular clearing (though this is rare¹), or through permitting one clearing country B to receive raw material from country A, selling the finished product to C, whereupon country C pays via the clearings to A for the raw materials involved and to B for the fabrication costs — the so-called Brocchi system. But we need not dwell upon further technical possibilities.

Once exchange control has prevailed for some time, additional grounds may appear for instituting clearings with new countries or for extending the scope of existing agreements. (3) Since the clearings include the bulk of ordinary trade, a fair presumption exists that transactions outside the clearings may represent attempts to export capital; to secure this simplification, the net of clearings may be extended. (4) A more or less deliberate campaign may be instituted to purchase as much as possible over the clearings, forcing the seller to extend involuntary credits in the way of unsettled clearing balances, obliging his government to shoulder the burden, and perhaps eventually inducing the acceptance of inferior goods in payment. (5) Finally, like exchange control itself, clearings may become an instrument for economic and political bludgeoning. The threat of *Zwangsclearing* in many cases has been a justifiable method of forcing recognition of creditors' claims; but all too frequently the control of direction and composition of trade, delivered into bureaucratic hands by the clearing method, has been perverted to partisan interests

nical arrangements, once clearing has begun. The League Enquiry, by dividing the first reason into desires to liquidate commercial and financial debts, comes out with three reasons for clearings (p. 11). But there are others; cf. points 3, 4, and 5, above.

1. *Südost Economist*, Vol. 1, No. 3, p. 81. One example is the recent triangular clearing of Germany, Rumania, and Jugoslavia.

within the country, to purely autarchic ends, or to intimidation of other countries.¹

THE EFFECTS OF ECONOMIC FORCES ON EXCHANGE CONTROL

Exchange control systems described in the first pages of this chapter as belonging to the first and second types do not involve an official rate of exchange. The third type was described as including the imposition of an official rate in a situation in which a black market rate might develop because of evasions of the prohibition of capital exports, but no price-level disparity in comparison with foreign countries exists. In these three cases there is no reason why trade cannot proceed without interference from exchange control. In exchange control of the fourth and fifth types, however, which have been most prevalent in Europe since 1931, this has not been the case. The prices of internationally traded goods fell too slowly to offset the decline of prices in gold standard countries, or failed to decline sufficiently to counter-balance sterling and dollar devaluations, or finally rose more rapidly under the forced draft of totalitarian make-work or rearmament programs than did prices abroad. The official rate came sooner or later to represent an overvaluation of the international purchasing power of the monetary standard. From the differential between official and real equilibrium rate of exchange in commodity trade there resulted a penalty upon exports and a wind-fall gain to imports. Much of the history of exchange control

1. In *The Exchange Clearing System* (London, 1935), Paul Einzig lists fourteen causes for the establishment of clearings. Such an extended list involves much reduplication and not a little error. Numbers 1, 2, 3, and 14 all refer to the willingness of creditors and the requirement of debtors that debt payments shall be made in goods and not in devisa, the first cause in my enumeration. Numbers 4, 6, and 9 fall under the second cause, the desire on both sides that current trade proceed. Einzig's 11, 7, and 13 amount to my 3, 4, and 5. But his items 5, 8, 12, and 10 are spurious. Clearing does not permit a country to escape such direct quantitative limitation of imports as quotas, import licenses, or prohibitions; furthermore the clearing agency usually has authority to accept or reject any proposed transaction. The allegation that clearing reduces "the disturbing effect of cash transfers" actually gives the thesis of the book, apparently recanted in *Bloodless Invasion*, that multiangular clearing promises to be the ideal international system of the future. Another error is the belief that a country wishes to "balance" its trade with particular countries; balancing may be achieved but only for an ulterior motive. Finally clearing cannot afford a means to "replenish the currency reserve," though admittedly clearing may prevent further depletion of reserves.

turns upon the clash of ordinary business motives with these artificial differentials. Had the various governments taken no steps to modify their control systems, the tendency toward unfavorable balances would eventually have brought an absolute cessation of international trade.

Devices by which exporters are given the "true" value of their products, or at least something more nearly approaching the yield of exports at an equilibrium rate of exchange, are varied and sometimes intricate. A simple method, to which resort was had in Germany, Austria, Hungary and Poland, gave to certain authorized exporters certificates which permitted them to retain enough *devisen* to pay for their imports of raw materials, provided they rendered a periodic accounting. The system declined because the certificate privilege was abused by exporters and because the state discovered that it could trench upon windfall and even normal export profits by requiring the sale of *devisen* (at the official price) even in excess of an amount leaving intact the *devisen* required to pay for imported raw materials. Rumania, Jugoslavia, Hungary, and Austria employed at various times the device of requiring exporters to surrender various *percentages* of their *devisen* receipts at the National Bank's official price. The percentages could be uniform, or could be adjusted to the "needs" of the particular exporter, or be made an instrument of domestic politics; the state utilized the *devisen* for its own purposes or sold them at their low official price to exporters judged to be especially in "need" of relatively cheap imported raw materials. These circumstances led to the designation of the percentage as the "raw material" quota.

Many of the schemes for offsetting the export handicap were rather involved. Out of the windfall arising from the discounts on blocked accounts or from the repatriation of securities selling at lower prices abroad than at home, the state in some cases paid a premium to secure "additional" exports. The term arises from the notion that it is only the foreign creditors' concessions in selling blocked accounts and securities at discounts in order to realize upon them immediately which makes the particular export possible. But this linking does not represent any economic connection: it is simply an act of authority. At the official exchange rates, exporters cannot compete on world markets, and even to export the previous quantities, they must receive

from some source outside their devisa sales the differential between official and equilibrium rates. Whence it comes, whether from surcharges on imports, taxation, or foreign creditors' forced concessions, is a matter of indifference to the exporter. And unless the payment he receives exceeded the rate differential, exports are not "additional" to what they would be were it not for the artificially low rates on foreign devisa set by exchange control, and it need scarcely be added that this rarely happens. This explains the amusing paradox that during a six-months period at the end of 1933 and early 1934 German exports declined by well over 100,000,000 Reichsmarks, although "additional" exports through the repatriation of bonds and the sale of blocked accounts amounted to 100,000,000 Reichsmarks.¹ The real intricacies of the additional-export device appear when a certain portion of one export parcel is declared by an exchange control authority, as for example the Hungarian, to be additional, but the other portion not; for the former portion an unusually high premium is paid, but for the latter only the ordinary rate. *Ad hoc* administration of this sort easily admits personal favoritism or political pressure, especially as the public does not know the premium paid in particular cases.

Equally difficult to administer in objective fashion is the method of offsetting the export handicap by quietly tolerating on occasion exporters' resort to the black market and its better prices for foreign devisa. In some countries, most notably Germany in the past few years, the chief method of relief to exporters has been direct state subsidy, a procedure scarcely adapted to secure objectively equal treatment either for exporters themselves or for their products on a comparative cost basis. In passing it should be emphasized that, unless the amount paid the exporter exceeds the handicap imposed by official exchange rates, there is neither genuine subsidizing nor, by the same token, "exchange dumping."

Finally, the control authority may levy upon imports a surcharge above the official rates for foreign devisa and apply the proceeds as a premium on exports. If these differentials were sufficiently large and applied uniformly, the system could, except for capital transfers, practically reconstitute the conditions of a free devisa market under exchange control, particularly since

1. Hamburger Fremdenblatt, March 6, 1934.

the differentials are also commonly introduced into clearing rates. Hungary has approximated this situation since 1935, without completely realizing it because of some lack of uniformity in the agios and inadequacies in their extent.

Commonly, however, as in Yugoslavia and Rumania,¹ different premia are paid for various countries and commodities. As previously remarked, this may be "justified" by differing degrees of overvaluation in various foreign currencies or by discriminating treatment of different commodities abroad. But this "justification" does not prove the advisability of the system, which may become unmanageably complex and subject to personal discriminations within the control country. Differential premia have also been defended as a means of fully exploiting foreign markets. For a country actually possessing a monopoly and having furthermore the requisite conditions for discrimination, the theoretical possibilities have been clearly set forth.² In the disrupted economic world since the World War and particularly since the crisis of 1931, protective tariffs, quotas, import and export prohibitions, boycotts, government monopolies in traded goods, discriminating railroad rates, subsidies, and exchange control make it certain that national markets are insulated to a high degree for many commodities. By the same token, however, these autarchic devices make it more difficult to exploit the differing demand elasticities of the several markets. It is, of course, not *a priori* demonstrable that finely differentiated exchange rates could not secure profitable monopolistic discrimination. The Hungarian authorities, however, who once categorically affirmed this possibility, abandoned the system for a relatively simple structure of rates. Monopolistic discrimination of a very simple variety made its advent early in exchange-control history in the requirement, even from exchange-control countries, of devisen payment for exports produced under conditions of spatial or geographic monopoly. Thus Rumania secures devisen for some of its petroleum and Hungary for some of its wheat, even from exchange-control countries.

Exchange control passes from type 4 or 5 to type 2 (with or

1. Cf. Yovanovitch, *op. cit.*, pp. 27, 35-36; Madgearu, *op. cit.*, pp. 17, 38, 44.

2. Joan Robinson, *The Economics of Imperfect Competition* (London, 1933), Chapter 15.

without autarchic accompaniments) when the authority, instead of attempting to reconstitute something like an equilibrium rate through any of the foregoing devices, tolerates an open market for devisen dealings under its constant supervision. The circle seems now to be joined, and the question may legitimately be put as to why exchange control should persist. There are of course vested interests: the control bureaucracy doubtless prefers not to contemplate a change (at best) of employment, and the state enjoys a continuance of its prerogative of purchasing devisen for its own purposes at the low official rate, which still persists as a formality made real for this one purpose.¹ But, as the case of Austria reveals, there are legitimate reasons for the persistence of type 2: to prevent capital withdrawals on a disastrous scale, *all* devisen dealings have to be scrutinized; and furthermore, the existence of exchange control in important trade partners requires the continuance of bilateral payment agreements.

In the present summary view it is impossible to exhaust the repercussions of economic forces upon exchange control. The account would be quite incomplete, however, without emphasis upon *evasions* of the control and the endless flow of regulations designed to render the system inviolable. One harried official of a central bank confessed privately that evasions were always outstripping enforcement; he predicted the eventual collapse of the system from this weakness. The strength of modern states does not permit such a prophecy with any confidence, but the circumstance emphasizes one important aspect of exchange control — its heavy social cost and complexity.

ECONOMIC PROGNOSIS FOR EXCHANGE CONTROL

Part of the "nature" of exchange control is its economic operation. Without anticipating results of the accompanying empiric studies of particular national economies under exchange control, it is possible to set down in brief form some of the chief economic effects which would appear highly probable or even inevitable from the very character of the unilateral and bilateral measures described in the present chapter.

Authoritarian action of the first type enumerated has already

1. This is said to be one of the chief bulwarks of exchange control in Rumania. Cf. Madgearu, *op. cit.*, pp. 9, 21.

been treated in a special literature;¹ it does not belong to exchange control in the narrower sense of the present enquiry. It is the chief characteristic of the second type, permitting the rate of exchange to move freely and dispensing with devisen allocation, that it prevents an exodus of capital. Undoubtedly such an embargo may interfere with the tendency of capital to bring its marginal employments to equality and thus maximize yields. Flight capital, however, can scarcely be thought of in this light. "If the authorities endeavor to prevent abnormal capital movements from affecting the exchanges," says Einzig, "they assist in the working of normal tendencies, instead of obstructing them."² On the other hand, in preventing capital repayments, exchange control effectively discourages the investment of new foreign capital. Since the "natural" direction of capital-flow was toward the debtor (now exchange-control) countries, this is probably the more serious consequence.³ The third type of control presents no important economic peculiarities over this situation, and we pass to the fourth and fifth types, in which overvaluation entails devisen allocation (*Devisenbewirtschaftung*).

It is, for example, possible to foresee with reasonable certainty that the maintenance of a country's exchange at a level higher than that justified by relative prices will penalize exports and give windfall profits on imports. From this simple fact several deductions can be reached. Countries having an export surplus consisting chiefly of agricultural products will discover that their agriculture languishes; if it is already depressed from a combination of secular and cyclical causes, the "agricultural price shears" will be opened still further. Industry will by contraries gain, first in the relative cheapness of imported raw materials at the low official rate on foreign devisen; secondly in the automatic protection afforded through the scarcity of raw materials at the too-low rate, and hence the high domestic prices chargeable for products; and, finally, from the cheapness of domestic agricultural materials. *Mutatis mutandis* the case may be stated for countries with industrial exports.

1. Consult, for example, N. F. Hall, *The Exchange Equalization Account* (London, 1935); Seymour Harris, *Exchange Depreciation* (Cambridge, Mass., 1936), Chapter 15; and F. W. Paish, "The British Exchange Equalization Fund," *Economica*: February, 1935; February, 1936; and August, 1937.

2. Einzig, *Exchange Control*, p. 108.

3. Cf. Yovanovitch, *op. cit.*, p. 23.

From a knowledge of the devices by which the artificially scarce foreign devisen — much prized because of their low official prices — are allocated, it would not be impossible to hazard that those economic interests which are most vocal, most highly organized, or most powerful would be apt to secure the most consideration. In general industry and commerce would bid fair to come off better than agriculture; large business units would prevail over smaller units; trusts and cartels would be aggrandized, with predictable results upon domestic costs of living.

The detailed scrutiny of individual transactions involving foreign exchange would necessarily involve costs for a hierarchy of employees and officials; furthermore, the exchange control apparatus is almost wholly administrative, and the enabling legislation usually specifically places the controlling authority above recourse to judicial review. *A priori* it would be impossible to know how extensive the costs of the control administration might be, or how economical the management; nor could one foretell whether the administration, endowed with powers of economic life and death, would or would not act impartially and honestly.

Foreign trade under exchange control may be made the object of quantitative prognosis in several respects. Involved are problems as to the direction, commodity composition, volume, and terms of trade, from the angles of both exchange-control and free-payment countries. Here we move in a sphere in which unilateral and bilateral measures articulate closely, though in some cases one or other set comes more prominently to the fore.

A country finding itself in a position of currency overvaluation, if it can or will not accept the alternative of exchange depreciation, must husband its devisen by direct interference with trade. In these circumstances imports from clearing countries will be fostered, those from free-exchange countries reduced as far as possible; and the opposite policy will be adopted for exports. Such a country will naturally exert itself to introduce clearings and compensations with any free-exchange country with which it has an unfavorable balance, and to postpone the advent of such arrangements when its balance is favorable. With those countries with which it already has bilateral agreements it may, either from force of circumstances or deliberately, import as much and export as little as possible. If the possibility exists of deriving an import originating in a country where devisen payment would be necessary,

by way of clearing or compensation from an entrepôt country, the opportunity will be avidly seized upon.

What has been said concerning the general changes to be expected in total exports and total imports by countries will also prevail for particular items of trade, i. e. nothing will be taken for payment in devisen if the commodity or service can be had through clearing or compensation. In relations with clearing countries with which it has naturally favorable balances, the exchange-control country will attempt to secure devisen payments for as much of the balance as possible; this it may be able to compass by reason of its relative importance as an export market for the particular country, by reason of threats of various economic reprisals, or by reason of its monopoly control over important export items. Bilateral agreements and exchange control lend themselves readily to autarchic policies: it may be confidently expected that permission to export or import by clearing, compensation, and through a payments office will be given only if the particular item does not displace home production and does not conflict with rearmament programs or other state policies.

The volume of trade stands to decrease. The forced balancing of exports and imports between countries included in bilateral clearing and in compensation could not *a priori*, as has sometimes been said, be assumed to be accomplished always by reducing the excessive side: it would certainly be conceivable that the balance be brought about by increasing the deficient side. But there are reasons for believing that the former adjustment would preponderate: bilateral trade, as will appear presently, diminishes the gain of international trade. Unless authoritarian action offsets the loss of ordinary profitability, less will be bought and sold. Furthermore, since we recognize type 5 as a genuine category of exchange control, bilateralism is conjoined with autarchic tendencies which are synonymous with reduced international trade.

We come finally to the effect of exchange control upon values in international trade. Careful discrimination is necessary between effects produced by (1) the fact that for *all* clearing countries bilateral agreements narrow the range of choice; (2) the fact that clearing and compensation necessarily involve opposite effects from the forced balancing of exports and imports, according as the clearing country has a favorable or unfavorable balance; and (3) the fact that an artificial rate of exchange is involved under exchange control types 4 and 5.

In the authoritative League of Nations Report on Exchange Control,¹ two important consequences of clearing agreements are described as follows:

The first is that a country which is compelled to expend the whole of any given sum of money (in this case the proceeds of its exports) in one single country ceases to have a free choice of markets and therefore often tends to buy on the average at higher prices than it would, had it a free choice. . . . The same tendency can also frequently be discerned in the exports of exchange-control countries — i.e., they tend to sell to other exchange-control countries at higher prices, in terms of their own currencies, than to countries with free exchanges.

Now while each part of this argument in isolation is, or rather may be, correct, there is conspicuous lack of symmetry between the first and second sentences. Clearing, and in still greater measure compensation, restrict the range of economic choice for two reasons: first, because bilateral agreements do not exist with every country and hence trade tends to be restricted — though not absolutely, still sensibly—to partner countries; but even within this range, since clearing is rarely triangular and bilateral trade must balance, exports and imports are frequently governed by the availability of a clearing balance rather than by considerations of quality and price. Contrary to the implication of the Report, however, this signifies for a clearing country not only that imports cost more but also that exports bring *lower* prices.

Let us consider quite another aspect of bilateral balancing.² Except for an improbable accident, one country or the other will have a "natural" export balance. Clearing prevents this flow of exports from continuing indefinitely by one or more of three checks. The clearing agreement may be denounced by the creditor or debtor: trade is broken off, and a new clearing can begin only when the deficient side has "caught up," i. e. the balance is liquidated. Or the interminable delay in getting payment for the export balance may automatically discourage sales on the "favorable" balance side until the import side "catches up," at least partly, and the delay is brought to tolerable proportions. Finally, the authorities may bring a balance by simply closing the clearing to certain goods or reducing the quota. What is true in this one

1. (Geneva, 1938), p. 34.

2. We refer to clearing and compensation in the usual and strict sense which precludes the use of *devisen*. If balances are settled in *devisen*, there is no essential difference from free payments.

clearing will be true typically (but not for every clearing) for a country with a generally favorable balance of items included in clearings. The economic result is clear: interest, risk premia, and losses on unsalable blocks of potential exports simply increase the costs of units finally marketed. To what degree the increased costs are borne by the seller or by the buyer depends *inter alia* upon relative elasticities of demand and supply. The gross price of exports, except in the limiting case where the buyer bears none of the cost increase, will be higher, and the net price lower. In this case the conclusion of the Report concerning (gross) export prices is justified; but the reverse would be true for a country with an unfavorable balance of trade.

Finally we have distortions specifically due to artificial exchange rates. It may be observed that the two foregoing sets of results flow merely from bilateralism; they would continue even if a "clearing rate of exchange" were free to move under demand and supply forces for each pair of partners. An artificial exchange rate means in general that what one country gains the other loses, except that both would be expected to lose something in factor efficiency by the change in the composition of trade. The net position of a country under exchange control will be compounded of at least these three elements so far as concerns international values.

In a final chapter we shall return to the *a priori* expectations of the preceding pages to determine how far they are discoverable in actual experience. Reference will also be had to Euclidean statements of exchange-control theory, as for example in Heuser's ingenious formulations.¹

It is intended that the following studies of exchange control in certain Central European countries should be intelligible as separate monographs. Conditions preceding and attending the advent of control, the history of exchange-control practice, the economic accompaniments of the system within the country and in international trade, and the "outcome" of the experiences—these form parts of the analysis in each case. The ultimate aim animating all the enquiries is a general appraisal of the system on the basis of its observed operation.²

1. Heinrich Heuser, *Control of International Trade* (London, 1939).

2. Some especial attention will be devoted to the systematic apology offered for exchange control by Fritz Meyer, "Devisenbewirtschaftung als neue Währungsform," *Weltwirtschaftliches Archiv*, May, 1939.

CHAPTER II

AUSTRIAN EXCHANGE CONTROL: AN EXAMPLE OF SUCCESSFUL TERMINATION

THE AFTERMATH OF THE CREDIT ANSTALT FAILURE

While the repercussions of the Credit Anstalt failure rocked the financial foundations of Europe, the immediate impact fell most violently upon the small republic of Austria. Beginning on May 8, 1931, when the bank's actual losses of 140,000,000 Schillings transpired and additional losses absorbing the entire 177,500,000 Schillings of original capital appeared probable, a frenzy of panic loosed itself. Unchecked by the tardy relief from abroad, it led to an absolute *impasse* for the National Bank and the introduction of exchange control five months later. During the first two days of intense panic, the Credit Anstalt lost 15 per cent of its deposits and by the end of the month 20 per cent, or 400,000,000 Schillings.

To enable this institution to meet demands, the central bank increased its private discounts, as may be seen from Fig. 1, in a tremendous bound from 69,500,000 to 451,300,000 Schillings during the three weeks from May 7 to May 31, almost exactly paralleling the Credit Anstalt withdrawals. The note circulation increased in the same period from 905,400,000 to 1,140,600,000 Schillings, an application of the Bagehot principle for meeting runs. Conclusive proof that the increase of notes merely supplanted deposits, and therefore cannot be stigmatized as inflationary, appears in Fig. 2. The increase of notes proceeded entirely from the thousand-Schilling category, a denomination not much used for exchange but predominantly for hoarding. Foreign withdrawals and domestic hoarding also began their disastrous inroads upon the National Bank's gold and devisen reserves (cf. Fig. 1). A decline from 855,500,000 to 732,200,000 Schillings during May alone provoked only the moderate discount-rate advances from 5 to 6 per cent on June 8, and $7\frac{1}{2}$ per cent on June 16; not until July 23 was the rate raised to 10 per cent, at which level it remained until the introduction of exchange control.

To cope with the basic difficulties of the Credit Anstalt

situation, the government promulgated a series of eight laws over the period from May 14 to December 23. In the first law it provided that the Treasury should assume 41,400,000 Schillings and the National Bank 12,400,000 Schillings of the 140,000,000 Schillings losses, the balance being covered by offsets from reserves, writing down the existing capital, and a contribution from the Rothschilds. The government also subscribed 58,600,000 Schillings and the National Bank 17,600,000 Schillings to new capital.

Well aware that foreign withdrawals might only have begun, the Austrian government addressed appeals for loans to London, Basle, and Geneva. The Control Committee of the Bank for International Settlements authorized an emergency credit on May 18, but nothing was done to make the funds available. On May 25, according to the Austrian Prime Minister, Ender, the Bank of England advised the Ministry of Finance either to declare bank holidays for the Credit Anstalt or to announce a moratorium; alternatively, it promised a loan in conjunction with the Bank for International Settlements, if the Austrian government would underwrite the obligations of the threatened bank. The underwriting law was enacted three days later, and the government also guaranteed National Bank rediscounts of 120,000,000 Schillings to the Credit Anstalt and Austrian Savings Bank advances of 50,000,000 Schillings.

Even so, no foreign credits appeared, although the first weeks of June saw a continuation of withdrawals from Vienna banks at the rate of 100,000 Schillings daily. From Paris a tardy offer of help was made upon conditions politically impossible for Austria: definite renouncement of a tariff union or *Anschluss* with Germany, and supervision of the reorganized bank by the Quai d'Orsay. Finally, on June 16, the French conditions for a possible loan took the form of an ultimatum which caused the collapse of the Ender cabinet. Rumors of moratoria and exchange control were rampant. At midnight came the news of a 150,000,000 Schillings credit from the Bank of England. This precipitated action by others: the Bank for International Settlements immediately lent 100,000,000 Schillings and announced its willingness to supply an equal sum in addition¹; in return for an explicit guarantee of Credit Anstalt

1. Actually this sum was not subsequently supplied, and instead the original advance was reduced to 90,000,000 Schillings. Furthermore, the Bank

deposits, a consortium of more than a hundred of its foreign creditors agreed to a two-years postponement of claims. The "London Agreement" of June 16 covered 500,000,000 Schillings, the bulk of the Credit Anstalt's short term obligations.¹

The announcement of the Hoover moratorium on June 23, 1931, induced a temporary optimism, but a sharp reversal ensued on July 13 when the failure of the Darmstädter and Nationalbank, involving its Vienna concern, the Mercurbank, led to the German bank-holidays. Austria suffered, therefore, not only directly from the Credit Anstalt bankruptcy, but also from a return of the virus from its devastation abroad. In Germany and Hungary foreign payments were suspended; and Austrian citizens, apprehending similar measures at home, renewed the conversion of deposits into notes and devisen. On July 25 the third, fourth, and fifth Credit Anstalt laws carried on the work of reconstructing this bank, but the panic continued with an estimated reduction of short-term foreign obligations of Vienna banks, excluding the Credit Anstalt and direct loans to industry, from 400,000,000 Schillings before the May crisis to 250,000,000 Schillings at the beginning of August. Devisen reserves in the National Bank shrank in the same period from 855,000,000 to 566,000,000 Schillings, despite the 250,000,000 Schillings credits from the Bank for International Settlements and the Bank of England.

In this extremity the government addressed a desperate appeal on August 7 to the League of Nations for a 250,000,000 Schillings loan. Representatives of the Financial Section went to Vienna to study the situation, but not until the summer of 1933 was the loan actually consummated. However, a meeting of foreign bankers in Basle, August 14-19, accorded a six months' standstill upon the remaining 240,000,000 Schillings² of Austrian banks' short-term debts, under the so-called Bruins agreement.³

of England required a repayment of 50,000,000 Schillings of its advance, and thus hastened the advent of exchange control.

1. By subsequent agreements on January 11 and April 27, 1933, its affairs were finally put in order through a "Foreign Holding Company" with the participation of the Austrian Government. On July 20, 1934, the guarantee of its deposits was finally terminated.

2. All figures in Schillings to p. 54, paragraph 1 are given on the basis of gold parity, thereafter at the "private clearing" rate.

3. The standstill was renewed on January 20, 1932, and at six months intervals thereafter until repayments and other arrangements supplanted it entirely on December 10, 1934.

Simultaneously in mid-August the Hungarian government promised to permit 50 per cent repayments upon all Austrian claims falling due before September 12; but its failure to transfer more than 3,000,000 Schillings from a total of 10,000,000 Schillings contributed to the embarrassing shortage of devisen. During August a further 5,000,000 Schillings was withdrawn from Vienna banks.

The rapid ebbing away of devisen reserves had created a shortage of foreign exchange immediately after the Credit Anstalt collapse, so that transactions of any importance proceeded on a premium basis for gold currencies. In September the phenomenon became commonplace; though the large banks found it more seemly to sell only at National-Bank rate, the informal (but still legal) coffee-house dealings involved premia of 10-15 per cent. After the Stock Exchange was closed on September 21 to stay the process of liquidation and capital flight,¹ the Bank officially limited its sales of devisen to "legitimate" import demands; but even so the supply proved inadequate. On October 7 the Ministry of Finance suspended remittances abroad by money order, and on the 9th the First Devisen Law was proclaimed. Reserves of the National Bank had fallen by that time from 855,500,000 Schillings on May 7 to 358,900,000 Schillings, private discounts had risen from 69,500,000 to 736,200,000 Schillings.

For several years preceding 1930, Austrian indices of production and of note circulation had followed roughly parallel courses. The continuation of note circulation secularly upward during the latter half of 1930 and the first months of 1931 did not signify relative inflation, despite a persistent decline in the production index (cf. Fig. 7, p. 61), since diminished velocity through hoarding offset the purely quantitative increases. Savings deposits, from an average of 2,119,000,000 Schillings in 1929 increased to 2,392,000,000 Schillings by June, to 2,512,000,000 Schillings by December and to 2,620,000,000 Schillings by March, 1931. For May their decline to 2,320,000,000 Schillings does not mean diminished hoarding but rather a flight from the banks attending the Credit Anstalt debacle; this interpretation holds also for the still lower savings deposits figures of the second third of the year, which is marked in the note circulation curve by a hump corresponding to the hoarded 1,000 Schilling notes (cf. Figs. 1 and 2).

1. The Exchange reopened in early November, 1931.

By September, however, the foreign short-term obligations of all Vienna banks, including the Credit Anstalt, had been prolonged by agreements, and government guarantees had assured bank

THE AUSTRIAN NATIONAL BANK*

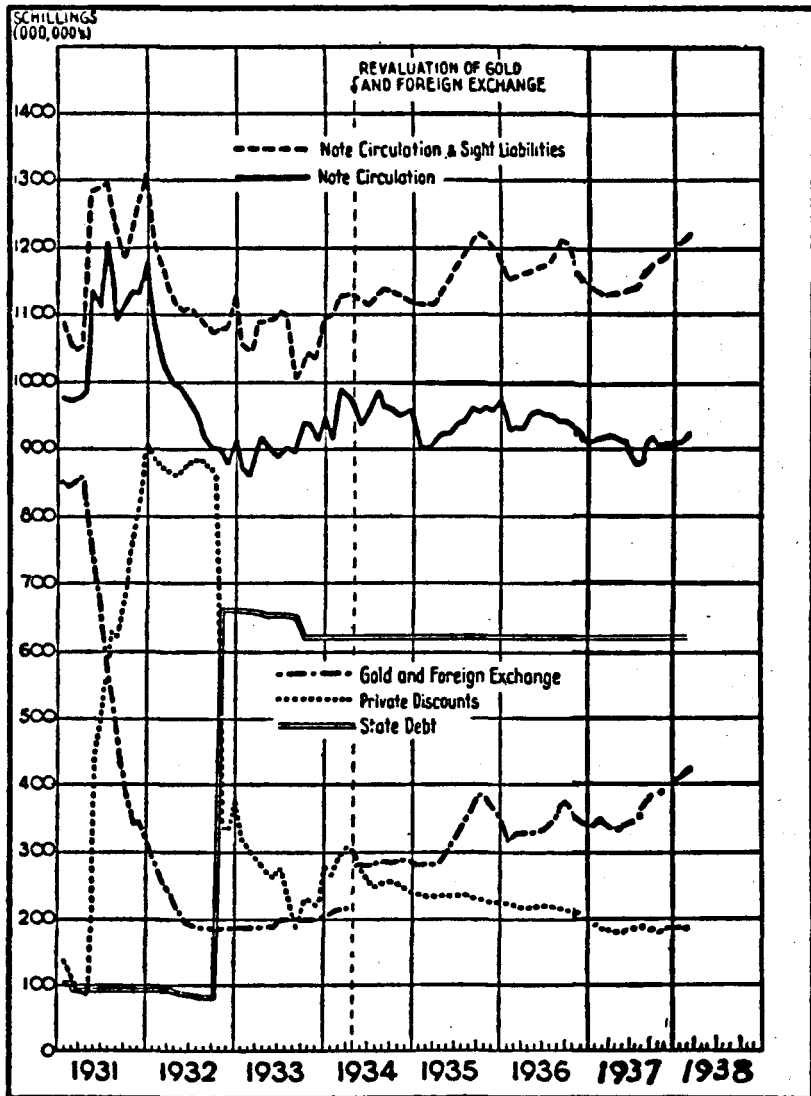


FIG. 1

* League of Nations, Austria: Public Finances, First Report (Geneva, 1936), p. 12, extended to termination of the Bank's existence in March, 1938. The decrease in private discounts and simultaneous increase in state debt are explained by the absorption of Credit Anstalt losses by the Treasury. Cf. p. 54, n. 1, below. For statistics, cf. pp. 74-76.

liquidity. But the sapping away of central bank reserves through capital flight, continued by Austrians and foreigners alike, caused popular apprehension to turn now from the banks to the currency. Reductions in savings deposits persisting throughout the final third of 1931 to a low point of 1,878,000,000 Schillings in Decem-

BANK-NOTES IN CIRCULATION BY DENOMINATIONS*

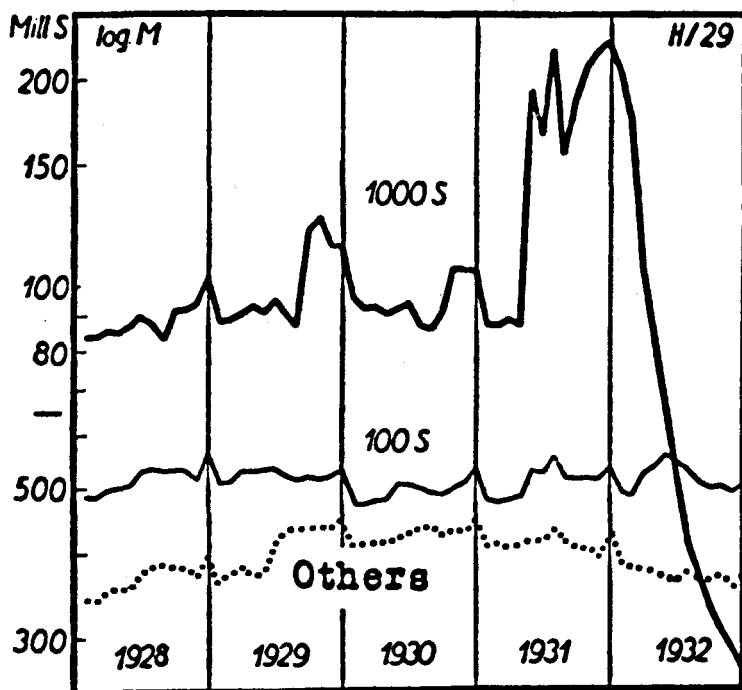


FIG. 2

* Monatsberichte des Österreichischen Institutes für Konjunkturforschung (hereafter: Ö. I. f. K.), Jhrg. 7, Nr. 2, p. 19. For statistics, cf. p. 85.

ber signify a flight from the currency and an acceleration of monetary velocity. During the same interval, doubtless partly as a consequence of the reduction of bank-rate from 10 to 8 per cent on November 13, the note and deposits index rose from its temporary low of 123 in October to a maximum of 131 in December, 1931 and February, 1932.

The inevitable result of increased velocity and quantity of central-bank notes and deposits was a pronounced upward sweep in the Austrian sensitive-price index, beginning in September, 1931. Fig. 3 shows its departure from the downward course of world gold

prices as typified by the United States.¹ We shall return later to the data in Figs. 1 and 3 for an explanation of the eventual devaluation of the Schilling by 22 per cent; at present we note that price equilibrium with gold countries such as America persisted until September, 1931, but that thereafter the official parity quotations on the Schilling were maintained in the teeth of a decidedly adverse turn in purchasing power parity.

At this juncture questions naturally arise as to whether Austria had anything to gain by introducing exchange control in October, 1931, and if so, whether the control should not have been applied much earlier. I do not believe it can be seriously doubted that a government's decision to support the banking system is necessary to prevent wholesale financial demoralization,² and that for Austria this decision inevitably involved sacrificing the monetary standard, unless foreign loans had been forthcoming quite beyond the bounds of probability in 1931. With these considerations as data, the authorities might simply have let the Schilling "find its level" or have devalued by an incisive step shortly after the Credit Anstalt crisis. Against this course, however, stood three important obstacles: the popular tendency to identify devaluation with inflation, the burden of foreign debts, and the impossibility of foreseeing a continuance of world deflation. Concerning the first, it is imperative to recall (1) that England had not yet given her demonstration of the practical feasibility of cutting loose from gold without inflation, and (2) that the Austrian people consequently associated devaluation with the post-war inflations. Less conclusive, but still important, was the per-capita foreign indebtedness of 476 Schillings, substantially less than Hungary's 766 Schillings but approximately equal to that of Germany or Rumania. Devaluation would have aggravated not only the real burden of debts in foreign currencies, but also the difficulty of coming to an understanding with foreign creditors. Finally, the conversion of Credit Anstalt deposits into central bank and government obligations did not *per se* mean inflation, but only the crystallizing of the credit volume against downward revision. Who in May, 1931, could

1. Experience with these two series has indicated to the Austrian Cycle Research Institute that closest conformity through a number of previous years is obtained when the Austrian series is advanced by four months. A normal divergence of 25-30 per cent of the Austrian curve above the American is eliminated by reducing both to 100 in June, 1931.

2. Thus Wilhelm Röpke also: *Crises and Cycles* (London, 1936), p. 8, n. 6.

have foreseen, however, a fall in the international price-level in the immediate future, to say nothing of a continued decline for two or three years to come?

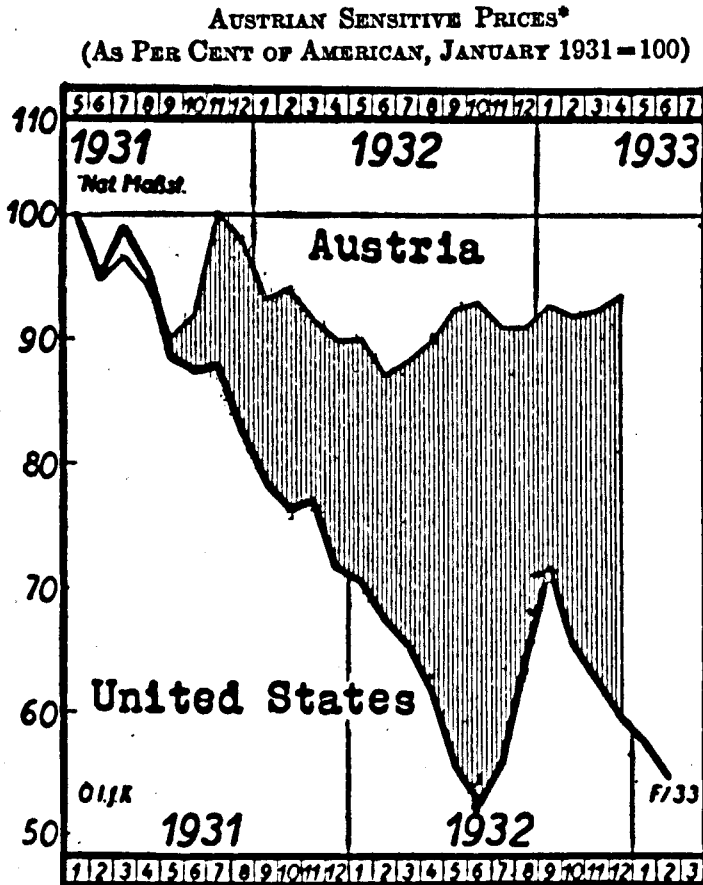


FIG. 3

* O. I. f. K., Jhrg. 7, Nr. 4, p. 65. The time basis for Austria appears at the top, for America at the bottom, of the diagram. For statistics, cf. pp. 78-80.

Another course would have been an attempt to maintain the gold Schilling by deflation. To cope with the panic psychology of a capital flight, sharp and rapid contraction of credit is requisite, with a successful outcome by no means assured. It is difficult to believe that credit could have been substantially reduced. Dr. Viktor Bloch called the attention of the *Währungsenquête* in April, 1932, to the fact that of 850,000,000 Schillings in National Bank loans nearly 700,000,000 Schillings directly or indirectly represented frozen Credit Anstalt assets, leaving a maximum of 150,000,000

Schillings which could be affected by the rediscount rate. Though commercial banks would have had to follow this rate, a large portion of their loan portfolios, in turn, were illiquid. Precisely this general condition is recognized by those who say that the cost of salvaging the Credit Anstalt was the gold Schilling, although the same persons inconsistently upbraid the National Bank for not deflating.

Perhaps even more momentous were the purely political considerations. The Social Democratic Party emerged from the elections in November, 1930, with unbroken strength, but the cohesion of the Government's majority was seriously affected, especially later through the ill-starred attempt to establish a Customs Union with Germany. The collapse of the Credit Anstalt virtually put the Government at the mercy of the socialists, and the Buresch cabinet had to coördinate its policy with the wishes of the Left.

The Social Democratic Party took a firm stand against any devaluation of the Schilling. For the masses of the Austrian electorate and even for many leaders of the party¹ devaluation and inflation were identical notions, and the party, accountable to its voters, never could, at least openly, pursue such a policy. On the other hand, the implications of a persistently deflationary policy were even less acceptable; together with the trade unions the party firmly rejected any policy which would increase the pressure on wages and salaries or which would decrease the part of costs of production caused by social legislation.² As early as June, 1931, in confidential meetings of the party, its leaders cited the warning example of Germany where, as they said, the deflation policy of the Brüning Government supported by the German Social Democrats would "cost the latter thirty seats at the next election."³

In their attitude towards the Credit Anstalt problem the socialists were guided first and foremost by the desire to maintain at any price⁴ employment in the industrial concerns owned by the Bank. In place of lowering costs of production, they urged the

1. Cf. Speech of Otto Bauer in Protokoll des sozialdemokratischen Parteitages. Abgehalten vom 13 bis 15 November, 1931 (Vienna, 1931), p. 22.

2. The aggregate "social burden" was estimated at 25 per cent of wages and salaries. *Die Industrie*, vol. 33, No. 8, p. 7.

3. *Pertinax*, Oesterreich 1934, (Zurich, 1934), p. 163.

4. Walter Federn, "Der Zusammenbruch der österreichischen Credit-Anstalt," *Archiv für Sozialwissenschaft und Sozialpolitik*, vol. 67, p. 427.

Government to restore the viability of this large part of Austrian industry by cancelling the heavy loans these undertakings had obtained from the Credit Anstalt;¹ and they continually demanded a reduction of the National Bank's rate of discount. It was in the main because of the socialist opposition that the National Bank did not raise its rate immediately after the failure of the Credit Anstalt. In the general panic precipitated by sterling devaluation, the socialists did, indeed, vote for a law which reduced the salaries of civil servants and railroad employees and imposed additional taxes on wages and salaries.² But even this shy attempt to pursue a policy similar to that adopted by the German Social Democrats aroused deep distrust amongst the party's membership and represented the last concession politically possible. Under these circumstances introduction of exchange control was the only alternative left, and the socialists readily gave their votes for the Constitutional Act of October 8, 1931, which created the legal basis for subsequent exchange control by cabinet decree. How the introduction of exchange control at an earlier point — for example, on May 8 when the Credit Anstalt failed, or on the occasion of the Danat Bank closing and the adoption of control by Germany on July 13 — would have altered the course of events belongs to the realm of pure guesswork. Since the primary purpose of introducing exchange control is to meet an emergency, the measure should have been adopted at one of these junctures, if ever. The great benefit would have been to preserve devisen reserves against a capital flight. This might have permitted an orderly devaluation in September along with the pound, and probably an immediate return to free payments. On the other hand, the device would have irritated Austria's creditors and possibly have delayed the agreements beyond even their tardy consummation as things were.

The actual occasion for introducing exchange control was England's departure from the gold standard and the further encircling of Austria by control countries. To Germany and Hungary were added Czechoslovakia on October 2, and Jugoslavia on October 7, accounting together for 42 per cent of Austria's exports and 52 per cent of her imports. Those countries which absorbed half her exports without paying in devisen were the very ones from

1. Cf. the "Economic Program of the Social Democratic Party": *Jahrbuch der österreichischen Arbeiterbewegung 1931* (Vienna, 1932), p. 21.

2. Budget Sanierungs-Gesetz, October 3, 1931, BGBl.294.

which Austria had to derive her raw materials. Furthermore, although the Credit Anstalt arrangement in June and the Bruins agreement in August prevented the withdrawal of 750,000,000 Schillings of short-term capital, there remained not only an annual debt service on all categories exceeding 450,000,000 Schillings, but also the possibility of an indefinite flight of domestic capital.

The League representative in Austria, Mr. Rost van Tonningen, appraising the adoption of exchange control, concluded that "No other step could be taken if the foreign exchange necessary . . . for raw materials and foodstuffs and for meeting the foreign liabilities of Austria was to be secured."¹ Dr. Viktor Kienböck, the governor of the National Bank subsequently responsible for the virtual abolition of exchange control, regarded its introduction as a means of coping with the loss of confidence attending the underwriting of the Credit Anstalt.² Probably the final resort to exchange control was unavoidable. Even so, the benefits derivable from control do not seem to have warranted adherence to the old gold parity. Had Austria followed the sterling bloc, and had its exchange control been really effective, the same ends would have been achieved as actually were realized after much fumbling and disturbance to trade. Certainly it was hopeless to attempt to preserve the old parity of the Schilling with the central bank nearly denuded of reserves and saddled with a mass of frozen assets, with gold prices everywhere declining, and with a National Bank management which permitted even an absolute increase of its credit after the official proclamation of exchange control.

THE ATTEMPT AT FULL MONOPOLY, OCTOBER, 1931 TO FEBRUARY, 1932

To anyone uninitiated into the hazards of exchange control, the First Devisen Act of October 9 would appear to insure an entirely adequate apparatus for the regulation of foreign payments. The National Bank was empowered to monopolize devisen dealings, to set the rate of exchange (publication of other quotations being forbidden), and to ration out devisen according to its own judgment without legal recourse on the part of private persons. Its consent

1. League of Nations: Quarterly Reports on the Financial Position of Austria (cited here under the author's name); Rost van Tonningen: First Quarterly Report (January 12, 1932), p. 10.

2. Mitteilungen des Verbandes österreichischer Banken und Bankiers, Bd. XVI, Nr. 12, p. 328.

was necessary not only to transfer abroad foreign and domestic means of payment of all categories, including deposit books and deposit receipts, but also for a bank or even for a private firm to credit a foreigner's account on its own books. Foreign means of payment and bank accounts had to be registered and offered for sale to the National Bank within eight days, if their total exceeded 1,000 Schillings, or if their total subsequently reached 500 Schillings. Anyone exporting goods to a value exceeding 200 Schillings was obliged to inform the Bank of the payment conditions, and upon its requirement to deposit a sum immediately as a guarantee that devisen proceeds of exports would be duly surrendered. An exception was made for sales in terms of Schillings against foreigners' Schilling accounts in Austria. Official approval of the Bank was required also for lending or borrowing abroad or for making payments of principal, interest, dividends, etc. abroad in foreign money. Finally, the National Bank was granted access to all business book-keeping and correspondence; and extreme penalties were enacted — a maximum 250,000 Schillings fine for the first offense and double this sum and imprisonment up to five years for the second offense. Any bank violating the statute might have its charter revoked.

No sooner was the legislation enacted than its defects began to appear: on the one hand an intolerable severity, and on the other the possibility of legal and illegal evasions. Three days after the act was promulgated, exporters and transit firms received authority to retain devisen necessary for purchasing raw materials and goods for re-export, though documented accounts of all such transactions had to be rendered the National Bank. Furthermore, foreign balances of insurance companies and banks for correspondent purposes were released by decree on October 15. Minor amendments were incorporated into a Second Devisen Act passed on October 16; and on November 18 there was promulgated a Third Act designed to strengthen the hand of the National Bank. The law failed signally, however, to stop evasion through purchase of foreign securities and through export against Schilling accounts of foreigners. The first law had made obligatory the sale to the Bank of foreign balances with credit institutions only; now the obligation was extended to foreign balances with any agency. A further clause prohibited the sale of domestic gold and silver currency at a price exceeding its nominal value.

The final legislation, the Fourth Devisen Act of January 4, 1932, explicitly limited exports against foreigners' Schilling deposits to accounts which originated before October 9 or were especially designated as "free" by the National Bank. The bare legal framework of exchange control as evolved in the four Devisen Acts was complemented by intricate administrative measures. Under the authority of these laws, the Austrian National Bank concluded clearing agreements with Hungary, Italy, Switzerland and Jugoslavia in the four months of attempted government monopoly prior to February, 1932. Simultaneously a system was being slowly and haltingly worked out for the rationing of devisen.¹

1. With the majority of exchange control countries, the Austrian authorities attempted to lighten the task of the central bank itself through two devices — a certificate system, and a preliminary examination of demands for devisen, both with the coöperation of the Chamber of Commerce. Immediately after the First Devisen Law the National Bank empowered the Chamber to grant to exporters of known standing certificates or attestations which permitted them to retain devisen proceeds for essential imported raw materials. The system seems to have been administered with too open a hand; on January 9, 1932, a census revealed 1,700 licensed firms, and the Bank was moved to a vigorous reduction of their numbers.

Although the imposition of exchange control had been impending for several weeks by the time of its actual adoption, the National Bank, caught without provision for its heavy duties, could attend to only a mere fraction of the applications for devisen. A first step in simplifying matters was the complete stoppage of rationing for certain import categories. The Bank also fostered a system of Advisory Councils, the first one being created for the shoe and leather industry on October 28; subsequently there were extensions to metals, wood, resin, and glass. Although the Councils were designed to represent and adjust the divergent interests of manufacture, trade, and commerce, they functioned poorly and had to be supplanted by another system.

As early as November 15 there were established in the Austrian National Bank twelve administrative divisions, corresponding to an equal number of important groups of industries, for the allocation of devisen. At first these divisions attempted to carry on the work in the Bank alone, but by the end of November the task of dividing out this allowance amongst individual applicants was left to complementary agencies called Vorprüfungsstellen. These preliminary examination boards were not fully established before the really active period of control terminated. The first one, organized on November 30, controlled bread-cereals and fodder; and during December and January similar units were created for industrial raw materials, fertilizers and textiles. One unit existed quite outside the Chamber of Commerce—the Vorprüfungsstelle in the Ministry of Agriculture. Its isolated position gave rise to recriminations, because in the later developments, when industry generally had to purchase devisen at the free market price, farming interests still received substantial rations of exchange at the official par. (Cf. Arbeiter Zeitung, June 21, 1932; Neues Wiener Tagblatt, November 28, 1932.) The impression prevails even with high authorities in the Bank and the Ministries that allocation proceeded in all quarters by high-handed and arbitrary methods.

THE EFFICACY OF CONTROL

Despite the heavy administrative apparatus, the attempt between October 9 and early February to make government control of exchange effective began unpropitiously and ended in fiasco because of widespread evasion, illegal and legal. Black market dealings in exchange flourished at all times in the Vienna cafés. Notwithstanding all prohibitions, a lively traffic in domestic currency sprang up in the Austrian border villages, and the National Bank withdrew the issue of 1,000 Schilling notes (cf. Fig. 2, p. 32) which had facilitated smuggling. Illegal, also, but widespread, was the practice of having foreign sellers bill the Austrian importer for a spuriously large amount, subsequently utilized as an excessive claim for devisen allocation. A favorite device, utilized extensively until as late as 1937, was to arrange to be billed for an import f.o.b. the foreign city of origin, whereas actually the importer had really to pay only f.o.b. Austrian border. Another ruse, even more extreme, was to induce foreign firms to send to Vienna their printed blanks for billing customers, or even to found in a foreign city a holding company to originate billings for goods which had never been imported. Firms within Austria enjoying the privilege of retaining export proceeds for the purpose of importing raw materials for re-export or for fabrication and re-export used receipted import-duty bills in conjunction with these spurious billings to secure devisen allocations which could then be applied to capital flight. During the period following the Third Devisen Act, when exports against payments in blocked Schillings were commonly thought to be legalized, exporters drew bills upon foreign purchasers for payment in blocked Schillings, secretly arranging for payment in devisen, which thus escaped control.

It is surprising, however, that illegal evasion should have been resorted to at all, in view of the many possibilities within the law. Most important amongst these were the so-called "export against Schillings" and the purchase of foreign securities. Both these modes of evasion were facilitated by the anomalous position of legal trustees under the Devisen Acts. On a slightly different level were the virtual evasions through purchasing goods on credit and through the clearing system.

The question of "exports against Schillings," *i.e.* whether Austrian producers should be permitted to sell for payment, not

in devisen, but merely in Schillings transferred from the otherwise frozen account of a foreigner in an Austrian bank, was hotly mooted in the press. Commercial organizations, on the one hand, maintained that the export industries could sell at competitive prices abroad only by accepting the (depreciated) blocked Schillings in payment, and they pointed to a further gain in this reduction of Austria's commercial indebtedness.¹ Officials of the Bank, on the other hand, maintained that the practice simply removed the control of imports from their hands and permitted a speculative market on blocked Schillings abroad, a market said to be narrow and subject to disastrous price declines from small decreases in demand. To the degree that blocked Schillings were accepted in payment of exports, the inflow of free devisen to the Bank was cut off. Furthermore, the officials and their supporters argued, when exchange control was imminent many Austrians had transferred their bank accounts to foreigners in order to be able to send funds out of the country later. To permit their utilization now for exports would be to complete the intended capital flight by means of real goods.

What the spirited journal discussions apparently missed was that this question involved not simply a particular practice but the whole matter of exchange control. The advantages to exporters cited by proponents of "export against Schillings" were real enough; but, after all, the "advantage" of reducing the commercial debt was precisely what exchange control was designed to prevent. President Kienböck pointed out that he later permitted this mode of payment merely as one way of withdrawing from the system. So long as exchange control was to be enforced, however, it is clear that the National Bank was right in opposing "exports against Schillings."²

1. Cf. the Sofortprogram of the Chamber of Commerce of Vienna in its Geschäftsbericht über den Monat März, 1932; also the demands of the two leading industrial and commercial organizations in Austria in the Neue Freie Presse, February 6, 1932.

2. Execution of this decision was seriously crippled by two defects in the Devisen Ordinances. For one thing, whereas the First Devisen Act (Sec. 5) authorized the National Bank to require of exporters a promise under oath to deliver export proceeds, if payment were taken in foreign devisen, a mere notification of the Bank by the exporter was sufficient, if payment were taken in foreigners' *free Schilling deposits*. But Section 5 of the Third Devisen Act (November 18) omitted mention even of the notification; this circumstance led to the popular impression that the bars had been let down to "export against Schillings," though the omission was really a "joker" perpetrated by interests

Another peculiarity in the ordinances was that only credit institutions were prohibited from transferring foreigners' accounts to others without the permission of the Bank. Until the Fourth Devisen Act expressly extended the prohibition to all agents, hundreds of attorneys drove a lucrative business with impunity by acting as trustees for foreigners and transferring accounts to third parties.

A second main channel of legal evasion was the purchase from abroad of internationally traded securities. Under the exchange prescriptions, the seller of a foreign security outside Austria could be paid in "inland" or blocked Schillings, and these sums could legally be invested in domestic securities, real estate, or by permission be applied to exports. To the degree that blocked Schillings were actually utilized by foreigners there could be no damage to the foreign value of the Schilling, aside from cases in which the foreign purchaser would otherwise have taken the Austrian goods or titles even for payment in free devisen. If, however, the proceeds of the sale were simply left in blocked accounts, their growing magnitude drove down quotations on these Schillings to lower and lower levels.

By the end of October, 1931, the Vienna quotations on Austrian League of Nations bonds and the International Federal Loan stood 20 per cent above the foreign quotations. A heated discussion arose in the press as to the desirability of following Czechoslovakia, Germany, and Hungary in requiring the sale of privately held securities to the government. The proposal was stigmatized as a squandering of the national wealth, especially, it was said, as Austrians held a much higher proportion of their wealth in foreign securities than the nationals of other exchange control countries. Actually the proposal was not incorporated into the Third Devisen Act as the public had feared, and even the Fourth Devisen Act prohibited merely the acceptance of foreign securities in payment for exports. The purchase of foreign securities continued to be a

opposed to the control system. A reduction of foreigners' Schilling deposits by 29,000,000 Schillings from November 30, until the Fourth Devisen Act definitely concluded the practice for the time being, explains fully one-seventh of the adverse balance on capital account during this interval. The figure of 29,000,000 Schillings actually includes the four months period from November 30, 1931, to March 31, 1932. Cf. Rost van Tonningen, *Fourth Quarterly Report* (November 30, 1932), p. 9. It is fair to assume, however, that most of it is accounted for in the limits given above.

mode of capital flight long after exchange control in other respects had been abolished, and not until April 5, 1933, did the Finance Ministry prohibit dealings in certain Swiss railway bonds which had become favorites. By this time the practice had become so deeply imbedded that the demand simply switched over to Swiss stocks, English consols, and various war loans.¹ The proposal to prohibit purchases of foreign securities, or to end the practice by compulsory sale to the government was a logical complement to the compulsory sale of devisen. The failure of the Austrian devisen acts to embrace this category of international credit instruments resulted in a direct channel of capital flight.

Besides these types of evasion in a strict sense, the existence of clearing agreements and the practice of selling to Austrians on credit operated to remove control over imports from the National Bank. It may, of course, be argued that even "superfluous" imports derived in either way do not make any *current* claim upon devisen. Nevertheless, since clearing balances have eventually to be met, and since foreign short-term credits come eventually to an end, such imports represent an eventual burden upon the country's exporting and paying capacity. The Austrian Institute for Business Cycle Research estimated sales on credit from October, 1931, to April, 1932, at 200,000,000 Schillings, or nearly half the total excess of imports over exports of 417,700,000 Schillings in the same period.

The net result of the late introduction of exchange control and the lax administration and evasion of the law was its almost complete failure to secure the devisen yielded by exports. When toward the middle of November, 1931, the National Bank published returns for the first month of control, it transpired that devisen receipts had amounted to 86,000,000 Schillings, of which 65,000,000 Schillings came from stocks of devisen already in private hands on October 9 and surrendered in conformity with the requirement. Only 20,000,000 Schillings had been produced by the flow of exports, although their total had aggregated more than 100,000,000 Schillings in that month. The discrepancy of 80,000,000 Schillings was partly accounted for by legal exemptions for raw material imports under the certificate system. Furthermore, the owners of certificates often obligingly handed over their receipted customs bills, as evidence of actual importation of raw materials,

1. Die Börse, June 29, 1933.

to persons desirous of documenting a claim to devisen allocation, perhaps only for purposes of exporting capital. Inasmuch as imports of raw materials amounted to only about 30,000,000 Schillings, and not even all of this was covered by certificates, it is clear that a minimum of 50 per cent with the probability of something approaching 65 per cent of devisen receipts legally or illegally evaded control.¹ The result was that even by the end of the first week in November allocations of exchange did not exceed 3-4 per cent of demand.²

CLEARING AGREEMENTS IN THE PERIOD OF ATTEMPTED MONOPOLY

The history of Austrian clearing falls into two phases, the first extending from late December, 1931, to the spring of 1932, the second extending to March, 1938. During the former phase, while Austria imposed sharp restrictions on all foreign payments, the introduction of clearings proceeded on foreign initiative; whereas in the latter period, while Austria relaxed exchange control, she was forced to rely upon clearings to secure payment for exports to control countries. Another very significant difference between the two episodes of clearing was the use of gold par in the former and a rate approaching free market quotations on the Schilling in the second. The Austrian attitude itself underwent a complete reversal. The earlier president of the National Bank, Dr. Reisch, had enthusiastically supported clearings at a conference sponsored by the Bank for International Settlements in Prague on November 2 and 3, 1931; by the end of December, he announced with evident satisfaction, that ten agreements were

1. *Der österreichische Volkswirt*, November 12, 1931, pp. 181-182.

2. On January 1, 1932, the Bank reported as follows upon the period October 9 to December 31, 1931: devisen received, 185,300,000 Schillings; devisen paid out — for the state debt and government needs, 53,600,000 Schillings; for the service of other loans, 13,900,000 Schillings; for commercial purposes, 109,300,000 Schillings; a total of 176,800,000 Schillings. (Cf. Rost van Tonningen, *Second Quarterly Report*, May 2, 1932, p. 10.) The total receipts of 185,000,000 Schillings represent not only the entire devisen yield from 280,000,000 Schillings exports, but also from the compulsory sale of existing stocks at the outset! By the end of January, 1932, allocations amounted to 1-1½ per cent of demand. The fact that the first four weeks of control produced 85,000,000 Schillings in devisen receipts, whereas the next eight weeks yielded only 99,000,000 Schillings, is explained by the absorption of stocks in the earlier period and by the growth of "export against Schillings" in the second

completed or in process of formulation.¹ But his successor, Dr. Kienböck, regarded clearings as a defensive instrument only, and proceeded to liquidate the agreements with free exchange countries as fast as Austria herself could reduce the obstacles to international payments.²

During the first period the National Bank put into operation agreements with Switzerland on December 11, Hungary on December 14, 1931, Italy on January 10, and Yugoslavia on January 20, 1932. The French clearing initiated on May 1 has also to be included with the earlier agreements by virtue of the par Schilling rate. In general these clearings followed the pattern of the Swiss agreement, which was the first of its kind anywhere; but they did not include its provision that one-third of the Austrian proceeds had to be applied to the service of non-commercial debts. The Hungarian clearing was peculiar in that, wheat exports to Austria being paid for in free devisen and the pengö and Schilling being about equally depreciated in terms of gold, payments approximately balanced off throughout this period and indeed, with occasional inequalities, through June, 1935. This clearing must therefore be excepted from the following generalizations.

No sooner had these early agreements been put into force than their perverse effects began to appear: the overvaluation of the Schilling sharply reduced exports and stimulated imports, and the National Bank automatically lost control of imports. As Dr. Robert Breza has pointed out,³ instead of essential raw materials for domestic consumption or fabrication and re-export, Italian fruits and early vegetables and Swiss clocks came into the country. Since clearing stopped the flow of devisen to exporters, they lost the benefits of certificates permitting retention of devisen for imported raw materials; they had therefore to depend on the meager Bank allocations. Austria was caught between the upper and nether millstones: exports to Switzerland and Italy, which had formerly brought in devisen on balance, now resulted only in franc and lira clearing balances, whereas with Hungary it was necessary to pay for the indispensable wheat imports with devisen. Furthermore, Austrian exporters had every reason to attempt to obtain payment *outside* the clearing with free currency countries

1. Die Börse, December 24, 1931.

2. Kienböck, *op. cit.*, p. 385.

3. Neues Wiener Tagblatt, December 25, 1931.

such as Switzerland and France; while Austrian importers from weak currency countries profited by *utilizing* the clearing. In consequence the clearing balance took an even more unfavorable turn than the balance of trade.

In January and February, 1932, exports dwindled to an unprecedented low level of 61,000,000 Schillings and 66,000,000 Schillings; during the first quarter of the year gold and devisen reserves fell from 318,000,000 to 215,000,000 Schillings. Unliquidated clearing balances with partner countries mounted meanwhile to such appalling sums with the Austrian National Bank that the whole system had gradually to be recast. On March 10, Austria denounced both the Swiss and Italian agreements, upon which balances of 9,000,000 and 19,000,000 Schillings had accumulated; and on March 22 Yugoslavia denounced the existing agreement, though a renewal carried on the old parity clearing until October 5, with an accumulation of 10,000,000 Schillings against Austria. The French clearing represented a distinct anomaly in being introduced on May 1 with the parity rate; it persisted, however, until June 17, 1933, with an unfavorable balance to Austria of 10,000,000 Schillings. At the end of 1932 the total of Austrian short-term commercial debts had risen by 100,000,000 Schillings, largely through adverse clearing balances.¹

Except in one case the liquidation of these balances proceeded painfully and with numerous bickerings as to rapidity of payment and rates of exchange applicable to old debts. The introduction of a 12 per cent premium on Schillings in Yugoslavia between October 5, 1932, when this country denounced the clearing, and October 20, when the agreement actually ceased, enabled the Austrian National Bank to pay its entire debt within the fortnight. In all cases the repayment had to be effected by a retroactive levy upon Austrian importers who had utilized the clearing during the period when the indebtedness accumulated. Not until May, 1933, was the Swiss balance liquidated; and the process continued until September, 1933, and February, 1934, respectively, for the Italian and French balances. Liquidated clearing agreements were not renewed during the remainder of Austria's independent existence; and after the spring of 1932 the clearings — restricted to countries with exchange control — proceeded, with the exception of Hungary, until late in 1935, on the free market value of the Schilling.

1. Oscar Morgenstern in the *London Times*, July 20, 1937, p. 18.

HOW AUSTRIA ESCAPED FROM EXCHANGE CONTROL:
FEBRUARY, 1932—MAY, 1935

Austria's withdrawal from all but rudimentary exchange control constitutes a unique chapter in monetary history. The eventual official recognition of Schilling depreciation, which had always been contemplated as a calamity, scarcely aroused a word of comment even in financial circles, and the general public remained happily ignorant of the fact. How this could be is explained by two circumstances — the general decline of world gold prices, which permitted virtual devaluation without an absolute rise in domestic prices; and, secondly, the gradual and adroit adoption of the new currency basis by the National Bank under Dr. Viktor Kienböck. At his succession to the presidency of the Bank on February 5, 1932, the allocation of *devisen* was approaching zero as a limit, and the trade balance had become extremely passive. The first subtle approach to liberating payments began with the Bank's permitting Austrian exporters of wood products, including lumber, paper, pasteboard, and cellulose, to sell their *devisen* at rates privately agreed upon to importers of mineral oils. Exports of the categories mentioned languished because pound-sterling devaluation had cut off important markets; on the other hand, imports of mineral oil could easily bear the higher rate on *devisen* because there was no competing domestic production. Another commodity showing substantial importers' profits was oleomargarine, and this the National Bank paired off with butter, which like wood products could legitimately be assumed to embody a weak "comparative advantage."

The coupling of specific exports and imports came by degrees to be extended further — to hats and leather exports against imports of grain and fodder, pharmaceutical products, and textile raw materials. In Austria, however, contrary to the later practice in Hungary, exchange rates in these cases were never determined by the National Bank, but solely by pairs of contracting parties. Consequently the quasi-free market in Vienna was always designated as "private clearing." It should not be imagined that this market, particularly in its beginning stages, gave free rein to competitive forces. For many months the express permission of the National Bank was necessary for each single transaction, with the result that small traders found themselves relatively handi-

capped. In all cases the commodity prices had to include, besides fairly high commission fees, a premium for the risk of not securing official permission. Equally important was the "raw-material quota," a requirement that even when admitted to private clearing, the exporter should surrender to the National Bank at its official price a certain percentage of his devisen, at first really, later on only ostensibly, to permit the Bank to continue certain allocations of devisen at par for "indispensable" imports. The quota was levied differentially amongst various categories of exports according to country of destination and the Bank's estimate of profit margins. Until late in 1932 the fiction was maintained that an export had to be "additional" to be eligible for admission to private clearing; and, finally, only transactions involving visible exports and imports could be admitted at all. As might be expected, the isolated pairing of exporters and importers, the differential character of the "raw-material quota," and the delays and restrictions involved in official permission resulted at first in a welter of quotations for one and the same foreign money.

The advent of private clearing also opened channels of evasion of exchange control generally. Raw materials could be imported for certain industrial purposes duty free. With the custom papers in hand, an importer could secure permission to purchase foreign devisen on the private clearing to satisfy his foreign creditor. Thereafter nothing prevented his also re-exporting the raw material and securing foreign devisen a second time, which could then be used to export capital.

Once begun, the relief to exporters and importers through the private clearing sufficed to insure its increase and elaboration. The Austrian National Bank on July 17, 1932, designated the Wiener Giro- und Kassenverein, a bankers' organization which had long existed as a clearing center for bank balances and a depository for securities, as the official agency for private clearing. From this point forward, as the statistics show, the turnover of private clearings grew steadily until, toward the middle of 1933, it reached a level set by the visible trade of Austria minus payments

TURNOVER ON THE PRIVATE CLEARING
(Million Schillings)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1932								56.8	90.0	102.3	130.7	119.3
1933	113.6	119.6	164.8	159.1	204.5	181.8	187.5	164.8	187.5	227.3	244.3	204.5

escaping control or passing over the remaining clearing and compensation agreements. Circumstances combining to produce this evolution were four: the termination of clearing agreements belonging to the "first period"; the attenuation of devisen rations by the Bank and its designation of further items of payments to be covered in private clearing; the reduction, eventually to zero, of the raw material quota; and, finally, the progressive liquidation of frozen accounts, so that virtually all payments passed over the free market.

The accompanying table reveals not only the striking fact that from October, 1931, to December, 1932, nearly 70 per cent of all imports were either purchased on credit or withdrawn from central bank control through evading the official channels of payment, but also that by October, 1932, the allocation of devisen had reached negligible proportions. During the course of that month allocations for agricultural imports such as fodder, seed, and wheat, beside raw material for textile manufacture, were stopped. With the decree that foreign exchange for purposes of travel abroad after November 21, 1932, should be derived from the

AUSTRIAN IMPORTS AND AUTHORIZED IMPORT PAYMENTS*

Period	Allocations Granted by National Bank for Imports and Sundry Commercial Purposes	Settled by			Imports to Austria	
		Inter-State Clearing	Private Clearing	Schilling Compensation		
(in millions of Schillings)						
1931:						
October-December	108.4	0.4	—	—	332.7	
		(December only)				
1932:						
January-March	79.4	38.8	} Estimates	50 {	394.6	
April-June	44.7	42.4				364.-
July-September	23.3	39.1			18 (From 12 July 17)'	312.1
October	3.4	20.1	9	11	107.3	
November	0.8	18.5	11	10	108.5	
December	0.5	14.5	14	12	117.-	
Total	260.5	173.8	52	45	1,736.2	

* Payments abroad converted at parity rates, including payments effected by the National Bank in foreign exchange under the Yugoslav clearing, "Old Debts" account, and under the Hungarian clearing, "Wheat" account; excluding payments under the Bulgarian and Greek tobacco clearings, and for the debt service of the Swiss clearing. This table is reproduced from Rost van Tonningen, Fifth Quarterly Report (February 24, 1933), p. 8.

private clearing market, allocations for all private purposes ceased. Meanwhile, because of the violent protests of the export interests, the "raw-material quota," which had stood as high as 40 per cent and even normally had varied from 20 to 15 per cent, was reduced to 12 per cent. On December 6 the final step in this direction was taken with the complete abolition of the quota.

Austrian *importers* still had to pay extra amounts over the clearing rates in order to liquidate the adverse balances with France, Italy, Rumania and Switzerland. Not until April 6, 1933, did the National Bank formally suspend its right to pass on transactions to be admitted to private clearings; the same decree also terminated the formal obligation of Austrian citizens to surrender *devisen* to the Bank at its official price. This eliminated an anomaly which had persisted from the end of the "raw-material quota," namely, that whereas ordinary exporters received the free market value for their *devisen*, the low official price was still applied to *devisen* received by authors, patent possessors, annuitants, and dependents.

Intimately associated with the disappearance of *devisen* rationing, compulsory sale of *devisen*, and the "raw-material quota," were two other processes contributing to the slow evanescence of exchange control in Austria — the liberation of certain frozen accounts, and the cautious and piecemeal official recognition of devaluation. The new Bank regime, in recognizing that future stability of the Schilling could be jeopardized by the presence of Austrian *Sperrkonti* on foreign markets, immediately took steps toward their liquidation. On March 9 the banks were authorized to honor drafts against frozen accounts up to 1,000 Schillings monthly for each owner for travel in Austria. On April 22 all blocked accounts — estimated at 10,000,000–12,000,000 Schillings — accumulated between October 12 and December 3, 1931, were converted into "free" accounts, applicable to a variety of domestic uses and to exports. The measures of May 2, 18, and 25, June 22, 1932, and January 21, 1933, liberalized the use of blocked accounts for travel in Austria. Blanket permission to receive payment for export in Schillings, regardless of date of contract and currency originally stipulated, was extended on October 20, 1932, provided that (1) 12 per cent of the bill was paid in foreign *devisen*; (2) the payment was for commercial purposes, and (3) the export proceeded to the country where

the account was owned. The export stimulus of this measure was somewhat dampened by the 12 per cent "raw-material quota"; but six weeks later, as we have seen, it too was removed. The monthly reductions of foreigners' Schilling accounts in consequence of these measures can be traced in the following figures:

CHANGES IN FOREIGNERS' SCHILLING ACCOUNTS*
(In Millions of Schillings)

		(Estimates)	
From	To	Free Inland Schilling Accounts	Blocked Schilling Accounts
Nov. 30, 1931	Mar. 31, 1932.....	-29.0	+ 2.1
Mar. 31, 1932	June 30, 1932.....	-11.3	-14.0
June 30, 1932	July 31, 1932.....	- 4.0	- 1.0
July 31, 1932	Aug. 31, 1932.....	- 2.5	- 4.3
Aug. 31, 1932	Sept. 30, 1932.....	- 1.2	+ 0.8
		-48.0	-16.4

* Rost van Tonningen, Fourth Quarterly Report (November 30, 1932), p. 9. Cumulative figures have not been made public, and the monthly statistics given do not include accounts with other agencies than banks.

The manifold and practically free uses of blocked Schillings are reflected in the fact that by June, 1934, their quotation on the Zurich market stood at 55 for 100 Swiss francs, while ordinary Schilling exchange stood at 56-57.

By the end of 1932 the most rigorous features of exchange control had vanished: ordinary trade proceeded entirely over the private clearing, the early gold-parity clearings were being liquidated, compulsory sale and the rationing of devisen were both in a state of desuetude, and the frozen accounts were being rapidly reduced. Why, then, was exchange control not completely abolished? Beside several reasons to be examined later, two appeared with particular cogency. To permit a small handful of directly concerned traders to deal in paper Schillings at a discount is, in the first place, a vastly different matter from playing with the fire of panic psychology by making a general public acknowledgment of depreciation. Secondly, a large amount of domestic debts in terms of foreign currencies, the so-called *Valuta-schulden*, presented an almost insoluble problem.

The Austrian Supreme Court on March 23 and April 26, 1933, took the first legal step, in contrast with the foregoing purely administrative measures, in recognizing devaluation by upholding the validity of gold contracts. Supplementary cabinet decrees at

the same time proclaimed that contracts for effective gold payment would be revalued according to the quotation of Schillings on the private clearing market, but leaving the precise *date* of the relevant quotation for future settlement. The actual valorizations subsequently enforced through taking the quotation "as of" different dates varied widely amongst the several types of obligations. Owners of bank deposits, for example (the holders of *Kassenscheine*), were allowed an effective premium of 10 per cent by decree of November 14. But owners of agricultural mortgages, though their paper was revalorized by 25 per cent, or almost to the full 28 per cent premium which had eventually established itself on gold currencies, actually received nothing because the interest was reduced reciprocally, so that mortgages simply continued at their old prices. Repayments on dollar and pound foreign loans into the special account for this purpose with the Bank had to be made at the full private clearing rate after August 28, 1933, and this was extended to all foreign loans after January 1, 1934. Another stage in the gradual recognition of devaluation was reached on April 30, 1934, when the Austrian National Bank revalued its gold reserves at 6,000 Schillings to the kilogram, in place of the old rate of 4,715 Schillings (cf. Fig. 1, p. 31), bringing about a correspondence with the 128-100 ratio of paper to gold Schillings, or a devaluation to 78.2 per cent.¹ Not until December 21, 1934, were possessors of bank deposit-books and "current accounts" allowed the full private clearing rate on their claims, totalling 10,000,000 Schillings. The obligations of industry to the banks were not settled, nor was the last step in legal devaluation taken, the redefinition of the Schilling in gold.

LIQUIDATION OF DEBTS AND THE SITUATION PRECEDING INCORPORATION INTO GERMANY

To appreciate the desperateness of the Austrian situation in 1932, when effective exchange control had already been abandoned, but before the "automatic correctives" through prices and exchange rates could operate, we must return to the foreign debts. During 1931, 1,000,000,000 Schillings had been withdrawn from the country, a sum equal to the entire amount of short-term foreign

1. The "profit" of 20,700,000 Schillings financed the reorganization and fusion of the Credit Anstalt, the Wiener Bankverein, and the Niederoesterreichische Escomptegesellschaft in the Spring of 1934.

obligations of Austrian banks in May, 1931! Over the year, also, gold and devisen reserves had declined from 930,000,000 to 318,000,000 Schillings. The Bruins Agreement, covering 240,000,000 Schillings of short-term bank debts abroad in August, 1931, was renewed for the balance of 114,000,000 Schillings on January 20, 1932, for six months with a complete standstill on principal and interest. Even so, with a remaining debt service of 23,000,000 Schillings monthly, devisen reserves sank by 20,000,000 Schillings a month during February and March, and before the Transfer Moratorium in July, 1932, by a total of 114,000,000 Schillings, or by more than a third of the 318,000,000 Schillings in reserves which had survived to the beginning of 1932.

I have already remarked upon the appeal for a loan directed by Austria on August 9, 1931, to the League. After consultation with the Financial Committee the government enacted a budget reform on October 3, and on the 15th secured a three months extension of advances made by the Bank for International Settlements and the Bank of England during the Credit Anstalt crisis. The Financial Committee was unable to stir the League to action upon a loan, and on May 9, 1932, Austria sent a second petition. Heavy maturities impending at the end of the month, together with the failure of Austrian bankers and British and American creditors to agree on the standstill arrangement expiring on July 20, forced the government to a provisional moratorium on June 23, 1932.

On July 15, the very date of the Geneva Protocol which finally indicated the willingness of the Powers to extend a loan, the formal Transfer Moratorium had to be proclaimed. Excluding 332,000,000 Schillings in trade debts, all foreign obligations fell under the decree — 3,200,000,000 Schillings in principal with an annual service of 247,000,000 Schillings.¹ Henceforth all payments owing abroad were made into a Foreign Debt Fund with the National Bank; out-payments to creditors were permitted on two conditions: (a) that the creditor agree to employ the proceeds for Austrian real estate and securities, for exports, or for services and travel within the country; or (b) that the Bank give express permission for payment in devisen. At first in-payments proceeded

1. Rost van Tonningen, Fourth Quarterly Report (November 30, 1932), pp. 14-15. The figure does not include the Schilling accounts of foreigners or trade debts in Schillings.

only at the official exchange rate, but later the private clearing rate was applied. The total accumulation in the Foreign Debt Fund amounted to 55,000,000 Schillings at the end of September, 1932, and 88,000,000 Schillings at the close of the year. Though limited transfer was resumed on January 1, 1933, the total rose to 108,000,000 Schillings at the half-year. Several factors precipitated a fall to 17,000,000 Schillings three months later: the Bank allowed freer use of the blocked Schilling accounts; many foreign creditors accepted payment in Schilling balances and utilized them in the country; and private arrangements for postponement or settlement increased in number. From September, 1933, to May, 1935, the Fund dwindled from 17,000,000 to 8,000,000 Schillings, and at this point the Bank was able to authorize complete transfer on all funded foreign liabilities.

When allowance is made for the underwriting of the Credit Anstalt, Austria experienced a relatively small increase in public indebtedness, a fact which contributed substantially to the strength of the Schilling.¹ Foreign indebtedness included under the original Standstill Agreement amounting to 295,000,000 Schillings (in devalued Schillings) was reduced by 230,000,000 Schillings at the end of 1933, and on December 10, 1934, was completely extinguished. It was not until two years after Austria's first plea to the League and a year after the Geneva Protocol that the Austrian Government Guaranteed Loan (1933-1953) was finally floated, in August, 1933. The yield of 237,400,000 Schillings enabled the Bank to repay the 100,000,000 Schillings credit from the Bank of England and 90,000,000 Schillings from the Bank for International Settlements, prolonged at six-months intervals since July, 1931; and to liquidate 50,000,000 Schillings arrears on the 1923 League Loan and the Federal Loan of 1930. Dollar devaluation accounted for 568,000,000 Schillings of a total foreign debt reduction of 1,059,700,000 Schillings between 1932 and 1933, and the devaluation of the franc and other currencies in 1936-1937 contributed 42,000,000 Schillings. An important event of 1934

1. The absorption of Credit Anstalt liabilities from the Austrian National Bank accounted for an increase of the public debt from 2,077,400,000 Schillings at the end of 1931 to 2,613,000,000 Schillings at the end of 1932. By the end of 1933, the figure had risen slightly to 2,711,700,000 Schillings, or to 3,471,100,000 Schillings when account is taken of devaluation. In the closing months of Austria's independent existence, the public debt stood at 3,900,000,000 Schillings.

was the conversion of the 1932 League of Nations Loan from interest rates of 6, 6½, and 7 per cent to 4½ per cent, completed by December 1, with a consequent reduction in Austrian foreign liabilities of 80,000,000 Schillings. In consequence of these favorable developments, foreign indebtedness was reduced over the entire period by 56 per cent.

AUSTRIAN FOREIGN DEBTS IN FOREIGN CURRENCIES*
(Year-end figures in million Schillings)

	1932	1933	1934	1935	1936	1937
Bonded indebtedness	2,574.6	2,542.3	2,002.2	1,928.7	1,707.1	1,592.7
Long and middle-term debts	389.0	360.1	343.2	353.5	256.0	241.7
Short-term debts	1,287.4	378.9	244.6	147.7	100.1	46.9
Total	4,251.0	3,191.3	2,590.0	2,429.9	2,063.2	1,881.3

* Data from "The Austrian National Bank in Liquidation," as given by the *Berichte of the newly constituted Wiener Institut für Wirtschaft und Konjunkturforschung*, Jhrg. 12, Nr. 9-10, p. 230.

The complete consolidation of foreign debt and substantial improvement in all capital accounts gave to Austria an enviable position amongst European debtor countries. During 1936 and 1937 Austria was unique in being able to secure again short-term commercial credits on the London market. It has been hinted in responsible quarters that a substantial amount of the repayments just recorded proceeded by evasion of exchange control laws with the tacit consent of the National Bank, which could be pardoned for having had this regard for Austria's credit standing.

Undoubtedly the Schilling was put to severe test by the gold-bloc and attending devaluations in late September and October, 1936. Some foreign observers thought that Austria was the most seriously threatened of all other countries;¹ and within the country certain vested interests, industrial exporters, for example, warmly espoused devaluation. Over 27 per cent of Austrian exports and 19 per cent of imports were involved with Italy, Switzerland and Czechoslovakia, when these countries devalued in 1936; and other devaluations since 1931 had considerably exceeded the 22 per cent Schilling depreciation. On October 8, however, the government announced that the existing Schilling would be maintained: Austria, according to the Finance Minister and the Central Bank President, could not risk the social consequences of a price revolution nor could she meet the first shock of devaluation

1. *Währung und Wirtschaft*, Jhrg. 5, Heft 11, p. 177.

with her available capital reserves. Embracing only a small part of demand on international commodity markets, she could not possibly reduce the level of gold prices by devaluation, but the Schilling prices of imported raw materials and foodstuffs would rise instead. It would be impossible to compensate for this tendency by lowering import duties and thus abruptly exposing domestic producers to foreign competition.¹

That the Schilling successfully weathered the foreign devaluations of 1936 is attributable not only to the moderate growth of the Austrian public debt and the reduction, consolidation and servicing of foreign debts, but also to three factors of immediate relevancy. So far as concerns imponderable psychological matters, the Schilling market was undoubtedly affected favorably by the spontaneous termination of League oversight of her finances on November 1, *after* the announcement that the Schilling would not be devalued; and furthermore the very definiteness of this announcement, coupled with the reputation for firmness on the part of the central bank president, reassured the public. Thirdly, so far as concerned the quantitative determinants of trade, Austria secured advantages in both the regulated and free sectors. In the former, several trade agreements were modified to permit larger exports; and in the price-determined sector, for the first time since 1929, foreign determined prices, as may be seen in Fig. 4, overhauled the advance of domestically determined prices. Whereas foreign prices advanced sharply under the influence of recovery and rearmament, Austrian prices were restrained by conservative central bank policy and by the isolation common to countries involved in clearings, quotas, and import prohibitions. After March, 1937, domestic prices again moved along a substantially higher level than prices determined abroad; but the devaluation crisis was then water under the bridge and Austria could safely oppose the general scramble for liquidity.

Definite evidence of the success of the currency policy came with the flotation on February 6, 1937, of the Domestic Investment Loan of 180,000,000 Schillings. Without gold or gold-value clauses characteristic of previous loans, and with an effective yield substantially below even the depression-period loans of 1933 and 1935, ninety per cent of this issue was absorbed by the general

1. League of Nations, *Austria: Public Finances, First Report* (Geneva, 1936), pp. 10-12.

public with extensive participation by small savers.¹ The loan indicated the solid position of the Schilling, but it also contributed to stability through consolidating short-term Treasury debts, improving government industrial holdings, and indirectly increas-

AUSTRIAN PRICES SINCE 1929*
(LOG. SCALE; 1929=100)

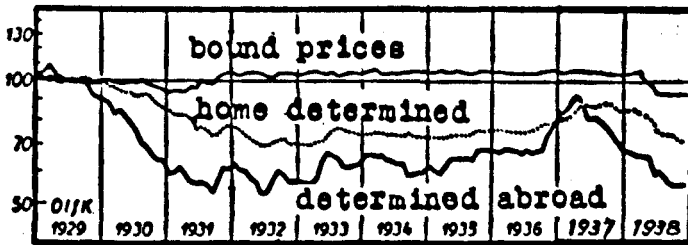


FIG. 4

* Ö.I.f.K., Jhrg. 11, Nr. 4, p. 79. The figure has been extended through February, 1938. For statistics, cf. pp. 78-80.

ing the liquidity of the National Bank. Gold and devisen reserves of the Bank equalled 34.2 per cent of its notes and deposits in February, 1938, or almost exactly double the reserve ratio at its low point in December, 1932.

Nevertheless, the exchange control laws were never revoked, and some of their provisions were still enforced, such as the blanket prohibition, except to owners of exporters' certificates, of remitting abroad without permission of the National Bank. This included, beside payments on old obligations, remittances for travelling, for relatives abroad, and for imports in the transit trade. What had been achieved was, in fact, the "simple exchange control to prevent capital flight" advocated as early as December, 1931, in mercantile circles.²

A peculiar irony forced Austria, despite her own withdrawal from exchange control, to extend her clearing system because of developments in neighboring countries. On August 10, 1934, Austria entered for the first time into an agreement with Germany to cover the whole field of trade by clearing, the chief German export being Ruhr coal against Austrian agricultural products. After two years of fairly satisfactory functioning, this clearing

1. League of Nations, Austria: Public Finances, Second Report (Geneva, 1937), p. 4.

2. E.g. by the eminent Vienna merchant Julius Meinl, an ardent liberal. Cf. Neues Wiener Tagblatt, December 31, 1931.

was amended on July 11, 1936, to allow Austrians to purchase travel marks at the usual discount and to provide for an increased exportation of Austrian dairy products. On January 27, 1937, another agreement sought to expand the mutual trade of the two countries by 40,000,000 Schillings through switching some of Austria's coal importations from Poland to Germany, which would then absorb an increased quantity of Austrian cattle, horses, dairy products, lumber, iron and steel, and such invisibles as travel and copyrights. Supplanting unilateral action on quotas, prohibitions, etc., a system of mutual agreement through permanent trade committees was inaugurated. With the introduction of exchange control in Poland, Austria put into effect the clearing arrangement of June 12, 1936, which was subsequently modified to permit increased "compensation" dealings.

Through the last years of independent Austria, clearing and compensation persisted as defensive weapons in international payments involving nine countries with strict controls themselves.¹

1. With three countries, Bulgaria, Greece, and Turkey, Austria maintained clearings chiefly for tobacco purchases; and with Rumania, Jugoslavia, and Czechoslovakia, trade proceeded largely by means of compensation. The Hungarian clearing, the only one to have been carried over from the earlier clearings on a gold-par basis because it seemed to work reasonably well, had to be revised. Until mid-1934 no particularly large clearing balances were accumulated either way, since Hungarian wheat exports were paid for chiefly in devisen. In May of that year, however, the relation of Hungarian to Austrian wholesale prices suddenly increased from 64 per cent to 72 per cent, and thenceforward with occasional small reversals it advanced to 100 in December, 1935. The tendency for Austrian exports to increase while Hungarian exports decreased was given a new impulse, and the adverse balance of Hungary in the clearings mounted to 15,000,000 Schillings and 16,000,000 Schillings in October and November, 1935. On November 27 the situation was at least partly remedied by an alteration of the clearing basis to provide a 10 per cent premium on Hungarian exports and a 13 per cent premium on Austrian exports to Hungary, approximating the purchasing power parity of 100 Schillings equals 90 Pengö revealed by Fig. 12, page 104, in the relative movements of wholesale prices and cost of living in the two countries. Austrian exporters, of course, opposed the measure strenuously. The year 1936 saw a decline of 1.7 per cent in Austrian export values to Hungary, despite an 11 per cent increase in export quantities, whereas import values increased by 2.8 per cent and import quantities by 7.9 per cent; the "balance" so essential to bilateral clearing was nearer realization, though substantial credits remained for Austria.

The clearing with Italy functioned smoothly until the Abyssinian War, which advanced prices and reduced Austrian purchases of citrous fruits, rice, and textiles; on December 17, 1935, the new clearing provided for the liquidation of Italian debts out of her exports to Austria. After the Italian devaluation another agreement, signed on November 7, 1936, compensated Austrian exporters for the new relation. During this year, also, the Rumanian clearing under-

Austria was never able, however, to escape the chronic malady of uncleared balances. During the period of gold-par clearing, as we have seen, the balance was continually adverse to Austria, amounting to 100,000,000 Schillings at its maximum. After the recognition of *de facto* devaluation, balances accumulated in the other direction through the adherence to artificial exchange rates by clearing partners. The difficulty was aggravated by increased purchase of Austrian raw materials by Danubian states in their efforts to find usable equivalents for exports under the clearings. Raw material prices were so severely advanced in Austria as to force her to a series of export-prohibitions in October, 1934, including cotton, non-ferrous metals, pelts and rags, and later such agricultural raw materials as hay and straw.¹ But, as we have seen from specific cases of clearing, the defensive measures did not avail. During 1936 and 1937 the existence of Austrian credit balances represented an equal abstraction of capital from her own economy; the National Bank could not, because of the risks, make advances upon all of these exporters' claims, and consequently there was bitter complaint against the handicap to recovery arising from these forced foreign loans.²

AUSTRIAN EXPERIENCE WITH EXCHANGE CONTROL TO MARCH 1938 IN RETROSPECT

The dramatic quality of the Austrian experience arises rather from the intricate but finally successful process of abandoning exchange control, except for an irreducible minimum, rather than from striking evidence of its economic accompaniments. The tardy introduction of control, the multifarious evasions, and the relatively short duration in anything approaching complete monopoly prevented any very marked effects upon domestic production. Complaints, for example, of a shortage of industrial raw materials for re-export in fabricated form were loud in the last months of 1931 went a revision (on May 15) which abolished the prevailing undervaluation of the *lei* relatively to the Schilling by leaving exchange rates to the free agreement of trading parties. A one-sided balance of 14,000,000 Schillings in Austria's favor in the Czech clearing prompted a new arrangement on April 2 and May 15, 1936; by mid-summer, the balance had nevertheless risen to 23,750,000 Schillings, and the Czech devaluation in the autumn did not prevent the persistence of uncleared balances.

1. Ö.I.f.K., Jhrg. 10, Nr. 11, p. 280.

2. Ibid., Jhrg. 11, Nr. 12, p. 258, and Jhrg. 12, Nr. 2, p. 24.

and early 1932. Bankruptcies during the first three months of 1932 exceeded a weekly average of 100, the apex of a curve beginning in 1929 and extending to the present. The Berndorfer Metallfabrik, doubtless without full justification, ascribed its failure in June, 1932, directly to exchange control. Exchange control contributed to the embarrassment of many firms, but the shrinkage of domestic production is too closely allied to the general course of depression to admit specific measurement of this particular influence. The general impression prevails that agriculture

AGRICULTURAL PRICES*
(LOG. SCALE; 1923-31 = 100)

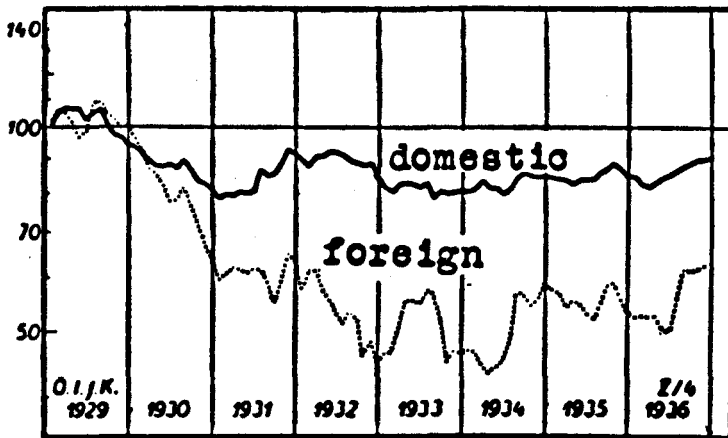


FIG. 5

INDUSTRIAL PRICES*
(LOG. SCALE; 1923-31 = 100)

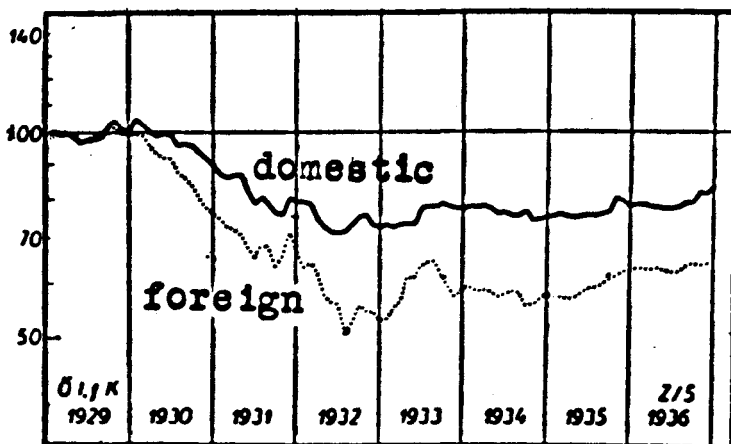


FIG. 6

* Ö.I.f.K., Jhrg. 11, Nr. 1, p. 5, for both figures. For statistics, cf. pp. 81-83.

fared better than industry in the National Bank's allocation of devisen, but no records exist by which this can be definitely proven. Furthermore, the artificially high Schilling rate bore more heavily upon industrial production, since Austria exported preponderately in this category, and it afforded corresponding protection to agriculture. Figs. 5 and 6 reveal a wholly artificial recovery of domestic agricultural prices precisely through the period of most extensive exchange control (latter part of 1931 through 1932), when industrial prices both at home and abroad continued to sag and foreign agricultural products continued their downward course in price.

INDEX OF PRODUCTION, EXPORTS AND IMPORTS BY VALUE,
EXCESS OF IMPORTS (INDEX BASE: 1929=100)*

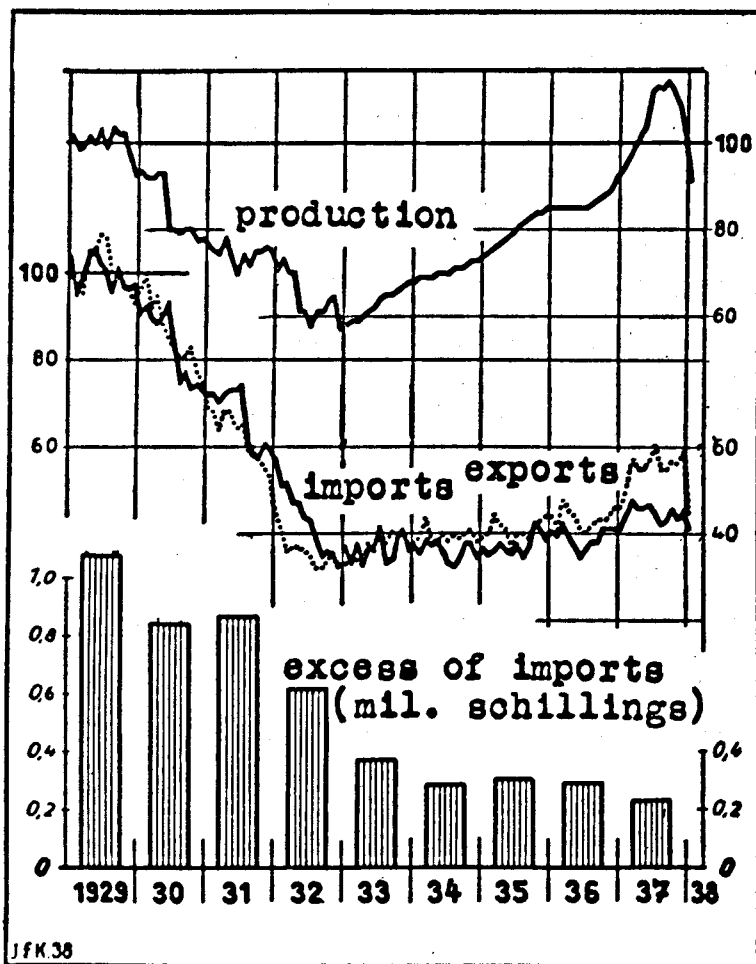


FIG. 7

* Ö.I.f.K., Jhrg. 12, Nr. 3, p. 78. For statistics, cf. pp. 77, 84.

Extensive import prohibitions upon agriculture, put into effect in June, 1932, offset the weakening of agricultural protection through the departures from Schilling parity on the "private clearing" market.

In the Austrian foreign trade, the effects of exchange control are again mingled with general causes, and Fig. 7 reveals the marked reduction in the total volume of foreign trade even before exchange control had been introduced. But the abruptly descending segment of the import and export curves from mid-1931 to the end of 1932, while it undoubtedly reflects the composite operation of depression and all spontaneous and artificial factors militating against international trade, does coincide approximately with the period of "attempted monopoly" in Austrian exchange control. The continuance of both export indices for four years thereafter (1933 through 1936) at a low level of 40 per cent of 1929 values,¹ despite the dramatic improvement of production, rests on the prevalence in world trade of clearings, export and import quotas, import prohibitions, high protective tariffs and exchange control and, more specifically for Austria, the lack of commercial treaties with Hungary and Czechoslovakia. During this quadrennium, however, world trade proceeded at levels even slightly lower — 35 per cent, 34 per cent, 35 per cent and 37 per cent of 1929 values. Thus Austria was able, by virtue of the abandonment of the official Schilling parity and the rationing of devisen, to escape with a penalty upon its foreign trade slightly less than that imposed by more autarchic countries.

Because of the short duration of exchange control in the narrow sense and the employment of market exchange rates in most of the important clearings after 1932, it is difficult to discover striking dislocations in Austrian trade with *particular countries* due to exchange control in isolation. The most conspicuous changes assume a nearly secular character antedating exchange control, and are for the most part ascribable to efforts of Austria and her chief trading partners at self-sufficiency.² But the situation is

1. The indices in Fig. 7 show movements of exports and imports by values, but investigations by the Austrian Institute for Cycle Research reveal that the indices also are reliable for changes in volume. Cf. Ö.I.f.K., Jhrg. 12, Nr. 2, p. 52.

2. On the side of imports, Czechoslovakia declined steadily from first importance in 1922 with 23.6 per cent of the total to 11 per cent in 1937, through the loss of the Austrian market for wheat, fuel, textiles, and sugar.

otherwise if, instead of regarding each country separately, we group together all the clearing countries to contrast with countries having free payments: in such an arrangement the aggregating of changes, each small in itself, in trade with particular countries ascribable to the presence or absence of clearing reveals a striking metamorphosis. Studies made by the Austrian Institute for Cycle Research, beginning with 1935 after the virtual abandonment of exchange control, except for the clearings, and hence revealing this factor in a fair degree of isolation, give the following results.

PERCENTUAL SHARE OF CLEARING COUNTRIES
IN AUSTRIAN TRADE

(January–September Values)*

		1935†		1936		1937	
		Imports	Exports	Imports	Exports	Imports	Exports
Clearing	Volume	63.9	77.3	85.9	79.2	81.4	77.4
Countries	Value	53.3	57.7	58.4	62.6	54.3	57.7
All Other	Volume	36.1	22.7	14.1	20.8	18.6	22.6
Countries	Value	46.7	42.3	41.6	37.4	45.7	42.3

* Ö.I.f.K., Jhrg. 11, Nr. 11, p. 240; cf. also *ibid*; Jhrg. 11, Nr. 9, pp. 191–192 and Jhrg. 12, Nr. 2, pp. 51–60.

† Poland is omitted in 1935 figures, not having yet adopted exchange control.

Disregarding the absence of Poland in the 1935 figures for clearing countries, their share of Austrian imports rose by volume from 63.9 per cent to 81.4 per cent and by value from 53.3 per cent to 54.3 per cent over the years 1935–37; whereas the share of non-clearing countries fell by volume from 36.4 per cent to 18.6 per cent and by value from 46.7 per cent to 45.7 per cent. Because of the fixity of prices in clearing countries and the substantial rise of prices on free markets, the value figures belie the actual sharp deflection of imports to clearing countries.¹ On the side of exports

Since 1927 Germany has been the chief source of imports, accounting for 21 per cent in 1930 and 16.3 per cent in 1937. Hungary has held third place in importance, varying but slightly from a norm around 10 per cent (e.g. 9 per cent in 1937), and Italy at fourth place has accounted for 4–5 per cent of total imports. On the side of exports, these four countries have accounted for roughly half the total, with Germany again leading. Its importance, however, declined slowly through the period 1930–1937 from 17 per cent to 14.9 per cent, though the beginning of the decline dates back to 1928. Czechoslovakia lost ground from 1930 to 1937 from 12.8 per cent to 7.1 per cent, whereas Hungary and Italy both gained, the former rising from 7 per cent to 9.1 per cent and the latter from 10 per cent to 14 per cent. The fairly satisfactory working of the clearing supported Austrian exports to Hungary, and the Rome Agreements increased exports to Hungary.

1. *Ibid.*, Jhrg. 11, Nr. 11, p. 240.

there was no net change over the years 1935–37, 77 per cent by volume and 58 per cent by value going to clearing countries and 23 per cent by volume and 42 per cent by value going to other countries. Comparison of export and import figures indicates the probability that it was an effort — for the most part not successful — to draw upon credit clearing-balances which accounts for the deflection of imports to clearing countries.

Beside its influence upon international trade, exchange control affects the foreign value of currencies. One would expect that

THE PRICE OF GOLD IN AUSTRIA*
(AS PER CENT OF PARITY)

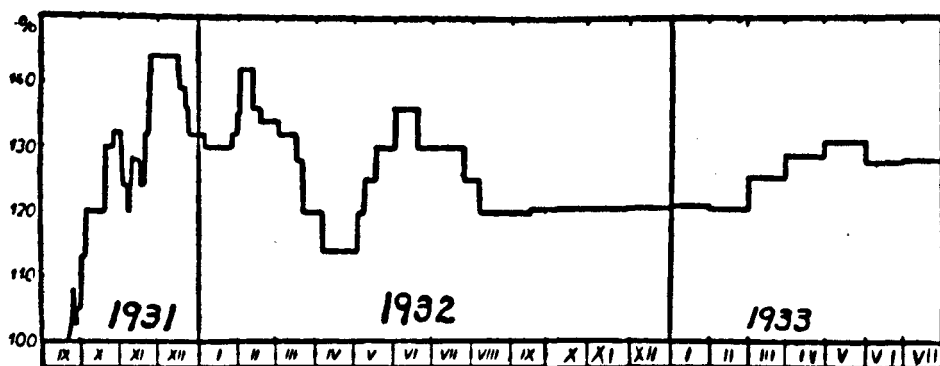


FIG. 8

* Ö.I.f.K., Jhrg. 6, Nr. 9, p. 132. The figure has been extended through July 1933. For statistics, cf. p. 85.

exchange control would reveal itself in short-run variations in the value of the Schilling, but that the basic factors would prove to be such determinants of purchasing power parity as the relative movements of domestic production and money. These expectations appear to be fulfilled. The course of the price of gold in Vienna¹ shows short irregularities which will presently be explained in terms of control measures; but the eventual level of 128 per cent of par, reached by July, 1933 (cf. Fig. 8, above), is almost the exact reciprocal of the movement of the index of production from 79 in April, 1931, just before the Credit Anstalt failure, to 65 in July, 1933 (cf. Fig. 7, p. 61), with the total of central-bank sight liabilities and notes remaining at approximately the same amount

1. By a strange anomaly the publication of the price of gold at the Mint was never forbidden, even during the months of most rigorous attempts at maintaining official parity.

(1,100,000,000 Schillings) at both dates (cf. Fig. 1, p. 31). Other comparisons yield similar results. Gold premia during the latter part of 1931 and 1932 fairly closely reflect the lag of Austrian prices downward in comparison with Germany (cf. Fig. 9, below) and the United States (cf. Fig. 3, p. 34 and Fig. 10, p. 66). In Fig. 10 the movements of Zurich quotations on Schillings (reversed to show what Swiss franc quotations would have been in Vienna had they been permitted) and the Vienna quotations on a favorite Swiss bond describe courses resembling the variations of the gold price.

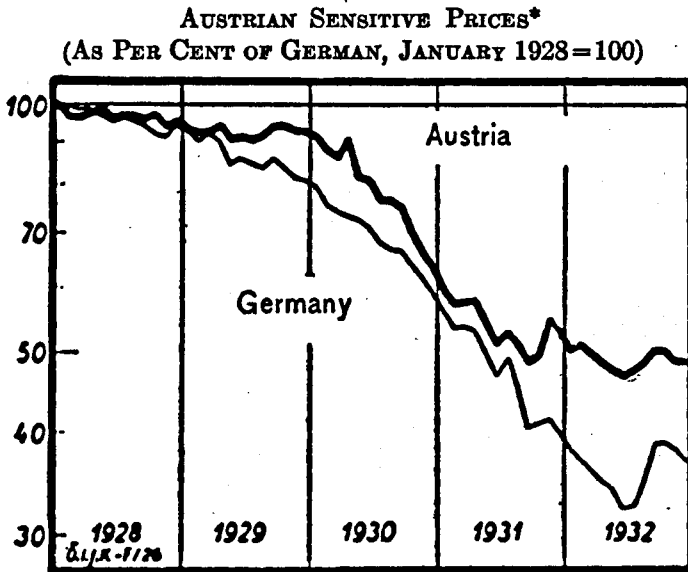


FIG. 9

* Ö.I.f.K., Jhrg. 7, Nr. 2, p. 23. For statistics, cf. pp. 78-80.

Shorter variations in the value of the Schilling are associated with certain phases of exchange control. The late November and early December, 1931, peak in the price of gold (142 per cent of par) and of A-K Bonds seems to have been caused by the pressure of capital flight carrying foreign devisa and *valuta* values beyond purchasing power parity. The evasion device of "export against Schillings," thriving between the Third and Fourth Devisen Laws, permitted an effective capital flight without resort to devisa or *valuta*. When this practice was stopped by the Fourth Devisen Law, and it was also made illegal to accept payment for exports in foreign securities, the A-K Bonds declined, but gold prices rose, through January. The accession of Dr. Kienböck and the begin-

nings of private clearing in February, 1932, gave the exchange market reassurances and permitted a fall of foreign exchange and security values toward their eventual equilibrium level. But this was also the time when the early gold-par clearing gave relief to importers and removed their pressure on devisen, a change reflected

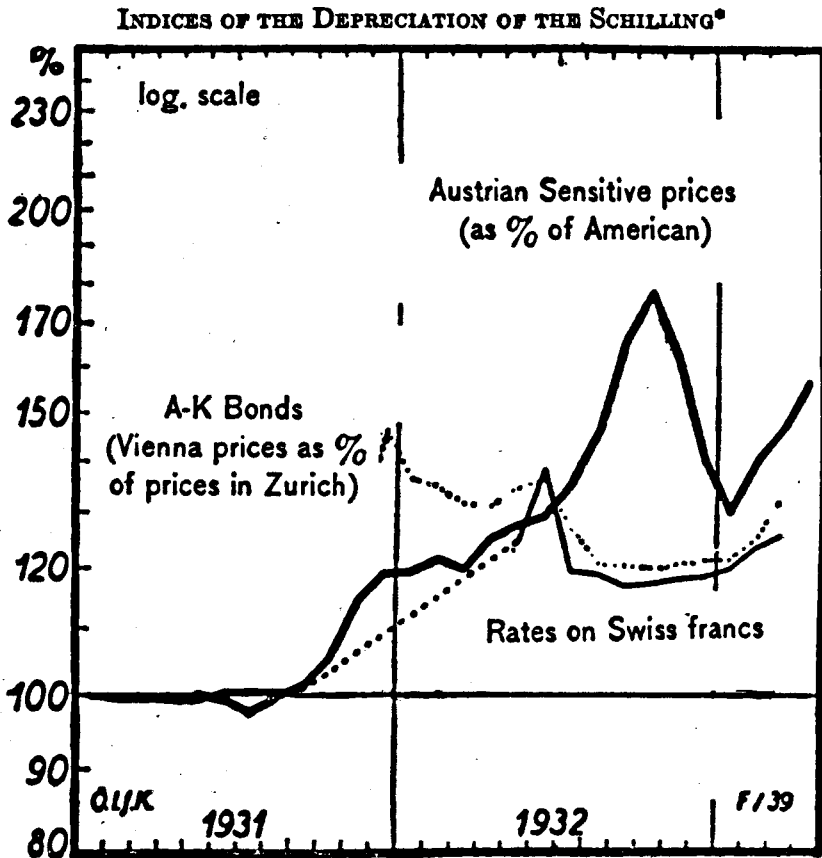


FIG. 10

* Ö.I.f.K., Jhrg. 7, Nr. 4, p. 64. For statistics, cf. pp. 78-80.

in the marked fall of gold prices to 117 per cent of parity. The termination of Italian, Jugoslavian, and Swiss clearing in March, and the subsequent necessity for liquidating unpaid Austrian balances swung the pendulum in the other direction by the end of the next month. During May both the prices of gold and A-K Bonds reached a point above their final levels at a time when maturities were particularly heavy and the Transfer Moratorium was imminent. Following its provisional introduction on June 27, relief given the balance of payments produced a sag in gold price,

A-K Bonds, and Swiss exchange curves until March, 1933. Thereafter the gradual resumption of transfer raised the curves somewhat, until finally a position of apparent equilibrium was realized by the eventual gold premium of 28 per cent.

Conceding, as do some of the most intransigent foes of exchange control, that interferences with exchange rates and transactions in October, 1931, could scarcely have been avoided, what is to be said of the actual course of events in 1932? All official organizations representing industry, commerce, and trade¹ came sooner or later to demand in categorical terms the removal of exchange control; and they were seconded by economists connected with the Austrian Institute for Cycle Research.² The Chamber of Commerce actually recommended³ deflation sufficient to restore the parity of the Schilling, but by mid-summer of 1932 the *de facto* depreciation was generally accepted as the appropriate basis for returning to free payments.⁴

Admitting the desirability of clearing away the hampering, ineffective and costly⁵ apparatus existing at the end of 1931, one must sympathize with the cautious course pursued by the National Bank. At that time the great obstacles to immediate and complete abolition of control were four: the foreign and domestic debts, the dubious state of public psychology regarding the standard, and the question of securing payment for exports to exchange-control countries. Both the Bruins agreement and the Bank for International Settlements-Bank of England credits were being renewed

1. Including the Genossenschaftsverbände des Gewerbes und der Kaufmannschaft, the Hauptverband der Industrie, the Handelskammer, and the Vienna Börsekammer.

2. E.g. Oskar Morgenstern, *Neues Wiener Tagblatt*, February 3 and September 10, 1932; Fritz Machlup, *ibid.*, November 11, 1932; Gottfried Haberler, *ibid.*, August 14, 1932.

3. Cf. *Wiener Kammer für Handel, Industrie, und Gewerbe, Geschäftsbericht über den Monat März, 1932*, pp. 47-49.

4. E.g., *Neues Wiener Tagblatt*, September 20, 1932; *Arbeiter Zeitung*, October 11, 1932.

5. The following is an estimate of costs of its own exchange control department during the first four years put at my disposal by the Austrian National Bank:

	Employees	Supplies	Total
1931, October 9 to December 31	\$527,000	\$141,000	\$668,000
1932	1,328,000	103,000	1,431,000
1933	535,000	46,000	581,000
1934	246,000	27,000	273,000
1935, half year	134,000	5,000	139,000

for six-months intervals only; the Credit Anstalt Agreement was still far from a satisfactory formulation; and the *devisen* reserves of the National Bank were being depleted by the remaining debt service. Furthermore, no one could advance a ready solution to the riddle of domestic debts expressed in foreign currencies; the process required time not only for a crystallizing of opinion and elaborating of details, but also for bringing recalcitrants to the realization that compromise would be necessary. Again, although it was stated by the proponents of immediate removal that 90 per cent of the population already recognized the *de facto* Schilling devaluation, this "population" must be restricted to bankers, brokers, leading merchants, exporters and importers. The man on the street scarcely realized the fact even ultimately, since devaluation was never made public; its recognition in 1932 might easily have loosed a disastrous velocity inflation and a renewal of the capital flight. Even under conditions prevailing prior to March, 1938, after the foreign debts had been completely funded, the principal reduced, and the service of the debt lessened by conversions, and after the problem of the domestic foreign currency debts had largely been solved, a modicum of control persisted. The stability of the Schilling despite gold-bloc devaluations had virtually removed any threat of panic psychology. But, as President Kienböck pointed out,¹ two circumstances required the retention of formal control. Clearing agreements are generally terminable on short notice by either country; without exchange control the Austrian Bank would have been left without authority to impose a defensive freezing of foreign balances to force settlement of its own claims. The action of both England and Italy in empowering the central bank to introduce "compulsory clearing" in emergency is a parallel to the power retained in Austria under the *Devisen* Acts by the National Bank. In the second place, so long as contiguous countries exercised exchange control, it was necessary for Austria to control payments in order to avoid abuse of the transit trade, since otherwise third countries could have paid merely in clearing balances while the Austrian transit firm would have had to pay the original exporter in *devisen*.

1. *Mitteilungen*, loc. cit., pp. 329, 331.

THE INCORPORATION OF AUSTRIA INTO THE GERMAN
EXCHANGE CONTROL SYSTEM

In the cases of the Saar in March, 1935, and Sudetenland in October, 1938, the existing German exchange control laws were applied in their entirety by one decree. Because of the greater magnitude of the undertaking, the complexity of problems, and a necessary considering of political possibilities, the German authorities proceeded in the case of Austria very circumspectly, at first retaining the "devisen frontier" between the two countries completely, and then only by a series of tentative steps arriving at the assimilation through a general recodification of devisen laws on December 12, 1938, exactly nine months after the political change.

Inasmuch as prices in Austria before annexation lay considerably lower than the German level at the old clearing ratio of two Schillings to the Reichsmark, it was necessary to choose between a rise of Austrian prices, if the old relation were retained, or a simple recognition of the higher real value of the Schilling, if price stability were preferred. The first alternative had already been officially adopted when the German Chancellor on March 17 decreed the official Schilling-Mark ratio to be $S3 = Rm2$, choosing thereby to avoid the politically unpalatable upward adjustment in Austrian prices. At the time of its introduction the 3:2 relation seems to have approximated the Austrian-German purchasing-power parity based on costs of living, so far as this may be computed despite differences in kind and quality of consumers goods and services. Substituting the 3:2 rate for the old 2:1 clearing rate made German exports to Austria cheaper by 26.5 per cent and Austrian exports to Germany dearer by 36 per cent, and approximately removed artificial distortion of trade between the two countries. If a computation is made over the *official* value of the mark,¹ imports from other countries than Germany became cheaper by 30.6 per cent and exports dearer by 44 per cent, the divergence between the second pair of percentages and the first being explained by the fact that the 2:1 Austrian-German clearing rate had already recognized a small percentage of depreciation in the Mark. If a computation of the change in the effective rate of exchange for Austria were carried out over the Mark rates actually prevailing in German clearings and sales of blocked Marks, considerably lower per-

1. As was done in [Ö.] I.f.K., Jhrg. 12, Nr. 7, p. 178.

centages would be given than 30.6 per cent and 44 per cent; but since the items as well as the source and destination of trade would be quite different for Austria before and after annexation, the results would be rather fanciful. Aside from this unreality these percentages indicate the artificiality of the official Mark value as imposed upon the Austrian economy with reference to non-German trade.

On the second day after the proclamation of German sovereignty, payments abroad in domestic or foreign bills of exchange were forbidden to private parties, as was also the export or import of Austrian and German currency. To cope further with the immense pressure of flight capital, the authorities limited withdrawals from demand and saving accounts to 1,000 Schillings weekly; and the gamut of precautionary measures was subsequently run through — limitation of money for foreign travel to the equivalent of 50 Schillings, compulsory sale of precious metals, foreign securities, devisen, and money to the Reichsbank, blocking of emigrants' bank accounts, etc. Curiously enough, the channel of evasion through "export against Schillings," which had flourished as a mode of transferring flight capital under Austrian exchange control in late 1931 (Cf. p. 40), enjoyed a brief resurrection until the practice was stopped by the German Devisen Office in Vienna by decree of May 21.¹ The Second Devisen Law of June 1 applied to Austria the system of "Number Control" utilized in Germany to cope with capital flight effected by smuggling out domestic money, purchasing German securities abroad, and secretly bringing the securities back into Germany (repatriation).

Imposition of the German Standstill and Moratorium decrees upon Austria followed as a matter of course. Formally the step was not taken for short-term foreign debts until November, 1938, possibly because the sum owed by Austrian banks and industries did not exceed 47,000,000 Schillings. The long and medium term debts of 1,834,400,000 Schillings in 1937 came under the Moratorium law of 1933 by a decree of April 29, requiring Austrian debtors to pay into the German Conversion Office and offering to creditors the choice of blocked accounts or the regranting of loans at reduced interest. As for the Austrian public debts, Germany declined on principle to recognize them, on the ground that they had been contracted to prevent the *Anschluss*. Nevertheless, after

1. Devisenarchiv, June 7, 1938, pp. 547-548.

threats of compulsory clearings on the part of creditor nations and protracted negotiations, agreements were arrived at with England, Holland, Switzerland, and France, embracing 55 per cent of the creditor interests. English creditors fared best, with full servicing of the loans of 1933-53 and 1934-59; an interest reduction from 7 to 5 per cent upon the Federal Loan of 1930, and 50 per cent transfer upon the service of others. The Dutch secured nearly as good terms, but in the case of Switzerland and France existing transfer arrangements between Germany and these countries were simply applied without preferential treatment of Austrian loans.

The measure of creditors' success largely depended in these cases upon the size of the creditor country's adverse balance of trade with Germany. Since the United States had a favorable balance, it was unable to secure concessions, and fell therefore under a blanket offer made by Germany, still refusing any formal recognition of obligation to Austria's creditors, to convert the holdings to a Reich Loan at $4\frac{1}{2}$ per cent with a 2 per cent sinking fund without transfer.

The proclamation of the new Schilling-Mark ratio immediately raised complicated issues as to the terms of settlement of outstanding commercial obligations. So far as concerned foreign debts or credits in terms of a foreign currency, it was immediately decided that until April 25 *devisen* would be bought and sold by the National Bank at the last quoted rate on Schillings on the old private-clearing market. By this arrangement Austrian exporters, of course, gained and importers lost in comparison with what would have been paid and demanded for *devisen* had the Reichsbank's rates been applied; but the decision was clearly not motivated by this consideration but rather by the desire to secure *holdings* of foreign *devisen* in Austrian hands. The arrangement prevailing until April 25 permitted the settlement of commercial debts in foreign currencies without loss to the creditor — either Austrian or foreign — in terms of foreign currency.

With regard to commercial debts in Schillings, however, the question of settlement threatened to bring certain sectors of foreign trade to an absolute *impasse*: Austrian importers refused to discharge their obligations at the higher sums in foreign currencies involved in the 3:2 ratio of Schillings to Marks, while foreign importers could not be induced to acquiesce in the upward valorization of their debts in terms of their own currencies. The *impasse*

was especially troublesome in the clearings, where Austria had a net creditor position of 134,000,000 Schillings. A part of this total, the equivalent of 30,000,000 Reichsmarks owed by Germany, was immediately repaid at the old clearing rate 2:1. Not until June 5, however, was there established any norm for the balance. On that date the Vienna Devisen Office declared that the S3=Rm 2 ratio had been intended merely for domestic relations; that obligations in Schillings entered into before March 17 were not thereby affected; and that, aside from special arrangements, settlement would be made on the basis of the last private-clearing quotation on Schillings. This decision put the Austrian exporter who had sold for Schillings in a position exactly the reverse of that which would have resulted had the sale been made in terms of foreign currency: in the present case he received the equivalent of only 70 Schillings in payment of an invoice for 100 Schillings. The same inequities appeared in the settlement of Austria's unfavorable clearing balances.

The process of incorporating Austria into the German trade system would have been rendered still more difficult by the automatic increase in all protective tariffs entailed by raising the Schilling to the overvaluation attaching to Mark currency. By decree of June 23, the customs duties, which by a quaint anachronism had been stated in terms of the old Austrian gold crown, were henceforth reduced to their pre-March level by computing the crown at a rate of .90 Reichsmarks instead of 1.22.

In the economic relations of the Altreich with the new Ostmark, the German authorities introduced many precautionary measures against a cataclysmic alteration of production and price conditions, particularly in the old Austrian territory. Although German tariffs upon Austrian goods were removed almost immediately — on March 26 — Austrian tariffs upon German goods were at first maintained. However, every import into Germany required in advance a permit from the German Import Control Office (*Überwachungsstelle*), ostensibly "to prevent denuding Austria of raw materials." A law preventing acquisition by citizens of the Altreich of new or old businesses or securities belonging to citizens of the Ostmark was maintained with gradual relaxation even after June 1, when the "devisen frontier" between these regions was abolished. Gradually the Austrian tariffs on German goods were reduced by measures introduced on April 7, 23, 26 and on July 1,

and their complete removal followed on October 1. Even then for several months exporters and importers in both parts of Germany under certain officially inspired "territorial protection agreements" were prevented from invading previously existing market territories.

The imposition of "price-stops," beginning with a decree of March 18, has apparently a permanent character; their presence interferes with the effort to trace economic consequences of the *Anschluss*. The number of unemployed was reduced, according to German statistics, from 403,643 in April to 112,745 in November, 1938. Nearly all significant indices, including the index of production, have not been carried forward; and it is impossible to isolate in the available trade statistics the share of German foreign trade carried on by the former Austrian territory. Until August, 1938, statistics of car-loadings for imports and exports exclusive of the *Altreich* were available and revealed an 18 per cent shrinkage in imports and a 33 per cent shrinkage in exports in the five months April-August, 1938, compared with the previous year, despite a revival of world trade.¹ Complaints have been heard concerning the decline of the *Ostmark* textile and paper industries and the Vienna luxury goods exports. Although the loss of foreign trade as measured in car-loadings is more than offset for both exports and imports by increases in trade with the *Altreich*, the decline of Austrian *foreign* trade is in many respects more significant for Germany as a whole, especially in the light of its 433,000,000 Reichsmark adverse balance in 1938.

1. Ö.I.f.K., Jhrg. 12, Nr. 8, pp. 200-201.

AUSTRIAN NATIONAL BANK

(Million Schillings)

	Note Circulation	Note Circulation and Sight Liabilities	Gold and Foreign Exchange	Private Discounts
	I	II	III	IV
1931				
I.....	904	1,092	868	118
II.....	873	1,027	830	93
III.....	879	1,009	833	71
IV.....	867	1,006	841	65
V.....	1,038	1,224	826	298
VI.....	1,050	1,286	699	488
VII.....	1,069	1,260	622	534
VIII.....	1,064	1,217	524	592
IX.....	990	1,163	456	605
X.....	1,057	1,208	351	744
XI.....	1,046	1,211	345	760
XII.....	1,091	1,271	337	835
1932				
I.....	1,034	1,222	295	853
II.....	992	1,161	268	854
III.....	949	1,123	249	841
IV.....	922	1,102	228	846
V.....	951	1,118	210	875
VI.....	912	1,075	193	850
VII.....	908	1,087	191	867
VIII.....	890	1,070	190	867
IX.....	857	1,069	189	855
X.....	849	1,071	189	324
XI.....	836	1,063	189	321
XII.....	880	1,098	189	355
1933				
I.....	822	1,059	189	327
II.....	792	1,037	189	297
III.....	839	1,046	189	302
IV.....	860	1,080	189	270
V.....	836	1,075	189	258
VI.....	831	1,078	192	245
VII.....	849	1,096	197	249
VIII.....	854	1,017	197	209
IX.....	882	997	197	205
X.....	899	1,029	197	223
XI.....	864	1,020	197	205
XII.....	913	1,055	202	237

AUSTRIAN NATIONAL BANK — *Continued*
(Million Schillings)

	Note Circulation	Note Circulation and Sight Liabilities	Gold and Foreign Exchange	Private Discounts
	I	II	III	IV
1934				
I.....	872	1,082	203	256
II.....	930	1,108	210	276
III.....	934	1,112	212	286
IV.....	915	1,120	214	292
V.....	893	1,125	278	288
VI.....	885	1,105	275	241
VII.....	900	1,117	273	249
VIII.....	933	1,131	277	253
IX.....	914	1,138	281	254
X.....	906	1,133	278	254
XI.....	888	1,126	282	244
XII.....	944	1,126	287	238
1935				
I.....	863	1,120	283	236
II.....	844	1,118	281	236
III.....	856	1,112	275	234
IV.....	873	1,120	279	234
V.....	869	1,144	294	235
VI.....	870	1,174	316	235
VII.....	888	1,178	330	233
VIII.....	903	1,194	349	233
IX.....	907	1,220	372	230
X.....	906	1,219	379	230
XI.....	893	1,209	372	229
XII.....	945	1,196	360	228
1936				
I.....	876	1,190	352	225
II.....	865	1,157	317	223
III.....	878	1,161	323	219
IV.....	883	1,160	323	219
V.....	897	1,160	324	218
VI.....	885	1,174	331	220
VII.....	886	1,173	330	221
VIII.....	897	1,197	358	219
IX.....	880	1,214	376	216
X.....	891	1,170	359	213
XI.....	861	1,161	348	209
XII.....	897	1,155	344	208

AUSTRIAN NATIONAL BANK — *Continued*
(Million Schillings)

	Note Circulation	Note Circulation and Sight Liabilities	Gold and Foreign Exchange	Private Discounts
	I	II	III	IV
1937				
I.....	846	1,143	341	206
II.....	826	1,135	349	202
III.....	841	1,134	341	199
IV.....	834	1,134	338	197
V.....	846	1,132	339	195
VI.....	823	1,140	341	191
VII.....	840	1,151	348	194
VIII.....	865	1,172	367	195
IX.....	855	1,187	383	192
X.....	861	1,196	394	190
XI.....	854	1,197	396	186
XII.....	894	1,205	401	187
1938				
I.....	846	1,201	404	189
II.....	827	1,216	416	187

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AUSTRIAN INDEX OF INDUSTRIAL PRODUCTION
(1929=100)

1929		1932		1935	
I.....	102	I.....	65	I.....	74
II.....	98	II.....	68	II.....	75
III.....	99	III.....	64	III.....	76
IV.....	102	IV.....	65	IV.....	77
V.....	99	V.....	57	V.....	78
VI.....	104	VI.....	59	VI.....	79
VII.....	98	VII.....	56	VII.....	81
VIII.....	104	VIII.....	59	VIII.....	82
IX.....	102	IX.....	56	IX.....	83
X.....	102	X.....	60	X.....	84
XI.....	97	XI.....	58	XI.....	84
XII.....	92	XII.....	57	XII.....	85
1930		1933		1936	
I.....	94	I.....	58	I.....	85
II.....	92	II.....	59	II.....	85
III.....	92	III.....	59	III.....	85
IV.....	93	IV.....	60	IV.....	85
V.....	93	V.....	61	V.....	85
VI.....	80	VI.....	62	VI.....	85
VII.....	80	VII.....	64	VII.....	85
VIII.....	79	VIII.....	65	VIII.....	86
IX.....	80	IX.....	65	IX.....	87
X.....	80	X.....	66	X.....	88
XI.....	77	XI.....	67	XI.....	89
XII.....	78	XII.....	68	XII.....	92
1931		1934		1937	
I.....	76	I.....	68	I.....	94
II.....	75	II.....	69	II.....	97
III.....	74	III.....	69	III.....	99
IV.....	79	IV.....	69	IV.....	102
V.....	72	V.....	70	V.....	104
VI.....	69	VI.....	70	VI.....	112
VII.....	75	VII.....	70	VII.....	113
VIII.....	71	VIII.....	71	VIII.....	112
IX.....	75	IX.....	71	IX.....	115
X.....	75	X.....	72	X.....	112
XI.....	76	XI.....	73	XI.....	108
XII.....	75	XII.....	73	XII.....	103

AUSTRIAN PRICE INDICES
(1929=100)

	Determined Abroad	Home Determined	Bound Prices	Sensitive Prices
1929				
I.....	103	103	100	101
II.....	104	102	101	100
III.....	107	100	101	101
IV.....	104	101	101	102
V.....	100	99	102	97
VI.....	99	100	102	99
VII.....	99	100	101	97
VIII.....	99	100	100	99
IX.....	100	101	100	102
X.....	97	101	99	102
XI.....	92	99	98	101
XII.....	91	99	98	100
1930				
I.....	90	99	100	99
II.....	88	97	99	96
III.....	83	97	98	94
IV.....	85	95	98	99
V.....	81	94	96	88
VI.....	79	93	96	88
VII.....	76	93	96	83
VIII.....	72	93	97	83
IX.....	70	93	98	82
X.....	67	91	96	76
XI.....	65	90	94	72
XII.....	65	87	94	69
1931				
I.....	61	85	91	64
II.....	61	84	92	62
III.....	62	83	92	63
IV.....	60	83	91	63
V.....	59	82	91	59
VI.....	58	79	92	55
VII.....	58	79	91	57
VIII.....	58	77	92	56
IX.....	56	76	90	53
X.....	60	76	94	54
XI.....	64	79	95	59
XII.....	64	79	95	58

AUSTRIAN PRICE INDICES—*Continued*
(1929=100)

	Determined Abroad	Home Determined	Bound Prices	Sensitive Prices
1932				
I.....	62	77	104	54
II.....	60	75	103	53
III.....	60	73	104	51
IV.....	58	72	104	48
V.....	56	70	104	46
VI.....	52	69	104	46
VII.....	53	69	103	46
VIII.....	57	70	102	47
IX.....	60	71	103	50
X.....	59	72	104	51
XI.....	57	70	104	48
XII.....	57	70	103	48
1933				
I.....	56	71	103	50
II.....	56	71	103	48
III.....	56	71	104	49
IV.....	57	72	104	50
V.....	63	73	104	51
VI.....	66	76	103	57
VII.....	65	78	105	58
VIII.....	64	79	102	59
IX.....	61	78	103	58
X.....	61	77	105	58
XI.....	62	76	104	58
XII.....	62	76	104	59
1934				
I.....	65	76	105	60
II.....	66	76	105	60
III.....	65	77	106	60
IV.....	65	77	104	60
V.....	64	76	103	59
VI.....	63	76	104	59
VII.....	62	75	103	58
VIII.....	63	75	104	58
IX.....	58	77	104	56
X.....	59	75	104	54
XI.....	59	75	104	53
XII.....	60	75	104	54

AUSTRIAN PRICE INDICES — *Continued*
(1929=100)

	Determined Abroad	Home Determined	Bound Prices	Sensitive Prices
1935				
I.....	62	75	104	55
II.....	60	75	105	55
III.....	59	75	105	53
IV.....	62	75	105	54
V.....	64	76	105	56
VI.....	64	76	105	56
VII.....	64	76	104	57
VIII.....	65	76	104	57
IX.....	64	78	104	58
X.....	68	79	105	62
XI.....	68	78	105	61
XII.....	68	78	105	61
1936				
I.....	67	79	105	61
II.....	67	79	105	61
III.....	68	79	105	62
IV.....	68	78	105	62
V.....	68	78	104	62
VI.....	66	78	104	60
VII.....	68	78	104	61
VIII.....	67	79	104	62
IX.....	67	80	104	62
X.....	68	81	104	65
XI.....	74	81	105	66
XII.....	78	82	105	71
1937				
I.....	82	82	105	76
II.....	84	84	105	79
III.....	91	84	106	84
IV.....	90	88	106	85
V.....	85	89	106	84
VI.....	82	89	106	78
VII.....	81	88	105	79
VIII.....	83	89	105	82
IX.....	79	90	105	79
X.....	75	89	105	75
XI.....	71	88	105	71
XII.....	69	85	104	67
1938				
I.....	69	87	105	68
II.....	68	86	105	65

EXCHANGE CONTROL IN AUSTRIA AND HUNGARY 81

	AGRICULTURAL PRICES (1923-31=100)		INDUSTRIAL PRICES	
	Austrian	Foreign	Austrian	Foreign
1929				
I.....	98	102	100	99
II.....	103	103	99	99
III.....	107	107	99	98
IV.....	106	100	98	97
V.....	106	95	97	95
VI.....	100	93	98	95
VII.....	107	101	98	96
VIII.....	103	96	99	99
IX.....	97	102	103	100
X.....	94	99	104	100
XI.....	93	97	101	97
XII.....	91	98	101	97
1930				
I.....	93	96	104	97
II.....	91	93	102	96
III.....	91	89	100	93
IV.....	87	86	99	92
V.....	86	83	99	91
VI.....	87	81	99	91
VII.....	85	97	95	87
VIII.....	93	99	96	85
IX.....	87	80	95	83
X.....	83	77	93	80
XI.....	83	73	92	77
XII.....	81	72	89	76
1931				
I.....	79	69	87	74
II.....	81	69	86	71
III.....	83	69	86	71
IV.....	87	72	87	70
V.....	86	70	82	67
VI.....	84	73	79	64
VII.....	91	82	80	66
VIII.....	90	66	78	68
IX.....	87	64	76	66
X.....	90	66	76	65
XI.....	95	67	80	69
XII.....	94	65	79	66

	AGRICULTURAL PRICES		INDUSTRIAL PRICES	
	<i>(Continued)</i>			
	<i>(1923-31 = 100)</i>			
	Austrian	Foreign	Austrian	Foreign
1932				
I.....	93	62	79	65
II.....	93	63	78	63
III.....	94	64	75	61
IV.....	94	63	73	58
V.....	96	59	72	57
VI.....	112	58	71	56
VII.....	101	59	72	55
VIII.....	93	61	73	58
IX.....	89	57	75	61
X.....	90	54	76	60
XI.....	91	55	73	61
XII.....	88	53	73	59
1933				
I.....	85	53	73	57
II.....	84	52	73	58
III.....	86	52	73	58
IV.....	86	53	73	60
V.....	85	56	73	64
VI.....	98	58	77	67
VII.....	93	63	78	71
VIII.....	82	61	78	71
IX.....	82	59	78	69
X.....	82	55	78	69
XI.....	82	57	77	68
XII.....	83	57	77	69
1934				
I.....	80	47	78	59
II.....	81	46	78	58
III.....	83	44	78	59
IV.....	81	43	77	58
V.....	81	44	76	58
VI.....	80	45	76	58
VII.....	81	48	75	58
VIII.....	84	57	76	58
IX.....	85	56	77	56
X.....	85	55	74	56
XI.....	84	56	75	57
XII.....	85	59	75	58

EXCHANGE CONTROL IN AUSTRIA AND HUNGARY 83

	AGRICULTURAL PRICES (Continued) (1923-31 = 100)		INDUSTRIAL PRICES	
	Austrian	Foreign	Austrian	Foreign
1935				
I.....	84	58	75	58
II.....	84	57	76	57
III.....	84	54	75	57
IV.....	82	55	75	57
V.....	83	55	76	58
VI.....	84	53	76	59
VII.....	84	52	76	60
VIII.....	86	55	76	60
IX.....	87	58	77	61
X.....	89	59	80	62
XI.....	87	56	80	63
XII.....	85	53	78	63
1936				
I.....	84	52	79	63
II.....	82	53	79	64
III.....	82	52	78	63
IV.....	83	53	78	64
V.....	84	50	78	63
VI.....	85	50	78	63
VII.....	86	57	78	63
VIII.....	88	62	80	64
IX.....	89	61	80	65
X.....	90	61	82	64
XI.....	90	61	82	65
XII.....	91		84	
1937				
I.....	90		85	

AUSTRIAN EXPORTS AND IMPORTS BY VALUE
(1929=100)

	Index of Imports (Raw Materials)	Index of Exports (All Products)		Index of Imports (Raw Materials)	Index of Exports (All Products)		Index of Imports (Raw Materials)	Index of Exports (All Products)
1929			1932			1935		
I	94	99	I	57	45	I	37	39
II	93	96	II	50	41	II	35	40
III	94	95	III	45	36	III	36	45
IV	104	105	IV	50	37	IV	38	42
V	103	104	V	48	37	V	36	41
VI	106	109	VI	49	36	VI	35	36
VII	96	108	VII	41	35	VII	38	40
VIII	99	100	VIII	38	32	VIII	34	40
IX	111	100	IX	37	32	IX	37	39
X	100	97	X	34	34	X	43	42
XI	96	97	XI	39	36	XI	41	43
XII	100	93	XII	36	32	XII	38	44
1930			1933			1936		
I	77	96	I	37	33	I	41	44
II	76	100	II	33	33	II	39	41
III	78	91	III	38	34	III	43	48
IV	79	95	IV	32	33	IV	39	45
V	84	88	V	36	38	V	37	44
VI	79	85	VI	37	36	VI	34	41
VII	76	82	VII	41	42	VII	36	40
VIII	79	81	VIII	33	38	VIII	38	42
IX	76	81	IX	34	40	IX	38	43
X	76	83	X	39	40	X	41	43
XI	73	77	XI	41	41	XI	41	44
XII	67	75	XII	36	36	XII	41	46
1931			1934			1937		
I	67	69	I	37	38	I	41	46
II	71	68	II	35	39	II	44	51
III	63	64	III	39	44	III	48	57
IV	71	68	IV	37	39	IV	46	55
V	71	68	V	38	38	V	46	55
VI	60	64	VI	36	40	VI	47	57
VII	61	65	VII	33	38	VII	45	61
VIII	54	59	VIII	32	40	VIII	42	55
IX	59	60	IX	35	39	IX	43	55
X	60	57	X	38	40	X	46	57
XI	62	55	XI	38	41	XI	43	56
XII	58	53	XII	34	38	XII	46	59
						1938		
						I	41	45

BANKNOTE CIRCULATION IN AUSTRIA*

(Number of Banknotes in Millions)

Denomination	1928	1929	1930	1931	1932
1,000 Schillings	103.185	113.615	104.791	228.800	26.600
100 Schillings	5,623.720	5,308.640	5,334.294	5,367.453	5,099.392
50 Schillings	.....	2,212.225	2,345.565	2,164.085	1,807.089
20 Schillings	11,986.789	9,280.059	8,901.878	8,368.269	7,418.945
10 Schillings	11,661.288	11,097.991	11,255.479	10,255.690	9,876.497
5 Schillings	8,371.966	8,524.837	8,782.670	8,365.589	7,930.365

* In Fig. 2, p. 32, the curves represent total values, not numbers of notes, in each denomination.

AUSTRIA:

GOLD PRICES IN PER CENT OF PARITY

	1931	1932	1933
I	...	129	122
II	...	136	121
III	...	129	126
IV	...	115	129
V	...	125	131
VI	...	133	127
VII	...	129	128
VIII	...	121	128
IX	100	120	128
X	122	120	128
XI	130	120	...
XII	140	120	...

Source of statistics, pp. 74-85: Monatsberichte des Österreichischen Institutes für Konjunkturforschung.

CHAPTER III

HUNGARY'S STRUGGLE WITH AGRICULTURAL DEPRESSION AND INDEBTEDNESS

ECONOMIC AND FINANCIAL CONDITIONS OF 1931

The disaster which overtook Hungary in the summer of 1931 had its roots in four adverse developments, in addition to the background of world depression, in the years preceding: (1) the excessive capital imports of the period 1924-1930, and (2) the defects of the banking system; but more immediately (3) the movement toward agricultural autarchy in Europe, and (4) the general decline of agricultural prices.

Between 1924 and 1930 Hungary borrowed 2,026,000,000 pengő,¹ one-fourth of which was at short term.² Of this tremendous sum, 50 per cent went into federal and communal investments, made without much reference to productivity in a technical sense; and 40 per cent went to agriculture, where a large proportion was absorbed simply in the division of property rights.³ Agricultural property accumulated mortgages to 37 per cent of its value.⁴ The country had become oriented to a continuous capital influx; a "prosperity fever" infected borrowers and lenders as well, especially the American. But a reflux of securities began: in 1929 capital import sufficed only for the debt service, and during 1930 capital was withdrawn from Hungary on balance, reducing the reserves of the National Bank by 100,000,000 pengő, or one-third. At the time of the credit crisis in 1931, total foreign indebtedness amounted to 4,310,000,000 pengő, with not more than 2,470,000,000 pengő at long term.⁵ The per capita foreign and domestic indebtedness of 613 pengő in 1931 was the largest in Europe, half again as large as Germany's or Austria's. Even for the years 1926-1929 the aver-

1. Office Central Royal Hongrois de Statistique, *Données de Statistique Economique, 1928-32* (Budapest, 1933), p. 9.

2. Dr. Anton Éber, *Ungarisches Wirtschafts-Jahrbuch*, Vol. 8 (Budapest, 1932), p. 322. This yearbook hereafter abbreviated as *Ung. Wirt. Jhrb.*

3. Georg Kemény, *Österreichischer Volkswirt*, September, 5, 1931, p. 1286.

4. *Idem.*, *Pester Lloyd*, January 6, 1933, p. 11.

5. *Magyar Statisztikai Szemle*, Vol. 10, No. 8 (Budapest, August 1932), p. 677.

age per capita income was only 514 pengő per annum, according to Professor Fellner's calculations, and by 1931 it had sunk to 360 pengő.¹

"The situation of the banks was satisfactory," a representative of the leading Budapest banking organization reported on May 15, 1931.² Within a few weeks, however, the banks were found to be in a highly illiquid condition, and only extensive government aid prevented wholesale insolvencies. As the League of Nations enquiry points out,³ the peculiarly intimate association of banks with industry in Hungary, and the merging of all types of banking business in the same institution, including commercial and mortgage operations, rendered the whole credit structure particularly vulnerable to weakness in any one quarter, for example, in agriculture. Within a six-year period from 1925 discounted bills increased from 651,000,000 to 2,010,000,000 pengő, mortgage loans from practically nothing to 668,000,000 pengő, while the foreign short-term obligations mounted to 823,000,000 pengő.

Meanwhile in continental Europe there was developing in the chief markets for Hungarian grain an approach to self-sufficiency which would eventually have brought the country to grief, even without a world economic depression. France succeeded by protectionist measures in raising the yield per hectare of her wheat lands from 13.9 quintals in 1924 to 17.1 quintals in 1933; Germany, during the same span, from 16.6 to 24.2 quintals.⁴ German wheat imports declined from 14,448,000 to a mere 3,000 quintals over these nine years.⁵ The consequence of European agricultural autarchy, conjoined with competition of American grains produced under revolutionary cost reductions, was a catastrophic reversal for Hungary. Both in value and volume her exports had increased far more than any other country's in the last two prosperity years, 1927 to 1929.⁶ But even at the average prices obtained for farm products from 1925 to 1927, the value of Hungarian agricultural

1. League of Nations, *Quarterly Reports on the Financial Condition of Hungary* (hereafter by the author's name): Royall Tyler, *First Quarterly Report* (January 12, 1932), p. 10.

2. *The Stock Exchange Gazette* (London), Vol. 31, p. 1139.

3. League of Nations, *Commercial Banks* (Geneva, 1934), p. 133.

4. P. N. Panaitesco, *Les contingentements dans les relations commerciales avec les pays agricoles* (Paris, 1935), p. 9.

5. *Ibid.*, p. 25.

6. Actually by 140 per cent. Cf. League of Nations, *Course and Phases of the World Economic Depression* (Geneva, 1931), p. 126.

exports declined from 936,700,000 pengő in 1929 to 920,500,000 pengő in 1930, and to 680,400,000 pengő in 1931.

In addition there was the precipitous fall in world prices, especially for agriculture, which notoriously reacts to a decline of values by maintaining production. World agricultural production on a 1925-1929 base stood at 104 in 1929, 103 in 1930 and 1931, and 102 in 1932; whereas the indices of industrial production were 114 in 1929, 101 in 1930, 86 in 1931, and 73 in 1932.¹ Inexorably the "agricultural price shears" reduced the ratio of agricultural prices to non-agricultural wholesale prices from 103.7 per cent in December, 1929, to 82 per cent in December, 1930, and 65.4 per cent in December, 1931.² The collapse of agricultural values, operating together with the decrease in physical volume of exports to autarchic countries, produced a decline in Hungarian agricultural exports, taken at their actual values, from 887,700,000 pengő in 1929 to 745,700,000 pengő in 1930 and 431,600,000 pengő in 1931, or to less than half in two years.³ The accentuation of this tendency through 1932 and its persistence through 1934 help to explain the continuance of exchange control in Hungary.

THE INTRODUCTION OF EXCHANGE CONTROL, MORATORIA, AND STANDSTILLS

The advent of exchange control is marked by three periods, the first extending from the failure of the Credit Anstalt to the bank holidays in July, 1931, the second to the middle of August, and the third to the moratorium at the end of the year.⁴ When the balance sheet of the Credit Anstalt appeared on May 8, a run was begun upon the Hungarian General Credit Bank, holding nearly a third of Hungary's 823,000,000 pengő short-term banking obligations to foreigners. Withdrawals shortly mounted to 45 per cent of the bank's liabilities. Possibly the situation was less acute than in Austria, since the General Credit Bank embraced not more than 20 per cent of the liabilities of the ten leading banks of Budapest. Even so, the Hungarian National Bank advanced its rediscount rate on June 15 from 5½ to 7 per cent and began negotiation with

1. Z. Koós, *Central European Agriculture and the Problems of Foreign Debts* (Budapest, 1934), p. 5.

2. *Ungarisches Institut für Wirtschaftsforschung*, Vol. 25, p. 56. Hereafter referred to as U. I. f. W. Cf. Fig. 15, p. 111.

3. *Ibid.*, p. 40.

4. Richard Quandt in *Ung. Wirt. Jhrb.*, Vol. 8, pp. 283-294.

foreign banks for the floating of an Emergency Loan to the Treasury. Free exchange and payments were maintained, despite a shrinkage of gold and devisen reserves from 47.9 to 39.4 per cent over the two months, as portrayed in Fig. 11, p. 103.

On July 13 came the failure of the "Danat" Bank and the declaration of bank holidays in Germany. Hungary followed suit, closing the banks until the 17th and the Stock Exchange indefinitely.¹ The first decree monopolizing the foreign exchange market and forbidding outward payments without permission of the National Bank was published on July 17. The weeks immediately following witnessed a fever heat of panic. Note circulation from the middle of July to August 7 expanded by 159,000,000 pengő to a peak for the year of 504,000,000 pengő and central bank support of institutions suffering withdrawal necessitated an expansion of its bill portfolio from 244,000,000 pengő on May 7 to 608,000,000 pengő on August 7.²

Events in mid-August, however, combined to relieve the crisis. Arrangements for an Emergency Loan, which had been going forward since the run on the General Credit Bank, came to fruition on August 14 in the formal "Paris Agreement." Through the intermediation of the Bank for International Settlements and various central banks, the Hungarian Government placed 139,000,000 pengő in Treasury Certificates on European markets, participations being 40 per cent by the French, 10 per cent each by the Swiss and Dutch, and 30 per cent by the large Hungarian banks themselves. This credit was subsequently extended at three-months intervals until its consolidation for three years in 1933.³

August 14 also saw the passage of Hungary's famous Gold Pengő Law, declaring all old debts (including bank deposits), past and future obligations to the state, and all future contracts in gold to be gold pengő debts.⁴ A supplementary decree provided that,

1. The Stock Exchange did not resume full activities until September, 1932.

2. For central bank credit and bills discounted, cf. Fig. 11, p. 103.

3. On October 18, 1933, the National Bank of Hungary agreed with the Bank for International Settlement and the central banks to pay one per cent interest and two per cent annual amortization on 119,000,000 pengő, the original loan after deducting 20,000,000 pengő for a special amortization from gold reserves. For the effect of this agreement on the Bank's balance, see Fig. 11, p. 103 and p. 171 below.

4. The Gold Pengő Law was not altogether without precedent in Hungary, for during the post-war inflation a "Savings Crown" had been introduced for debts — a sort of tabular standard aiming at stability of obligations in terms of real values.

until the end of August, the paper pengö was to be regarded as a gold pengö, and that thereafter the National Bank was to establish daily a ratio between the two. But on August 29 the Bank was relieved of this duty, and the ratio, quite naturally, has never been published, since this would be tantamount to a devaluation of the pengö while all debts remained payable in gold. The obligation of banks, particularly, to pay in gold pengö has since proved an incubus; but the bizarre legislation had immediately a beneficent effect: to secure the privilege of effective revalorization in case of currency devaluation the banks converted their cash holdings to balances with the central banks; and private persons, by the same token, redeposited their hoarded currency in the banks. Rumors on September 23 that the Bank would publish a gold-paper ratio even produced the curious phenomenon of a run *into* the banks! Doubtless the Gold Pengö Law was originally enacted in good faith. When a gold premium of one or two per cent appeared on the black market, the Bank could see no gain in alarming the public by an official acknowledgment of depreciation; and when the premia advanced to much larger percentages, the Bank lacked courage to take the fateful step, though it continued to pretend that the Law was "the principal measure for protecting the currency."¹

Another measure in mid-August was the erection of the Hungarian Guarantee Bank with a capital of 50,000,000 pengö subscribed by the government, the large banks, and industrial concerns. Its function consisted in endorsing eligible paper in order to increase general liquidity. Although it did not begin operations for another year, its foundation helped to allay the panic.

The combined effect of the Emergency Loan, the Gold Pengö Law, and the establishment of the Guarantee Bank was such that on August 17 bank deposits, which had been subject to a maximum limit on withdrawals of five per cent for July and again for August, could be liberated for domestic use. The third phase of the early history of exchange control in Hungary was characterized by the disappearance of acute panic, a reduction in credit demands on the banks, and the elaboration of a control apparatus described in subsequent pages.² Nevertheless, the contraction of business and

1. National Bank of Hungary, Reports Submitted to the Eighth Ordinary Annual Meeting (Budapest, 1932), p. 12.

2. From its maximum of 608,000,000 pengö in August, the central bank's portfolio decreased to 520,000,000 pengö on October 23, and despite the usual

production was such that, even with a nine per cent rediscount rate, Hungarian prices rose by six per cent against a two per cent rise in gold bloc countries from August through December, 1931.¹

Under the embargo on foreign payments imposed by the Devisen Decree of July 17, the National Bank continued for several months to permit payments in private debt service. Hungarian commentators agree that an outright moratorium was impossible in the summer and early autumn of 1931, because of its probable psychological effects and because of the necessity of proving to foreign creditors that the debt service spelled financial ruin. By December ruin was actually imminent. Ten leading Budapest banks had experienced a 35 per cent loss of deposits, the central bank a reduction of reserves from 43 to 25 per cent. Had it not been for the 139,000,000 pengö Emergency Loan, reserves would have disappeared completely, since they amounted to only 118,000,000 pengö at the end of 1931. After deducting the necessary cover for the note circulation, only 3,000,000 pengö could be used for debt service, while maturities in late December and early January equalled 20,000,000 pengö.² There remained only the resort to Transfer Suspension or Moratorium, a step taken on December 22 by decree that for one year all payments owing abroad on bonds and debentures should be made into a Foreign Creditors' Fund with the National Bank, which should undertake the transfer to foreign countries in devisen.³ Embraced under the Moratorium were long-term debts estimated at 2,470,000,000 pengö with an annual service estimated at 287,000,000 pengö.⁴

As for the short-term debts, Hungary did not have the advantage of Austria in connection with the Credit-Anstalt of an early private agreement with her chief banking creditors. It was not until three months after the Moratorium that the First Standstill seasonal movement, did not exceed 589,000,000 pengö at the end of the year. Note circulation decreased from 504,000,000 pengö to 352,000,000 pengö from August 7 to September 23, and to 423,000,000 pengö at the end of the year, or 46,000,000 pengö less than the figure a year previous.

1. U. I. f. W., Vol. 24, p. 124.

2. Tyler, First Quarterly Report (January 12, 1932), p. 9.

3. Hungarian National Bank, Laws and Decrees concerning the Safeguarding of Normal Conditions of Economic and Credit Life (Budapest, 1932), pp. 41-42. The League of Nations 1924 Reconstruction Loan was excepted from the Moratorium decree.

4. Cf. respectively Pester Lloyd, January 6, 1933, p. 13 and Economist, July 18, 1933, p. 75 for these estimates by Dr. Julius Walders and the League Financial Committee.

could be arranged. Reference to the curve showing the portfolio of the National Bank (p. 103) reveals the extensive aid given to commercial banks in these months; the sound appearance which their balance-sheets took on as a result probably delayed the Standstill. Furthermore, the American representatives objected to the priority of the League Loan, and attached their signatures to the agreement made by the others on March 31, 1932, only after the Hungarian default on the League Loan in July. The first Standstill, applied to debts outstanding on February 1, 1932, provided that there should be no discrimination amongst creditors; that interest should be paid by debtors into a blocked pengö account with the National Bank; and that no capital repayments should be made except by cancellation against Hungarian balances abroad. Out of a total short-term indebtedness of 1,838,000,000 pengö, the Standstill included 823,000,000 pengö.¹ We shall return later to the tortured history of the Moratorium and Standstill.

THE HISTORY OF EXCHANGE CONTROL

Regarded from the angle of the terms upon which devisen were bought and sold by the Bank, the Hungarian experience reveals four major phases. From mid-July, 1931, to the late months of 1932 a fairly literal application of official parity was attempted, any deviations assuming the aspect of evasions or specially authorized exceptions. The turn of the year 1932-33 witnessed a widespread recognition of non-par rates in the form of an enormously complex array of differential premia, a condition prevailing to December, 1935. After the introduction at this date of the scheme of "linear" premia and surcharges, control of foreign exchanges in Hungary underwent substantial simplification and reduction, culminating in the summer of 1937 in the gradual removal of the Moratorium and the complete recasting of the Standstill. The fourth phase, extending from mid-1937 to the present, involves a somewhat milder form of exchange control with effective transfer of the debt service in free exchange. Each phase is complemented by foreign-payment arrangements, through clearings, compensations and the like, of distinctive character.

The general system evolved in the first year resembled the early organization in Austria: petitions from importers for devisen

1. Magyar Statisztikai Szemle, loc. cit.

went first to certain designated banks, then to an intermediary advisory authority, and finally to the National Bank. The Union of Manufacturers, the Agricultural Institute, and the Budapest Chamber of Commerce functioned in various spheres in the intermediate capacity. A few large firms, under an arrangement resembling the Austrian "certificates," received "compensation licenses" permitting them to retain enough *devisen* to pay for imported raw materials used in exported goods; other firms were granted this privilege only *ad hoc* for certain transactions. Some exporting even at this early juncture was authorized as against frozen pengö; and also, by special dispensation of the central bank, a practice resembling the Austrian "private clearing" began to gain ground. Hungarian metal industries, for example, obtained *devisen* for imported raw materials at a 12 per cent premium from exporters of poultry, and cotton spinners derived *devisen* under similar terms from exporters of beans, seeds, poultry, and sheepskins. In October, 1932, President Éber of the Chamber of Commerce estimated these transactions for the preceding eleven months at 60,000,000 pengö.¹ But outside these officially recognized channels, apparently an even greater volume of trade had to avail itself of smuggled *devisen* at *agios* ranging from 23 to 30 per cent.² The initiation of formal *premia* and surcharges at the turn of the year 1932-1933 recognized something already approaching a *fait accompli*.

During the period of control, when the official rate was actually applied, Hungary entered into gold-par clearings with Czechoslovakia, Switzerland, Austria, France, Germany, Italy, Belgium, and Rumania, in order given, between October 31, 1931, and October 8, 1932. With the exception of the Austrian clearing, which functioned reasonably well, because the Schilling and pengö were about equally depreciated, and because the Hungarian favorable balance was covered by Austria's payments for wheat in *devisen*, none of these clearings worked satisfactorily. The overvalued pengö in the relations with other countries piled up a total adverse clearing balance of 15,000,000 pengö at the half-year and 42,000,000 pengö at the close of 1932. Furthermore, since all commodities were admitted to clearing, the Hungarian authorities complained of a loss of control over imports; and the complemen-

1. Ung. Wirt. Jhrb., Vol. 8, p. 323.

2. Österreichischer Volkswirt, Vol. 27, p. 227.

tary device of direct barter or "compensation" occasionally resorted to, with its forced day-to-day balancing of visible exports and imports — and only visible items could be admitted — served rather to restrict than to promote trade, at least in comparison with clearing.

The inadequacy of *devisen* supplies for industrial raw materials at the Bank's official parity rate and the incubus which this rate imposed upon Hungarian agricultural exports began shortly to force an extension and regularizing of transactions at something approaching real equilibrium rates. On December 1, 1932, formally marking the beginning of the second phase of exchange control in Hungary, a "Compensation Bureau" was established to determine the premia to be allowed exporters for each commodity and country. The Ministry of Commerce administered the "Devisen Fund" which arose from exchange surrendered by exporters, and which was allocated to different import groups at various surcharge rates. To receive rations of *devisen* from this fund, importers had to sign a pledge not to raise domestic prices, despite the surcharges imposed upon them. In February, 1933, a "Foreign Trade Commission," representing the various Ministries and the Bank, and a "Foreign Trade Office" began their advisory functions, attempting to encourage exports to countries without exchange control. So far as can be determined from published information,¹ the average premia and surcharges for the first ten months (to September 30, 1933) were 13.4 and 16.9 per cent; by January, 1934, the averages to date stood at 17.9 and 22.9 per cent, and by January 1935 at 23.2 and 27 per cent. During the course of 1935

1. Anything approaching a true account of the *agios* applied during the 1933-35 system of differential rates would be nearly impossible, since rates were generally *ad hoc* and each transaction would have to be considered separately. No doubt the Hungarian authorities themselves desired to reveal as little as possible regarding the *agios*, since, in the first place, it was an open secret that the rates depended as much upon the political or commercial importance, on the obdurateness or the unscrupulousness of particular traders, as upon the character of the trade; and since, in the second place, the *pengő* depreciation was itself an embarrassing fact. Even in the reports of the League of Nations representative in Hungary (Tyler, Eighth Quarterly Report, November 8, 1933, p. 12) the progressive raising of *agios* was partly concealed by publishing only inclusive averages from the date of their institution. After the multiple system was formally abandoned, monthly averages were indeed given retrospectively (Tyler, Seventeenth Quarterly Report, January 15, 1936, p. 8), but even so they did not distinguish rates by major categories, such as clearing, compensation, and free *devisen*, nor, of course, by particular countries and commodities.

the premia rose and the surcharges declined to bring them to the same level at 25 per cent when the differential system was terminated.

Except for the Austrian clearing, which persisted on the old basis, premia and surcharges applied specifically to the *clearings* came in 1935 to be fairly uniformly 22 per cent for finished products, 20 per cent on semi-finished goods, and 18 per cent on raw materials on the export side, and 18, 20, and 22 per cent respectively for these three categories on the import side. This uniformity arose from the insistence of each foreign country that it be subjected to no heavier surcharge than its competitors on sales in the Hungarian market; but the "uniformity" is limited to ordinary commodities in the clearings only, and the many special commodity categories and special combinations of rates made it largely illusory, as we shall presently see. The resulting rates seldom completely expressed the real pengő depreciation, and during the years 1933-1935, save for two notable instances, Hungary had adverse balances in the clearings. Indeed, in the case of Austria, the high pengő rate, coupled with the temptation to draw artificially high bills of lading on the part of Hungarian importers and Austrian exporters alike, caused unused pengő balances to pile up in Budapest even early in 1934. The progressive accumulation of these sums throughout that year and the next finally required the abolition of par-clearing in favor of premia and surcharges on exports and imports, as a part of the general reform of December, 1935. The clearing with Germany, after the introduction of the "New Plan" there in the autumn of 1934, and the Italian clearing, after the launching of the Ethiopian campaign, were exceptional in showing favorable balances for Hungary.

During the second period of exchange-control history, three clearings which had functioned poorly caused resort to the cruder device of compensation, with Czechoslovakia, Rumania, and Bulgaria. Hungarian authorities explain that the devaluation of the Czech Krone on February 19, 1934, not being followed by any significant rise of prices, made the existing clearing untenable. Instead of revising the rates through premia and surcharges, the Hungarians went over to the daily *quid pro quo* of a compensation system with Czechoslovakia on July 12, 1934. Trade with Jugoslavia had been on this basis since the institution of exchange control; and the addition of Rumania somewhat later completed

the countries of the Little Entente. Clearing with Bulgaria was terminated in favor of compensation on July 1, 1934. Compensation with the Entente countries was carried on through subsidiary companies of the Hungarian General Credit Bank with offices in Prag, Bucharest and Belgrade, standing in a correspondent relation to the home office. Besides advising traders as to the possibilities of arranging barter and interpreting the maze of regulations, quotas, and special conditions, it is significant that these companies did a real banking business in financing exports. The maintenance of running accounts obviated the necessity of a strict balancing for each separate transaction, and curiously in effect rehabilitated clearing under private auspices. All transactions required, of course, the consent of the National Bank, which imposed certain norms, *e.g.*, that trade with Jugoslavia should approximate a 1:1 ratio of exports and imports, or that Rumanian imports should consist of 50 per cent of wood, 17 per cent of fuel, 33 per cent of oil. Officials of the General Credit Bank maintain that profits on compensation do not exceed what commissions would be under free payments; outsiders, however, regard the business as very lucrative, particularly because of special rates obtained on "additional" exports.

The distinguishing characteristic of the second period extending through 1933, 1934, and 1935 is that literally thousands of pengö rates came into being; for, besides the clearing premia and surcharges and the decidedly *ad hoc* rates authorized for compensations, there were special rates applicable for particular categories of goods, unique rates on "additional" exports, the use of Sperrpengö at their distinctive quotations, to say nothing of differences arising merely from considerations given one trader in comparison with the next. Importing was less complex than exporting, but surcharges differed between large commodity categories and between groups of countries. Imports from Germany at one time under the clearing paid an 18 per cent surcharge for raw materials, 22 per cent for half-finished goods, and 25 per cent for finished goods; and about the same rates prevailed for other clearing countries except Austria, for which the old gold parity was maintained. Payments in devisen to free-exchange countries bore a fairly uniform 40 per cent surcharge at the same juncture, though dollars cost 35 per cent and Swiss francs only 25 per cent more than par.

Foodstuffs, however, paid uniformly a 60 per cent import surcharge; they were "charged what the traffic would bear."¹

The multiple rate scheme had been put into operation on the theory that in Hungary's particular situation price discrimination would yield a larger return than uniformity: to allow such export premia as were "necessary" with the depressed world market for agricultural products would be to give greater premia than many other classes of Hungarian exports required. The theory underlying this policy is subject to later enquiry; here we observe merely that, with a change in underlying conditions, the theory was abandoned. Most significant was the world-wide revival in the price of agricultural products and a progressive closing of the "price shears" between agriculture and industry.² For Hungary this meant an increased inflow of foreign devisa and a steadying of

1. (Cf. "Das ungarische Währungssystem," Die Börse, August 22, 1935.) Exports revealed unending differentiation of rates. Being a peculiarly "exportable" commodity, goose liver paid no premia. Living fish brought a 9 per cent premium on 70 per cent of the devisa received from free-payment countries, with no premium, i. e., the official rate, on the remaining devisa surrendered. Paprika brought a 20 per cent premium on 15 per cent of the devisa, if exported to France, a 16 per cent premium on 100 per cent of the devisa, if exported to Germany. For seeds exported to Germany no premium was paid, because of the high prices obtained; but the exporter had to couple these sales with sales to other countries where the official rate of the Hungarian National Bank produced losses.

With the further complication of special rates for "additional" exports, the premia assumed for the layman something like the appearance of astronomical physics. Certain standard articles in the additional export category followed general rules according to country of destination; for example, salami sold to Italy fetched a 20 per cent premium, to Holland and to Albania, 35 per cent. Exports of fat, however, commanded an 18 per cent premium if sold to Germany; for England, a 50 per cent premium was paid on the 40 per cent devisa receipts which had to be surrendered to the National Bank, while 60 per cent of the proceeds could be taken by the exporter in discounted Sperrpengö and redeemed at par. Further complications were produced by the existence of special export subsidies. Exports of processed foodstuffs might secure premia in this fashion: a 35 per cent premium on 20 per cent of the price in devisa under the "raw material" subsidy, offsetting losses on imported raw materials; a 60 per cent premium on 50 per cent of the price in devisa under the "groceries syndicate" quota, offsetting the general handicap of high costs of production in Hungary; finally, if the export was "additional," the remaining 30 per cent of the price might be taken in Sperrpengö, thus supposedly extending sales beyond the quantity "naturally" absorbed by foreign markets. To attempt a measure of the effects of such procedures as these upon Hungarian trade would resemble an attempt at a statistical survey of the effects produced by stirring an ant-hill with a stick.

2. Cf. p. 111 below.

pengő quotations abroad.¹ The encouragement from these gains on the positive side and the nuisance and uncertainty on the negative side combined to move the Hungarian authorities to a simplification of rates and a liberalizing of payment arrangements during late November and December, 1935, the beginning of the third historical phase of exchange control in that country.

The simplified scheme involved five main categories as follows:

Category	Premia for Exports	Surcharges for Imports
1. Clearing countries except Austria.....	38%	41%
2. Free exchange countries	50%	53%
3. "Devisen-compensation" as applied to Germany	18%	19%
4. Austria.....	10%	13%
5. Compensation countries	<i>ad hoc</i>	<i>ad hoc</i>

The rates which may be taken as basic are the 50 and 53 per cent premia and surcharges on free currencies, approximately the premia paid for gold in pengő currently. For clearing countries, including after the middle of January, 1936, Belgium, France, Switzerland, and Turkey (besides Austria), the 38 and 41 per cent rates represent a much closer approach to the market relation than the 18-25 per cent rates previously applied, the persisting margin below free-exchange premia and surcharges being explained by the restricted applicability and delays in realization of clearing balances. While the rates under clearing and free-exchange categories were approximately justified, the premia and surcharges on Austria were undoubtedly too low, as the subsequent accumulation of Hungarian debts demonstrated. The figure for Austria was arrived at by deducting from the 38-41 per cent rates on clearing countries the 28 per cent agio on free devisen which had established itself in Austria after *de facto* devaluation. But the resulting 10-13 per cent premium and surcharge did not sufficiently recognize the depreciation of the pengő; for since the end of 1933, when pengő and Schilling depreciations were approximately equal, the index of Hungarian wholesale prices indicating the course of export prices had risen by 18 per cent, whereas the Austrian index, even of sensitive prices, had advanced by only two per cent.² As for the Mark, which had depreciated by about one-fourth as against a

1. Cf. pp. 115-116 below.

2. Cf. Fig. 12, p. 104

one-third depreciation of the pengő, the Hungarian premium and surcharges of 18 and 19 per cent seem to be approximately correct, though an overvaluation of the Mark later developed from the retention of these rates. A new term, "Devisenkompensation," which made its appearance at this juncture, coupled with the announcement that the Hungarian and German banks were to set the exchange rate daily, created the impression that something approaching a free rate was being introduced. Actually, since the rates were not so adjusted, devisen compensation proved to be merely another name for clearing. It came to be known also that the 18-19 per cent rates for Germany were quietly departed from for certain commodities.¹ However, it was not the clearing rates, but rather the policy of Germany in systematically exploiting the clearings, which lay behind a balance of 25,000,000 pengő in Hungary's favor by June, 1936.² After eight months more of "favorable" trade balance, the Hungarian authorities are said to have threatened in August, 1937, to sell their Mark balances at any price necessary to clear the market. Instead there was introduced the "Loro system," providing that, beyond a certain accumulation of Mark balances, the Reichsbank's Hungarian account was to accept payments only if equal payments for German exports were made into the German account in Budapest.³

Despite undoubted benefits to the volume of foreign trade attending the rate simplifications of early 1936,⁴ Hungary made

1. Basler Nachrichten, January 11, 1938.

2. Economist, June 20, 1936, p. 673.

3. Georg Káldor, Georg Kemény, Josef Vágo, Die Volkswirtschaft Ungarns 1938 (Budapest, 1939), pp. 192-193. Hereafter referred to as Volkswirtschaft, 1938.

4. The rate simplifications were far from being as thoroughgoing, however, as might be inferred from the schedule given on p. 98. It has never been divulged to what extent the simple scheme was departed from, but an indication may be obtained from the following data supplied to me by the National Bank of Hungary for one sample commodity on a given day.

PREMIA GRANTED ON THE EXPORTS OF EGGS ON MAY 15, 1936

In the French clearing.....	20 per cent
In the Italian clearing.....	17.5 per cent
In the Swiss clearing.....	22 per cent
In compensation transactions with Czechoslovakia.....	34-35 per cent
In "free" trade.....	38 per cent
In the case of additional exports.....	85-88 per cent

The consensus amongst competent observers seems to have been that there was nevertheless a substantial amount of uniformity, after January, 1936, and that it had a salutary effect on Hungarian trade.

slight progress during the year on other methods of simplifying or reducing exchange control, largely because of uncertainties preceding the gold-bloc devaluations. Though other members of the Little Entente — Czechoslovakia and Rumania — remained on a mixed scheme of clearing and compensation, Jugoslavia was put upon a “devisen compensation” or clearing basis on January 15, 1936, with uniform premia and surcharges of 45 and 46.5 per cent. The term was also applied to an arrangement with Italy of November 19, 1935, though actually it was a complex mosaic of varying systems, Hungarian grain exports being applied to the amortization of her commercial debts, certain commodities being automatically, others by permission, admitted to clearing, without public announcement of any uniform rates of exchange.¹ Trade with France during the first three quarters of 1936 proceeded on a makeshift basis over the old clearing modified to provide the application of 75 per cent of Hungarian export proceeds to commercial debts as a *quid pro quo* for a 30 per cent reduction in the principal by French creditors. During the same period Hungary was obliged to devote two-thirds of her export proceeds with the Swiss to the amortization of commercial debts. The substitution of a payment for a clearing agreement with Belgium on July 15, 1936, marked the first of several steps toward a slight relaxation of exchange control during the ensuing year.

The gold-bloc devaluations in late September, 1936, interrupted current trading until, after prolonged negotiations, the Hungarians were able to strike agreements with clearing partners as to the exchange rates to be applied. Had the devaluations been mechanically countered by an equal devaluation of the pengő in the form of premia and surcharges, these agios on foreign currencies would have had to be advanced very sharply. By way of illustration, a foreign devaluation of one-third on a currency carrying a 40 per cent agio in Budapest would have required a 210 per cent agio.² In point of fact, the agios were advanced much less — for France and Switzerland from 38 and 41 per cent to 50 and 53 per cent, for Czechoslovakia from 40 and 43 per cent to 45 and 46.5 per cent, and for Italy, where the rates had not previously been

1. Tyler, Seventeenth Quarterly Report (January 15, 1937), p. 10.

2. To offset a one-third devaluation abroad the pengő would have to be devalued by a reciprocal advance of agios; thus, $3/2 \times 140$ per cent = 210 per cent.

announced, from a lower level to 40 and 43 per cent at first and to 47 and 48 per cent later. The relatively high level of domestic prices in the gold-bloc countries previous to devaluation makes it appear improbable that a full meeting of their exchange-rate reductions was necessary. But it also seems improbable that the Hungarians sufficiently devalued the pengő in these clearing relations, for in the year following exports to the five countries involved dropped by 16 per cent in relative share of total Hungarian exports, while imports rose by five per cent.

When the Swiss clearing agreement expired on March 31, 1937, transition measures provided for the liquidation of Hungarian debts, and a payment agreement providing for a free account in the Hungarian National Bank, with the settlement of balances in free devisen, supplanted the old clearings. On April 19 clearing came to an end with France, payments being carried on similarly by free accounts in the two national banks and by settlement of balances in free devisen. Two further steps in the liberalization of trade appeared in the transfer of Bulgaria and Turkey on April 20 and July 1 from the category of compensating to clearing countries. Thus the year and a half of strong economic revival in Hungary from early 1936 to mid-1937 witnessed the institution of devisen payments with Belgium, France, and Switzerland, the abandonment of barter for clearing with Rumania, Bulgaria and Turkey, and, as we shall see presently, the culmination of liberalizing efforts, after the debt regulation in the summer of 1937, in the resumption of free-exchange debt service.

The fourth epoch in Hungarian exchange control, characterized by effective transfer of the debt service but also by a decline in volume of production from the mid-1937 peak, has brought only one measure which could be considered as a continuation of the more liberal exchange policy begun in the third period. On January 15, 1939, the depreciation of pengő currency was recognized in a formal way in the "writing up" of National Bank gold and devisen reserves by 50 per cent, corresponding to premia paid on free devisen. In relations with foreign countries, nearly 'all the foreign trade agreements of the previous period have been renewed without noteworthy change.¹

1. Clearing with Italy, which functioned poorly in 1937 because of Italian measures to exclude Hungarian cattle and the requirement that a portion of Hungary's wheat exports be paid for in free devisen, has repeatedly been the subject of prolonged negotiations, yielding nothing but an extension,

ECONOMIC DEVELOPMENTS UNDER EXCHANGE CONTROL

A. *Money, Production, Prices, and Exchange Rates.*

The financial and economic history of Hungary under exchange control is dominated by the successive phases of world depression and recovery. As a symbol of these phases, we take four major movements in Hungarian wholesale prices, represented in Figures 11 and 12:¹ (1) from July to the year-end 1931, relative stability in wholesale prices in the face of sharply declining prices abroad, reflecting the financial crisis in Hungary and the rapid depreciation of the pengő; (2) from January, 1932, to September, 1933, gradual decline in wholesale prices attending agricultural depression and the collapse of industrial production; (3) from the last quarter of 1933 to the third quarter of 1934, a rise in Hungarian wholesale prices deriving chiefly from the improvement in world agricultural prices and economic recovery generally; (4) after the closing quar-
of the *status quo* to June, 1939. (Volkswirtschaft, 1938, p. 194.) The Rumanian clearing agreement had also to be modified as a consequence of Rumanian protests against the sale of lei balances by Budapest banks at what was considered to be such high rates as to penalize Rumanian exports. An agreement valid until March 31, 1939, fixed the rate at 26.5-27 lei to the pengő, increased the Rumanian Bank's free balance with the Hungarian National Bank, and extended the petroleum quota — for which Hungary had always to pay in free devisen — from 30 per cent to 40 per cent. (Volkswirtschaft, 1938, p. 195. Hungarians have continually protested that the requirement of payment in devisen is onerous.) By far the most important change in the foreign trade situation has been the absorption of Austria and Czechoslovakia into Germany. By the Hungarian-German agreement of May 7, 1938, all Austrian import quotas were transferred to Germany. The establishment of the Schilling-Mark relation at 3:2, with its consequent imposition of the Mark overvaluation on Ostmark trade, has quite naturally raised Hungarian exports and decreased imports, the former from 17 per cent to 18 per cent of total Hungarian exports, the latter from 18 per cent to 11 per cent of total Hungarian imports, or a 35 per cent decline from 1937 to 1938. Complaints are especially noticeable in Hungary because of the high price and sharp reduction of imports of Austrian wood. (I. Ferenczi, "Ungarns Handelspolitik," Ung. Wirt. Jhrb., Vol. 14, pp. 175-177.)

1. Pp. 103 and 104. For comparative purposes the index of sensitive prices of the Hungarian Institute for Economic Research has been reproduced in Fig. 12. While this index does show a number of short, sharp movements, it fails to show as satisfactorily as the wholesale price index the larger changes in depression and recovery. The Institute may have excluded agricultural and industrial staples from its sensitive index because of the existence of monopolies or controls; but these elements were overridden by cyclical forces, according to the evidence of the wholesale index, which does include such staples. Prices included in the sensitive index are: cowhides, calfskin, tallow, beefgut, bones, rapeseed oil, muslin unbleached and prints, iron wire, scrap-iron, brown coal.

MONEY, PRICES, AND PRODUCTION IN HUNGARY, 1931-1939. *Logarithmic scale; monetary series in million pengő*

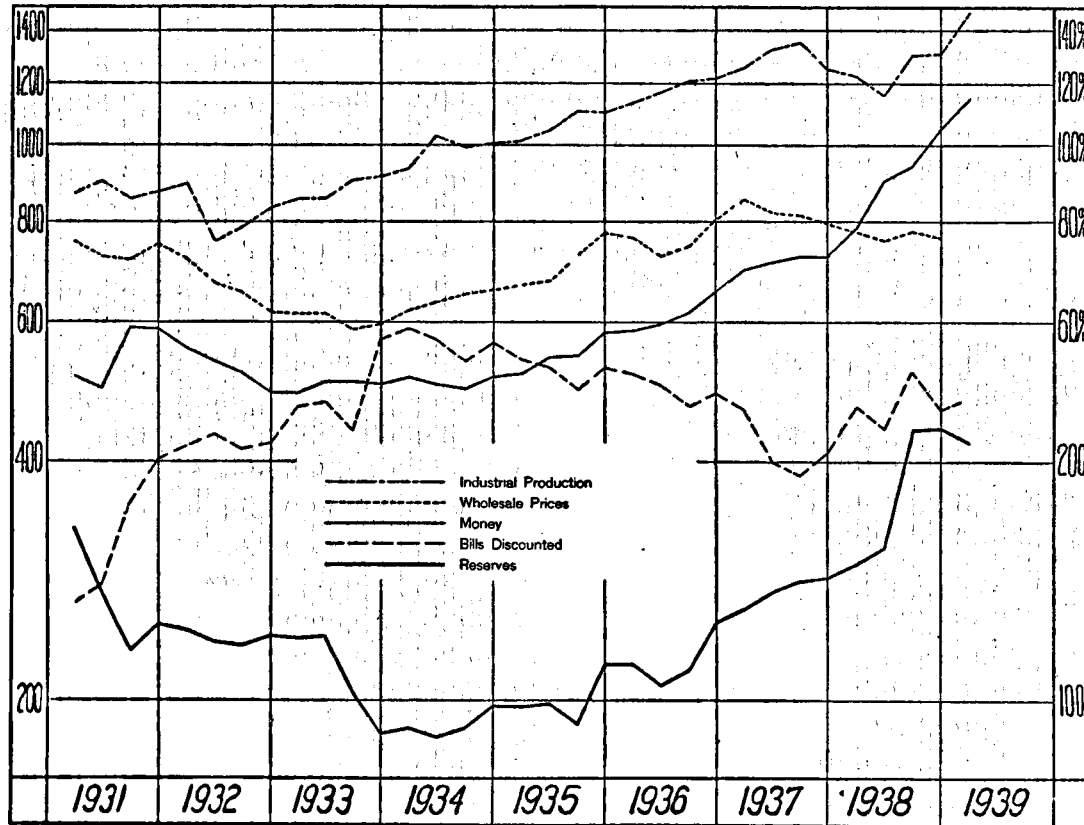


FIG. 11.* Left-hand scale: money, and bills discounted. Right-hand scale, lower half: central bank reserves, upper half: percentages for the indices of production, and prices. Index of production: 1929=100. Index of wholesale prices: 1925-1927=100. * For data and sources, see pp. 171-175.

HUNGARIAN, AUSTRIAN, AND BRITISH PRICE INDICES
(1925-1927=100)

Hungarian Sensitive
 Austrian Sensitive
 Hungarian Wholesale
 British Wholesale (Gold)

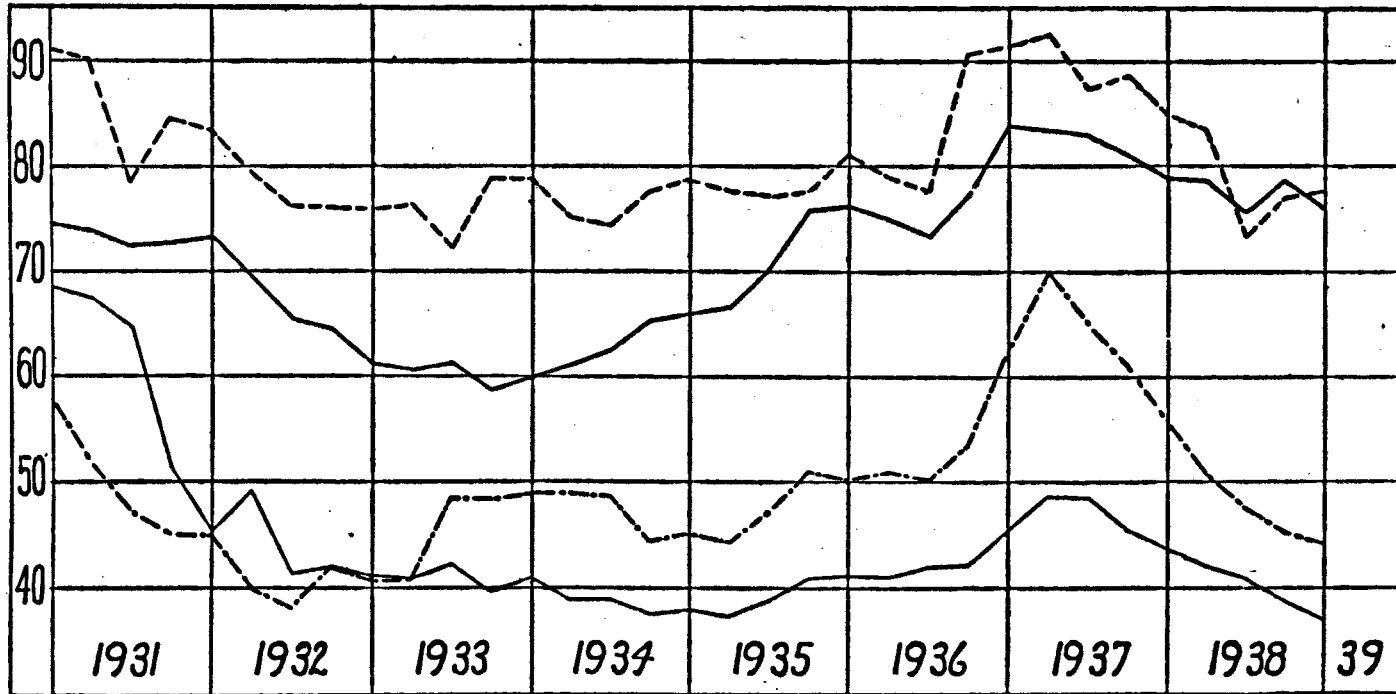


FIG. 12*

* For data and sources, see pp. 77-80, 173-175.

ter of 1937, a fall and indecisive rise in prices accompanying the set-back and recovery of the last year and a half.

The incisive action taken in 1931 by the Central Corporation of Banking Companies and the central bank in rescuing commercial banks from the consequences of capital withdrawals preserved banking liquidity at the cost of the monetary standard. Despite a rediscount rate of nine per cent in force until September 10 and eight per cent during the rest of 1931, central bank credit increased from 500,000,000 to 600,000,000 pengő and bills discounted from 275,000,000 to 400,000,000 pengő during the second half year. Part of the increase in money supply was dissipated into hoards and part merely provided for the additional requirements of a liquidation crisis; as a result the index of wholesale prices remained stationary. Meanwhile, however, sterling-bloc devaluation and deflation in other countries significant for Hungarian trade — Czechoslovakia, Germany, and Switzerland — left the pengő “high and dry” in a situation of *relative* inflation. Fig. 12 shows a fall from May to December in English wholesale prices on a gold basis from 66 to 44 per cent. The premia on gold in the free Budapest market, as shown in Fig. 13, moved reciprocally, except for the sudden spurt in November, to the British price index. At the same time, black market quotations on gold currencies such as the dollar showed approximately the same movement as the price of bullion.¹ International price comparisons and gold-currency premia indicate a one-third depreciation of the pengő by the close of 1931.

Even during these first few months of exchange control, the maintenance of the old pengő parity began to entail certain disadvantages which became chronic maladies of the system. For example, the 1931 wheat harvest, chief staple of Hungarian export, was marketed abroad at a total value of 40,000,000 pengő in comparison with 42,000,000 pengő for the 1930 harvest, despite a 50 per cent increase in physical quantities sold.² A fall of 14 per cent in the price of Hungarian wheat on Hamburg and Liverpool markets accounts for a small share of this discrepancy, but much the larger share must be ascribed to the penalty on exports involved in the low official price of foreign currencies. In the second place, we

1. E.g. in late December the dollar (old par=5.71 pengő) was quoted at 8.3 — 8.5 pengő, i.e. at a 47 per cent premium, while gold sold at a 53 per cent premium.

2. U. I. f. W., Vol. 41, p. 90.

INDICATORS OF THE FOREIGN VALUE OF THE PENGÖ

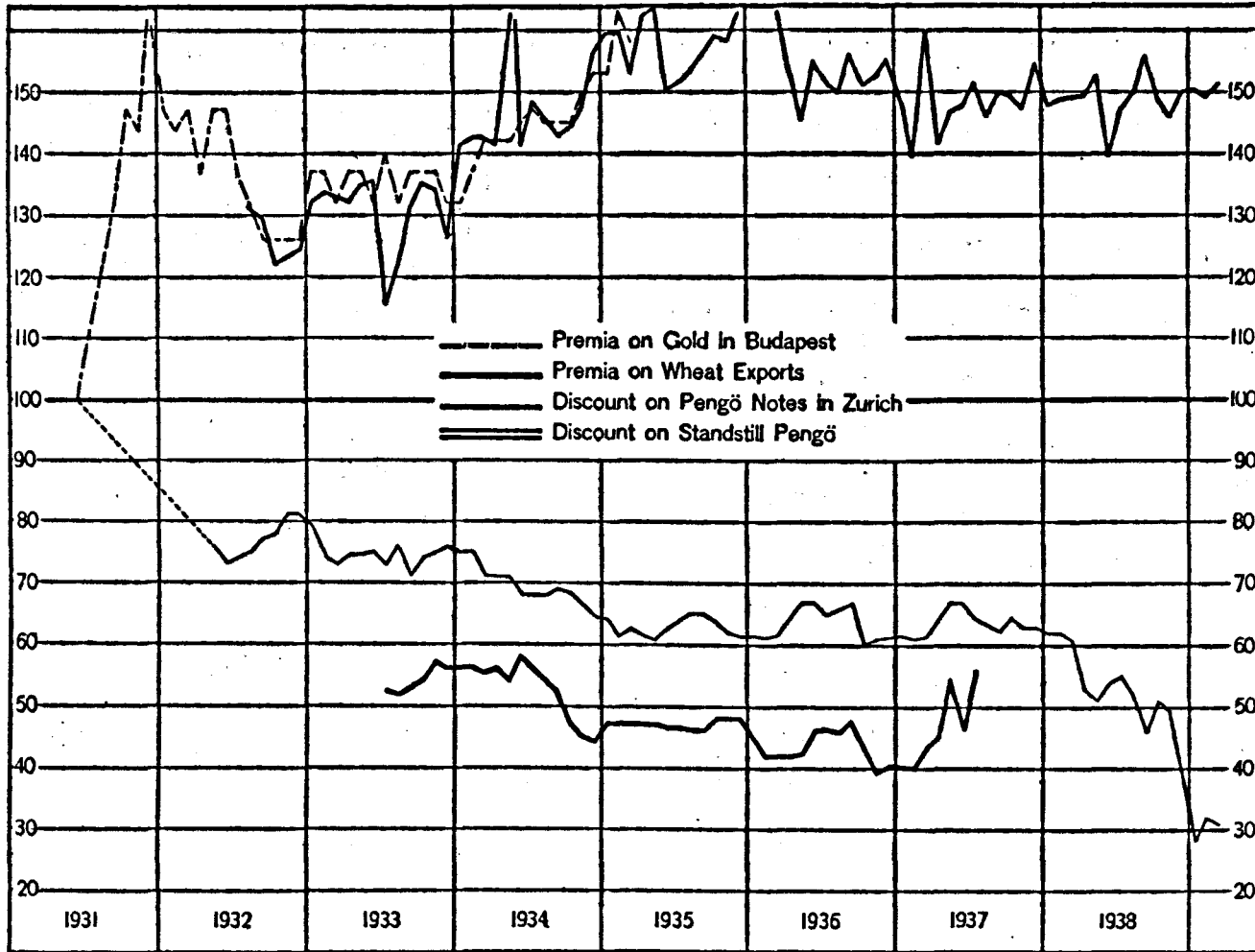


FIG. 13* * For data and sources, see pp. 150, 176-178, 182-184.

observe how the limited allocation of import devisen afforded to certain industries a degree of protection from foreign competition exceeding that which resulted from protective tariffs alone. The cotton textile and coal industries began to experience boom conditions, and the stimulus spread to nearly all cartelized industries in

HUNGARIAN FOREIGN TRADE
VALUE IN MILLIONS OF PENGÖ BY QUARTERS

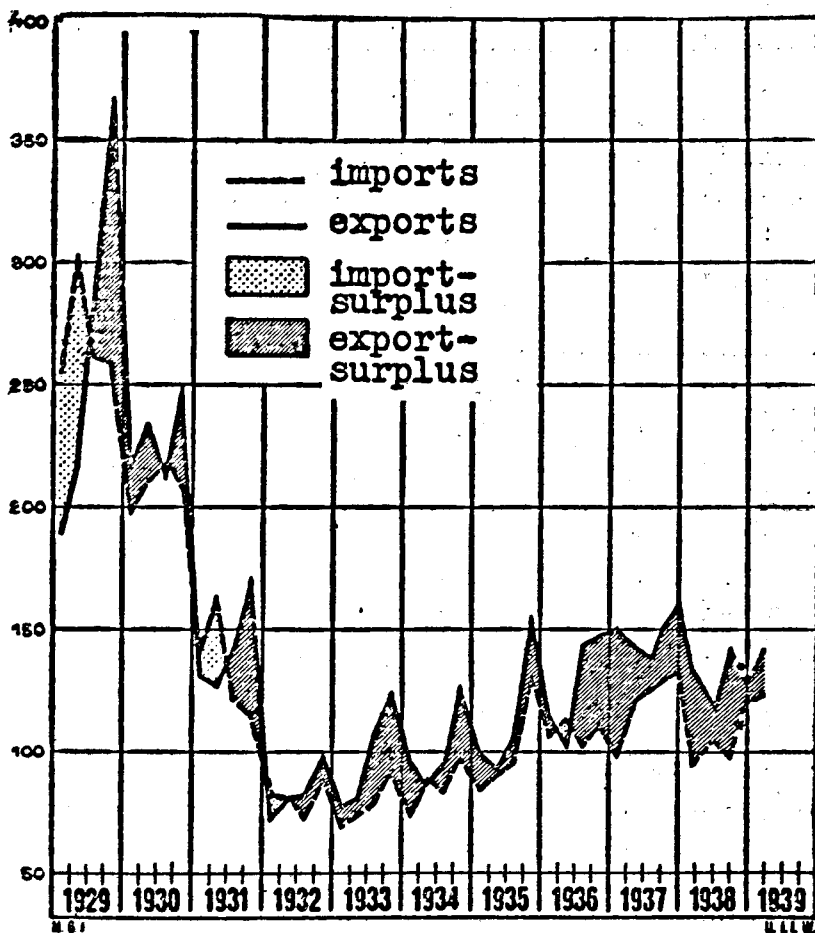


FIG. 14*

* For data and sources, see p. 179.

the early stages of exchange control. For those industries not possessing certificates enabling them to retain export devisen for the purchase of raw materials, the National Bank's key for allocating exchange caused severe shortages of raw materials; and this came to be the third main source of economic difficulty.

Partly as a consequence of declining world prices for agricultural products, partly because of the pengö penalty on exportation, and partly from the scarcity of raw materials, the Hungarian excess of exports fell from 195,600,000 pengö in 1930 to 157,900,000 pengö in 1931, the third year of catastrophic decline but not yet the lowest point, as shown in Fig. 14. The export surplus in 1931 thus approximated not more than one-half the estimated annual debt service of 300,000,000 pengö. It is difficult to imagine a monetary policy sufficiently deflationary to have developed the requisite surplus. Exchange control had been practically unavoidable because of capital flight; and moratorium — decreed on December 22 — was similarly inevitable because of the impossible burden of debt service.

The moratorium marks an end of the crisis phase of depression and the beginning of nearly two years of deflation, financial liquidation and economic stagnation. From its panic level of 170 per cent, reached during the preceding month, the Budapest price of gold came in January, 1932, to assume a level slightly under 150 per cent, which persisted for the next half-year. From Fig. 12 it will be seen that Hungarian sensitive and wholesale prices fell as rapidly as the Austrian sensitive price index and even more than British wholesale prices on a gold basis. Pengö depreciation and the loss of central bank reserves came to a definite halt. Although the National Bank increased its portfolio slightly to the mid-year, total central bank credit (notes and deposits) decreased. The decline in the index of industrial production in these months undoubtedly reflects the world depression and, more particularly, the low levels of agricultural prices and the poor harvest of 1931;¹ but Hungarian commentators ascribed part of the difficulty to inadequate allocations of import devisen and a shortage of industrial raw materials.

The isolation of exchange control as peculiarly responsible for the throttling of industrial production in the first half of 1931 has some justification, inasmuch as the upturn in the second half of the year was accompanied, as we have already noted, by increasing departures from the official pengö prices. From the angle of general monetary policy, however, the second half of 1932 was characterized by an intensification rather than any lessening of credit restriction and liquidation. Bank rate was indeed reduced four times, on April 18 to six per cent, on July 1 to five per cent, and on

1. Cf. p. 180.

October 18 to $4\frac{1}{2}$ per cent; but bills discounted maintained their former level and central bank credit shrank to 500,000,000 pengö in comparison with nearly 600,000,000 pengö a year earlier. However this development may be judged for its effect upon the domestic economy, it strengthened the foreign position of the pengö. Hungarian wholesale prices continued downward in the second half-year, while British wholesale prices, indicative of price movements in countries not under exchange control, ceased falling altogether. Gold premia in Budapest and the Zurich notation on pengö notes moved reciprocally to one another and were virtually consistent in showing a reduction in pengö depreciation from somewhat less than one-third to approximately one-fourth in the course of the year, as may be seen from Fig. 13.¹ Despite the narrowness of the gold and pengö-note markets, their mutual consistency and their closeness to two other indices of pengö depreciation examined later — the premia on wheat, and the discounts on Standstill pengö — seem to indicate that they were fairly reliable indicators of the foreign value of the pengö.

The first three quarters of 1933 found the Hungarian economy "bumping along the bottom" in the final stage of depression. Under the combined influences of depression, exchange control, quotas and tariffs, exports and imports came to their lowest ebb in the first quarter of 1933 at 26 per cent and 23 per cent of their 1925-27 values. Dominated by the world prices for agricultural products, the index of wholesale prices shows the trough of depression, reaching its minimum in September at 58 (1925-27 = 100) in comparison with 71 at the initiation of exchange control in August, 1931. Although the government instituted numerous measures to counteract deflation — borrowing 15,000,000 pengö from the Foreign Creditors' Fund, fostering the foundation of an "Institute for Industrial Rationalization" with an initial 15,000,000 pengö capital for immediate undertakings, intermediating in 25,000,000 pengö of

1. Both the Budapest gold market and the Zurich market for pengö notes were somewhat narrow and artificial. As for the former, gold could not legally be sent out of the country, and its sole legal use consisted in its serving as a liquidity or hoarding medium. The Zurich market for pengö notes existed chiefly by reason of the fact that, unlike the German authorities, the Hungarians did not attempt to interfere with reimportation of the notes. The supply came from smuggling out currency, chiefly for the purpose of repatriating Hungarian securities (cf. p. 158 below; Tyler, *Twenty-third Quarterly Report*, July 15, 1937, p. 12), while the demand came from travelers to Hungary.

new credits by the Central Banking Corporation to agriculture — the total of central-bank credit nevertheless remained constant throughout the year at 500,000,000 pengő.¹ The year 1933 also shows a remarkable constancy in indices of the foreign value of pengő currency: quotations on the Budapest free gold market hovered about a premium of 35 per cent, and pengő notes sold on the Zurich market at a discount of about 25 per cent, the slightly more favorable prices in the latter market being easily accounted for by large profits made in bond repatriations financed through smuggling out pengő notes.²

The recovery of industrial production beginning in the third quarter of 1932 and carrying forward steadily throughout 1933 (the seasonally adjusted index rose from 75.6 to 91.3 per cent) was not only exceptional in the generally adverse conjuncture, but actually anomalous and artificial. Had exchange control operated in a "pure" form and in isolation, the official rate on foreign currencies would have entailed low yields on agricultural exports — such, indeed, as were actually realized — but it would have exposed industrial production for the home market to devastating foreign competition. Agios over the official rates, introduced for dealings in devisen late in 1932 and extended to clearings during the following year, averaged less than half the 35 per cent premium on gold; they reduced but fell far short of eliminating the bonus to importation. But exchange control did not operate in isolation; beside the ordinary import tariffs, an extensive system of import prohibitions and quotas protected industry at the cost of agriculture. According to the League's Representative in Hungary, by April, 1933, import licenses covered 86 per cent of the total.³

1. The sudden increase of bills discounted in the last quarter of 1933, as observed in Fig. 1, represents no increase of loans; in conjunction with an agreement on October 18 between the Hungarian National Bank and the Bank for International Settlements regarding the consolidation of the emergency credit secured in the summer of 1931, the National Bank had returned to it 126,000,000 pengő of discounted bills formerly in the hands of the European central banks which had granted the loan. At the same time 17,800,000 pengő was transferred from gold and devisen reserves to a special amortization account. Cf. U. I. f. W., Vol. 22, p. 19 and Tyler, Ninth Quarterly Report (December 30, 1933), p. 7.

2. Cf. p. 158 below.

3. The percentage of imports subject to license in April, 1933, was given euphemistically in terms of 1930 imports! Tyler, Sixth Quarterly Report (April 26, 1933), p. 16. This percentage (44.5) for 1930 imports equals 86 per cent of 1933 import values.

Furthermore, industrial cartels undoubtedly fared much better than unorganized and usually smaller competitive industries in securing certificates for the retention of devisen and in obtaining allocations for raw material imports. To offset some of these buttressing forces on monopoly price, in December, 1932, attending the official introduction of agios on devisen, importers had to give a written pledge not to raise prices; but in a period of generally falling prices, such a measure would of course be purely nugatory. Furthermore, a decree of January 7, 1932, established a Price Fixing

AGRICULTURAL PRICE-SHEARS
(1924-27=100)

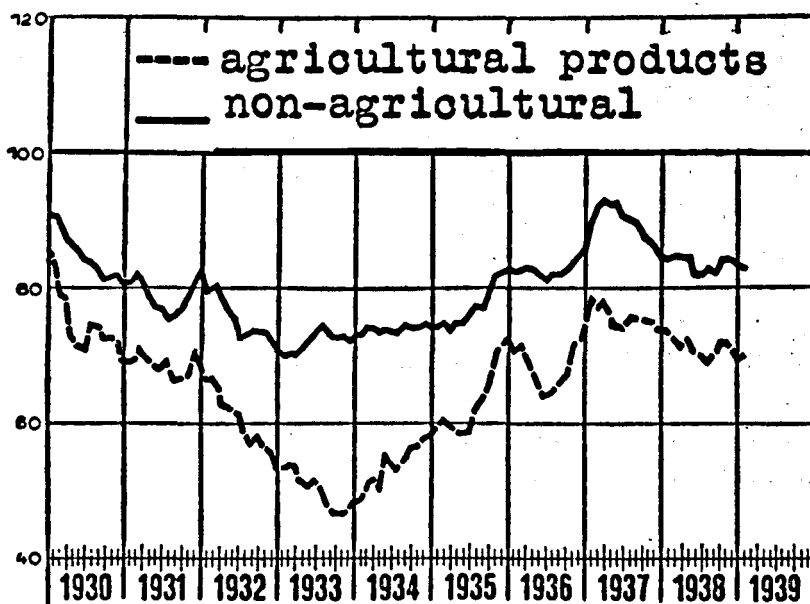


FIG. 15*

* U. I. f. W., Vol. 41, p. 72.

Commission; but the wording of the decree created the impression that 1931 price relations were to be taken as "normal."¹ Another decree on January 23, 1933, made explicit a cost-of-production test of justified price, apparently without avail.

The one fact of overwhelming importance to the Hungarian economy during the whole period of depression was the opening of the "agricultural price shears," i.e. the decline of agricultural

1. Stefan Varga, "Probleme der Preispolitik," Pester Lloyd, January, 1934.

relatively to industrial prices depicted in Fig. 15. Under the artificial maintenance of cartel prices through tariffs, quotas, and exchange control on the other side, their decline being worsened by the penalty on exports from the official exchange rate and the throttling of active balances with clearing partners, the price disparity between industry and agriculture came in the last phases of depression to be the greatest in Europe.¹ Since industrial production accounts for a share of the national income not exceeding one-fourth, these relative handicaps laid upon agriculture must be charged with grave responsibility, quite aside from the inevitable workings of the world agricultural situation, for the 40 per cent shrinkage of Hungarian national income in the depression.²

Economists who rely upon each country's combatting depression for itself by means of an expansionist monetary policy may well consider the case of Hungary. In the first place, Hungary's chief difficulty was not less than full employment, but low international values upon her products. Employment statistics for agriculture show a reduction in unemployment from 1935 to 1938 from 10½ to 4 per cent; the reduction is ascribed,³ however, even in these years of strong recovery in Hungary, not to a genuine absorption of unemployed factors but merely to a spreading of the work. The ten per cent figure probably represents merely frictional and voluntary unemployment. It is difficult to see how credit expansion could have done more than raise costs and domestic prices of agricultural products, lowering the effective foreign value of the pengő. Even from the beginning of the depression in 1929, Hungarian industry enjoyed a favored position at the expense of domestic consumers and agricultural interests. The seasonally adjusted index of industrial production, as shown in Fig. 11, did not fall below three-fourths its 1929 level; in 1932 the Hungarian index assumed third place after England and Sweden among the ten most important European countries. Had the central bank and Treasury followed a vigorous program for increasing money incomes, it seems probable that the competitive strength of Hungarian agriculture upon world markets would have suffered, and that industry would have lost more through the impairment of farm purchasing

1. Tyler, Tenth Quarterly Report (April 26, 1934), p. 13.

2. Matthias Matolcsy and Stephen Varga, *The National Income of Hungary 1924-25 to 1936-37* (London, 1938), pp. 68-69.

3. *Südost Economist*, Vol. 1, No. 5, p. 141 (May 26, 1939).

power than it gained through "pump priming" activities directly.

Although the government, perhaps because of such reasons as these, did not launch on a systematic effort at reflation, its own financing was not deflationary. Budgetary deficits of 229,500,000 pengő, 179,700,000 pengő, 108,500,000 pengő and 66,300,000 pengő in fiscal years from 1930-31 to 1933-34¹ served to increase the flow of monetary incomes, since a large share went into agricultural relief and other purposes of "social legislation." It must also be emphasized that, though the operation of the monetary system, including central bank and commercial bank² credit, was on the whole deflationary, Treasury borrowings from the National Bank approximately doubled from 1931 to the end of 1933.³ The 30,000,000 pengő increase was simply overwhelmed in the general liquidation, which reduced central bank money (notes and deposits) from 600,000,000 pengő to 500,000,000 pengő. Finally, other measures taken by the State against depression bore an expansionist character—the reductions of bank-rate primarily as an aid to agriculture,⁴ the establishment of a National Credit Senate to set maximum interest rates on all categories of indebtedness,⁵ thereby reducing the service of agricultural debts by 51 per cent from 1931 to 1934, the extension of "Green Credits" on crops,⁶ and the limited moratorium on short-term agricultural debts proclaimed on April 1, 1932, and extended for two years on October 12, 1935.⁷

The story of economic recovery in Hungary from the last quarter of 1933 to the last quarter of 1937 can be told rather

1. *Ibid.*, p. 297.

2. Statistics of commercial bank credit have not been reproduced here, because of the fact that the use of cheques is so limited as to render the principle of "system expansion" of little importance. "Current accounts" at the close of 1938 only slightly exceeded the 1,050,369 pengő of cash, central bank notes and its own deposits. The figure of current accounts showed an almost absolute inflexibility from 1929 to 1939. Cf. *U. I. f. W.*, Vol. 41, p. 46.

3. Cf. p. 171.

4. *Österreichischer Volkswirt*, Vol. 25, p. 312.

5. *Pester Lloyd*, January 1, 1935, p. 16; *The Stock Exchange Gazette* (London), May 18, 1934, p. 1125-1127.

6. *Pester Lloyd*, February 28, 1933.

7. *U. I. f. W.*, Vol. 20, p. 113; Tyler, Eighth Quarterly Report (November 8, 1933), pp. 14-16, *idem*, Sixteenth Quarterly Report (October 30, 1935), pp. 9-10. For a complete report of Hungarian government measures for agricultural relief, see International Institute of Agriculture, *The World Agricultural Situation for the years 1931-32 to 1935-36* (Rome, 1932 to 1936).

briefly, because it is so completely dominated by the improvement in world agricultural markets. Monetary policy, quotas, and exchange control operated as cause and effect, but in either rôle they are subordinate. National income follows the course of agricultural income so closely¹ that Fig. 16 may be taken as showing

THE PURCHASING POWER OF AGRICULTURE
(1924/25—1926/27 = 100)

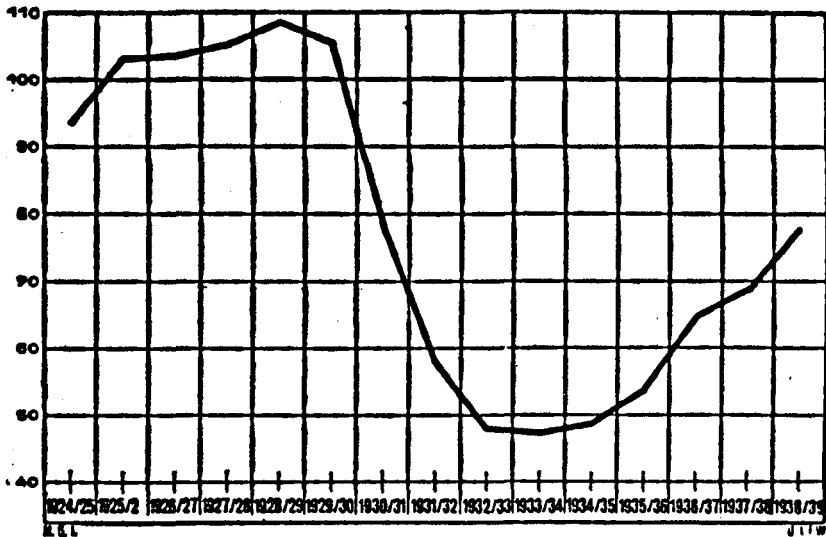


FIG. 16*

* U. I. f. W., Vol. 41, p. 72.

the variations of both. Industrial production, which began to advance earlier than in most countries, and which outstripped other countries in growth rate to mid-1937, excepting Japan, Germany and Sweden, had a pyrotechnic quality, but it did not "call the turns."

Recovery began in the last quarter of 1933 as it became apparent that, despite a one-third drop in the Liverpool price of wheat in three months,² the 1933 harvest would be large enough to insure a larger value yield than the preceding year. There was, moreover, an increase in industrial exports under the stimulus of the Martins Agreement for "additional exports" against frozen pengö.³ The year closed with a favorable trade balance of 84,000,000 pengö, or

1. Matolocsy and Varga, *op. cit.*, p. 69.

2. Cf. pp. 182-184.

3. U. I. f. W., Vol. 24, p. 126; cf. also p. 149 below.

only five per cent less than 1929, the largest of post-war years. The favorable balance of 1933 reacted strongly upon expectations throughout the Hungarian economy the following year. Wheat prices in Budapest almost doubled, much exceeding any rise explicable from the poor harvest, since Liverpool quotations closed the year at the same level as prevailed at the beginning. Export prices as a whole rose from May to November by 22 per cent; and, despite a three per cent fall in the British wholesale index, the Hungarian index advanced by six per cent.

The consequence of this ten per cent rise of prices relatively to gold currency countries was a depreciation of the pengő from a level of three-fourths to a level of two-thirds of parity: gold premia in Budapest (cf. Fig. 13, p. 106) advanced from about 35 per cent in 1933 to 53 per cent by the end of the year, while pengő notes in Zurich fell from 75 to 65 per cent of par. The favorable balance of trade declined meanwhile by one-third. Responsibility for these developments rests less with the banking system than elsewhere, since central bank credit remained nearly constant. But the budgetary deficit in 1934-35 advanced to 70,400,000 pengő, carrying with it a tendency to raise costs; government borrowings from the central bank increased somewhat, and the artificial maintenance of grain prices continued. Had the government actually felt the concern regarding the external value of the pengő implied in its retention of exchange control, it would have pursued a more rigorous course in these matters.

However insecure the price advance of 1934, the revival of Hungarian economy during 1935, 1936, and the first half of 1937 was solidly founded upon the improvement in world agriculture. From the low point of depression to the first quarter of 1937, industrial prices rose by only 13 per cent against 45 per cent for farm products. This closing of the "agricultural price shears" goes far in explaining the advance of industrial production from 101.5 (1929=100) to 135.3 and of national income from 3,490,000,000 to 4,227,000,000 pengő over the same period, as well as the reduction of the budget deficit to 34,600,000 pengő in 1935-36 and the appearance of a surplus of 8,100,000 pengő in 1936-37. Second in importance in the recovery were the excellent harvests of 1935 and 1936¹ marketed at good prices because of relatively poor yields elsewhere, circumstances which largely account for the swelling of

1. Cf. p. 180.

central bank reserves (cf. Fig. 11, p. 103) from 94,000,000 pengö in September, 1935, to 142,000,000 pengö in September, 1937, and for favorable trade balances of 1935 and 1936 of 86,500,000 pengö and 167,800,000 pengö.

In contrast with 1934, the first year of recovery, when the pengö lost a tenth of its foreign purchasing power, the gradual climb of the wholesale price index from 1935 to the turn of activity in 1937 did not outstrip the advance of British prices (cf. Fig. 12, p. 104), and the external value of the pengö appears to have suffered no deterioration as measured in wheat premia and the discounts on pengö notes and Sperrpengö in Zurich (cf. Fig. 13, p. 106). That the entire upswing was financed from hoards and current savings¹ is evidenced by the continuous reduction of bills discounted by the central bank and the increase of its notes and deposits at a rate not exceeding accretions to its gold and devisen reserves (cf. Fig. 11, p. 103). Monetary ease, frequently characterized as stagnation in the money markets, prevailed throughout: by virtue of its isolation from other capital markets — such as Germany — bank-rate could be kept at four per cent from August 29, 1935 onward, and the whole structure of interest rates could be held at the low levels of that year. The culmination of four and a half years of economic gains came in 1937 with a national income equalling that of 1930, industrial employment exceeding 1929 by ten per cent, a balanced budget, and the resumption of debt service in free devisen. Inconsistent with what would be the normal expectation for recovery, and ominous for an approaching downturn, was the trebling of National Bank advances to the Treasury from 1934 to 1937.

The current phases of the cycle began with a turn in wholesale prices in April, 1937, reflecting a break in Liverpool wheat prices. Prices for farm produce in general declined, but not so rapidly as to prevent the total value of Hungarian exports from increasing over previous years. For agricultural exports in 1938 prices were very low, but Hungary was favored by a record harvest bringing a favorable balance of 104,000,000 pengö, equal to the previous high mark in 1937. Thus, despite the decline of agricultural prices, it has been agriculture which paradoxically supported the economic situation. Hungarian industrial production fell off from 135.3 to 116.2 from the second quarter of 1937 to the third quarter of 1938,

1. *Economist*, February 12, 1938, p. 20.

as compared with 105.1 and 69.1 during the same interval for the United States.¹

On the monetary and financial side, steady accretions in 1937 to central bank reserves justified the increase of its credit, especially in view of the declining index of wholesale prices. Developments during 1938, however, were precarious. The absorption of Austria into Germany in March caused apprehensions regarding Hungary's economic future and a withdrawal of 100,000,000 pengő from the banks between March 1 and May 1, met by a corresponding increase of central bank note issue. Before the hoarded funds could return in significant amounts, the second crisis — this time involving Czechoslovakia — precipitated withdrawals of 150,000,000 pengő. Bills discounted at the National Bank increased correspondingly to 567,000,000 pengő by the end of September, but their decline to 479,000,000 pengő a month later indicated the passing of acute panic. The large increase of reserves at this juncture is not real but a mere transfer of 70,000,000 in gold and devisen from "Other Assets" to "Reserves,"² a move which not only reveals the existence of hidden reserves but also betrays a desire for a show of strength at a time when note issue had been increased 60 per cent within a single year. About one-fourth of the increase was, it is true, involved in the exchange of pengő notes for Czechoslovakian currency in the regions taken over by Hungary in November.³

On June 23, 1938, the statutes of the Hungarian National Bank were revised in conjunction with the initiation of the rather ambitious Five Year Plan for public investments aggregating 1,000,000,000 pengő, funds to be provided by a domestic loan of 400,000,000 pengő and the balance by a capital levy. However much certain of the amendments may have been required by "modern conceptions of a monetary standard," such as permission to engage in open market transactions,⁴ the provision of a 130,000,000 pengő credit to the State — an amount nearly equal to central bank discounts for the Treasury in the prosperity year 1937 — arouses suspicion of inflationary fiscal tendencies. Of the 1,000,000,000 pengő provided for in the Five Year Plan (600,000,-

1. Reischskreditgesellschaft, *Germany's Economic Situation at the Turn of 1938-39*, p. 32.

2. *Volkswirtschaft*, 1938, p. 225.

3. Note issue was thereby increased in roughly the same proportion as the accretion to population. *Economist*, December 17, 1938, p. 595.

4. *Ung. Wirt. Jrbh.*, Vol. 14, pp. 366-373.

000 pengö for rearmament and 400,000,000 pengö for public works) half had already been spent by the late spring, 1939.¹ Industrial production rebounded from 116.2 in the second quarter of 1937 to 147.0 in the first quarter of 1939 under the influence of these heavy public expenditures.

The reappearance of a budgetary deficit of 67,900,000 pengö in 1937-38, the disturbed state of international politics, large increases in the note issue, and the launching of the Five Year Plan have reacted unfavorably on the pengö. After three years of stability extending through even the gold-bloc devaluations of 1936, Zurich quotations on pengö notes fell during 1938 and the early months of 1939 from 60 per cent of parity to 30 per cent (cf. Fig. 3, p. 106). It is difficult to tell how much of this can be ascribed to domestic price level changes, particularly, since the cue given by the Budapest gold market has been lacking since early 1935. Until the end of 1938 the indices of both sensitive and wholesale prices moved downward, and even the more moderate movement of the latter equalled the reduction in British wholesale prices; but with the first quarter of 1939 all the price indices of the Hungarian Institute for Economic Research have disappeared in its *Reports*, and their place has been taken by the relatively insensitive indices of the Royal Statistical Office,² a change which is calculated to arouse suspicions. The abrupt fall in the value of pengö notes in Zurich, on the other hand, is probably partly explained by the increase of supply through a flight of capital from Hungary, while the demand for travel purposes has suffered under threats of European war. On the whole, there seems to be a strong probability that the statement which had come to be conventional, that the pengö is about one-third depreciated, now errs decidedly on the side of optimism.

B. The Comparative Situations of Industry and Agriculture.

The most characteristic feature of exchange control, the maintenance of an artificially low price on devisen, operates to penalize exports and encourage imports. If a country's exports are largely agricultural, agriculture suffers; if its imports are largely industrial products or raw materials, industry flourishes. A windfall to

1. Royal Institute of International Affairs, *South-Eastern Europe, A Political and Economic Survey*, 2nd ed. (London, 1939), p. 118.

2. U. I. f. W., Vol. 42 (May, 1939), p. 52.

importers of industrial products or to domestic industrialists arises in the first place because, at the artificially low rate of exchange, import devisen have to be rationed out and this entails a reduction in imports and a rise of their domestic prices.¹ A second source of windfall or monopoly profits to industry lies in the allocation of devisen for industrial raw materials at the low foreign exchange rates. Thirdly, to the degree that industries are monopolized or firms are few and large, they are apt to fare better in securing allocations of devisen, by fair means or foul. These three factors *per se* increase the profits of cartels and further the formation of monopolies. The hardships to agricultural exporters, on the other hand, induce them to band together to secure modifications of exchange control or better prices for their exports. Nothing precludes such export organizations from turning their attention to the possibilities of domestic markets. It is to be observed that the greater the divergence between official and "real" rates of exchange, the more potent are all four of these forces. Finally, almost as a corollary from these propositions it follows that the consumer must suffer loss.

The Hungarian economy under exchange control shows the operation of these tendencies in full force. Consider first the position of industry. The narrative of economic developments in Hungary under exchange control revealed that industrial production turned upward in mid-1932, two years before the upturn in agricultural income,² that it maintained a fairly even advance for five years thereafter at 12 per cent *per annum*, and that it was, relatively to other countries, rather slightly affected by the downturn of 1937. The superior position of industry arose partly from the "natural" divergence of industrial and agricultural prices in depression; but it was also to an undetermined degree adventitious — the result of protective tariffs, import quotas, and exchange control.³

1. The immediate tendency of an artificially low rate on foreign exchange would be toward an *absolute* increase of imports. But with given conditions of domestic cost and international demand this rate will necessarily reduce exports and, except for available reserves of devisen which an exchange control country is not likely to possess, reduce imports also.

2. Cf. Figs. 11-16, pp. 103-114 above.

3. Some offset to the superior position of industry came from the levying of the "social burden" taxes almost exclusively upon industry, and from the introduction in 1937 of the 44-hour week and minimum wage rates by administrative decree.

Chief benefits from these interferences accrued to the cartelized sector. Fig. 7 reveals how the prices of coal, lignite, firewood,

HUNGARIAN WHOLESALE PRICE INDICES: INDUSTRIAL RAW MATERIALS
(1927=100)

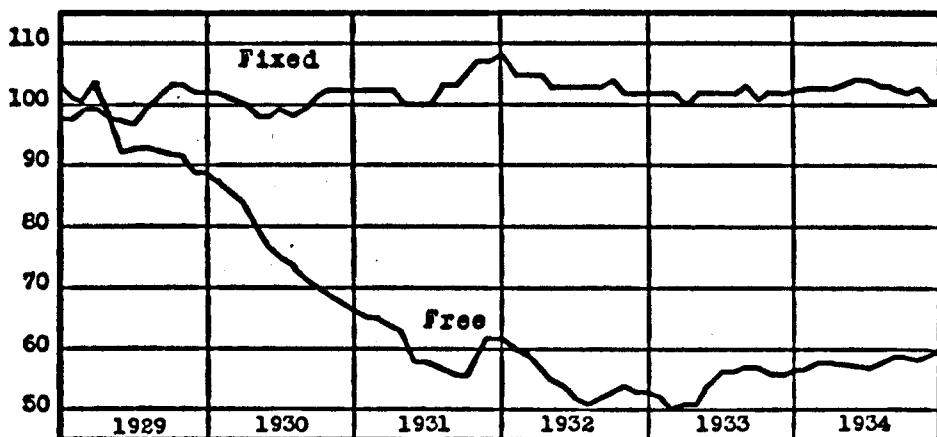


FIG. 17*

*These indices, not previously published, were compiled by Professor Wolfgang von Heller of the Hungarian Institute of Technology. The underlying data are not available for reproduction.

mineral oil, and iron — monopolized industrial raw materials — not only defied reduction throughout depression but even rose slightly, whereas the prices of copper, lead, tin, lumber, briquettes, leather, cotton, wool, linen, and paper — competitively produced or imported industrial raw materials — fell in 1932 and 1933 to 50 per cent of their prices in 1929.

In addition to the five cartelized commodities included in the index, monopolies also controlled fertilizers, gasoline, lime, cement, textiles, alcohol and milk. So notorious was the discrepancy between pegged and free prices that publication of the two series had discreetly to be discontinued by the Hungarian Institute for Economic Research after September, 1932.¹

Of those industries gaining from exchange control in and of itself, glass, leather, paper, and iron are perhaps most notable. Certain cartelized industries such as coal, while benefiting by import restrictions through quota and exchange control, lost on balance, because of reduced demand from heavy industry, espe-

1. U. I. f. W., Vol. 14, p. 35.

cially in the 1931-32 period of par exchange rates.¹ But this very enforcement of the official rate provided an unparalleled stimulus to the textile industry, because of a high proportion of its costs in imported raw materials. As a result, as early as November, 1931, it was especially noted as a booming industry;² similarly in the following quarter, it was the one exception to general economic contraction.³ Despite a fall of 53 per cent in textile import from 1930 to 1931, there was again a 57 per cent decline from 1931 to 1932; but total sales of textiles in Hungary decreased (1931-32) only from 498,000,000 pengö to 408,000,000 pengö,⁴ and number of employees remained at practically the 1929 level throughout the depression. In 1933 a one per cent tax on textile production, calculated to yield 3-3,500,000 pengö annually for purposes of export subsidy, was explicitly justified from the favorable conjuncture created by import limitations.⁵

Throughout the exchange control experience complaints were rife concerning a "shortage of industrial raw materials." In view of the fact that the percentage of total imports falling under this caption increased from 23.6 per cent in 1931, when exchange control was introduced, to 34.6 per cent in 1934, and that it remained at the relatively high level of 31 per cent through 1938, a phenomenon which should cause no surprise in a period of intense autarchy, the complaints may seem paradoxical. The explanation is a simple matter: at the low official rate on foreign devisen, amount demanded vastly exceeded amount supplied, however large the imports of industrial raw materials. To some firms, those which possessed importers' certificates,⁶ large concerns and cartels which succeeded in enforcing their claims in the devisen allocation, and those, as for example the iron industry, drawing their raw materials through the clearings,⁷ even this circumstance meant no embarrassment. The complaints emanated mostly from merchants, small industrialists, and agriculturalists dependent upon imported raw materials. As might be expected, a raw material

1. *Österreichischer Volkswirt*, Vol. 6, No. 5, p. 87.

2. *U. I. f. W.*, Vol. 13, p. 111.

3. *U. I. f. W.*, Vol. 14, p. 118.

4. *Österreichischer Volkswirt*, Vol. 25, No. 43 (July 22, 1933), p. 345.

5. *Wirtschaftsdienst*, September 20, 1935; *U. I. f. W.*, Vol. 19, p. 111.

6. Cf. p. 93 above.

7. R. P. F. Edwards, *Economic Conditions in Hungary, 1933-35*, Department of Overseas Trade, Bulletin No. 629 (H. M. Stat. Off. London, 1936), p. 24.

shortage in this sense was most acute at times when the exchange rate applied by the National Bank showed largest deviations from "free" rates,¹ as for example in the latter part of 1931 with the enforcement of parity rates.² It is frequently said³ that the shortage of industrial raw materials arose because Hungarian exports went largely to European exchange-control countries not supplying these essential materials. Had there not existed the artificially low rates on foreign devisen, however, windfall profit on imports including this category would have disappeared, and with it the "scarcity" of devisen for less fortunate applicants.

The concave side of the shield is the economic position of agriculture. How the "agricultural price shears" reduced Hungarian agrarian classes to desperate straits, and how in a variety of ways the government attempted to alleviate their difficulties, has been described briefly.⁴ From the viewpoint of exchange control chief interest attaches to the policy of maintaining grain prices⁵ substantially above their international level through the operations of the Futura Company, the Boletta Fund, the Agricultural Relief Fund, and international agreements. The Futura Company, founded in 1919 to aid farmers in marketing, was utilized from 1930 onward to carry through open-market purchases on government account to support grain prices. Throughout the entire period of exchange control, also, the price of Hungarian wheat was maintained above world market levels by international agreements giving the buying countries a *quid pro quo* through an undertaking on the Hungarian side to amortize debts or to absorb certain quantities of industrial exports. An agreement made as early as 1931 with Austria merely offset the effect on Austrian purchasers resulting from a 3.50 pengö per quintal mark-up on wheat given as a bonus to Hungarian producers.⁶ Under the

1. As (quite inadequately) indicated by the black market for devisen, gold market, and Zurich quotations on pengö notes. Cf. p. 109, n.1, above.

2. U. I. f. W., Vol. 13 (November 1931), p. 111.

3. For example in Ungarns Handel und Industrie im Jahre 1936 (Budapest, 1937), p. 31.

4. Cf. p. 113 above.

5. Concentration upon grain and neglect of livestock, the next most important Hungarian export, may be explained by the fact that grain prices fell early and violently, whereas livestock breeding actually gained for a while by a shift of consumption to meat. Cf. League of Nations, World Production and Prices, 1925-33 (Geneva, 1934), p. 26.

6. Österreichischer Volkswirt, Vol. 23, No. 42, p. 1121, and No. 46, p. 1203.

terms of the famous Rome Pact between Hungary, Austria, and Italy, which was put into effect in July, 1934, and renewed annually thereafter, the latter two wheat-importing countries agreed to take definite quantities of wheat at a "fancy" price in return for Hungarian trade concessions. Though the price was not officially published, it is known to have been 16 pengő per quintal for Austria and 17 pengő, subsequently 18 pengő, for Italy,¹ a price level which, like "dollar wheat," seems to have seized upon the popular imagination as a sort of *justum pretium*. The Liverpool price did not exceed one-third this amount, but even so, under the prevailing obstacles to trade the Rome Pact prices assumed an intermediate position between world markets and the domestic price in European wheat-importing countries.² While the international agreements undoubtedly worked to an undeterminable degree toward grain-price maintenance in Hungary, their results, so far as *quantity* sold is concerned, were generally disappointing.³

The Futura Company and international agreements have been operating during the whole period of exchange control in Hungary, but the Boletta device utilized until 1934 has given place to an Agricultural Relief Fund. After an initial year (1930-31), when the entire proceeds of 3 pengő per quintal went to grain producers, the price of the *boletta* (ticket), which purchasers were required to buy for each quintal of wheat or rye, went partly as a subsidy to the producer and partly to the government for an agricultural export subsidy fund; if the domestic buyer exported the wheat or rye, the *entire* price of the *boletta* was refunded. In 1931-32, when the *boletta* cost 10 pengő,⁴ 6 pengő went to the farmer and 4 pengő to the export subsidy fund. The

1. Foreign Agriculture, Vol. 2, 1938, p. 105.

2. On October 20, 1933, for example, the Budapest price at 7.6 pengő to 7.8 pengő per quintal exceeded slightly the Liverpool price, while the Austrian domestic price equalled 28.2 pengő and the Swiss 54 pengő! Cf. Tyler, Eighth Quarterly Report (November 8, 1933), p. 16.

3. Details of the Rome Agreements are set forth by Tyler particularly in the following Quarterly Reports: Eleventh, pp. 14-15; Thirteenth, p. 9; Fourteenth, p. 14; Nineteenth, p. 18; Twenty-second, p. 14; and Twenty-fourth, p. 14.

4. In this year when the farmer's share of the *boletta* was at its maximum, premia had not yet been introduced on export devisen; furthermore, the Hungarian price of wheat was at its lowest level in a century. Cf. International Institute of Agriculture, The Agricultural Situation in 1932-33 (Rome, 1934), p. 465.

difference between 10 pengö refunded upon exportation and 4 pengö going into the subsidy fund was made up by taxation, the existence of this burden being partly concealed by keeping the Boletta Fund separate from the budget.

It has been said that the *boletta* system "did not hamper export, as the bounty was refunded to the exporter."¹ The fallacy of this reasoning lies in its neglecting four important facts. (1) Once export bounties are established, margins of cultivation and exploitation assume such a position that the bounty can never be removed without "hampering" the export of the subsidized commodities, as Hungary has discovered in being obliged to retain the system to the present day, despite the notable increase in agricultural purchasing power.² (2) The absorption of factors of production into the subsidized export raises the costs of other export commodities, a force becoming important as business revival proceeds. (3) Export commodities into which the subsidized article enters as a raw material cost more to produce, even in periods of less than full employment.³ (4) Finally, as a consequence of these three facts, the foreign value of the monetary unit is maintained at a level higher than can be justified on the basis of comparative costs of production.⁴

The farmer's share of the *boletta* was set at 6 pengö, 4 pengö, and 3 pengö for the successive fiscal years of 1931-32, 1932-33, and 1933-34. As we have seen,⁵ the system of premia and surcharges began to be introduced late in 1932; as the high domestic prices were gradually and at least partly compensated for by lowering the effective foreign value of the pengö by agios, the *boletta* could be gradually reduced. At the beginning of the new fiscal year in July, 1934, the Boletta Fund was abolished — probably as a gesture to consumer and labor interests — in favor of a system of authoritarian minimum prices⁶ and the "Agricultural Relief Fund," which derived its income, like its predecessor,

1. Tyler, Thirteenth Quarterly Report (December 29, 1934), p. 8.

2. Cf. p. 114.

3. The high cost of living became a matter of concern in Hungary even in the depths of agricultural depression. Cf. pp. 166-168 below.

4. Cf. the discussion of pengö rates, pp. 102-118.

5. Cf. p. 94 above.

6. The minima (15.35 pengö in 1933-34, 14.75 pengö in 1934-35, 20 pengö in 1936-38) served merely to define the amount of domestic subsidy per quintal of Tisza wheat. So far as concerns export prices, they had been set by authority from the outset of exchange control.

entirely from extra-budgetary sales taxes. The expense of the Funds for four fiscal years beginning with 1933-34 amounted to 75,000,000 pengö, 45,000,000 pengö, 49,500,000, and 51,000,000 pengö, and for the last two years it has remained at about the 50,000,000 pengö level. With these sums may be compared the balances of the State budget, including State undertakings: -76,400,000 pengö -70,400,000 pengö -34,600,000 pengö, and +8,100,000 pengö for the years 1933-34 through 1936-37. Subsidy to agriculture in the form of price maintenance alone thus assumed a magnitude comparable with depression deficits on the entire budget.

The history of Hungarian wheat prices under exchange control, despite the intricacy of interacting forces, nevertheless betrays some main lines of causation. In Fig. 13, p. 106 appears a curve of "Premia on Exports of Wheat," which has been derived by dividing the actual or "paper pengö" prices in Budapest per quintal of Tisza wheat by the gold pengö equivalent of the wheat prices demanded on international markets by the Hungarian export authority.¹ The resulting percentages show the paper pengö prices actually paid the Hungarian wheat producer by the export authority relatively to the actual proceeds of export in gold pengö. Naturally in setting the prices for sales against free devisen (=gold pengö), the export authority had to conform closely to competitive prices abroad, a fact confirmed from data presented in the Appendix.² The margin between 100 per cent and the actual percentages in the curve represents the extra amount in pengö currency necessary to make the Hungarian "export surplus" of wheat actually exportable. This margin

1. Cf. pp. 182-184. The International Institute of Agriculture in its International Year Book of Agricultural Statistics publishes wheat quotations in the important world markets in terms of pre-devaluation Swiss gold francs per quintal. The prices for Hungarian wheat from the Tisza river valley are labelled simply "Budapest"; similarly the Tisza wheat prices given in the Reports of the Hungarian Institute for Economic Research are also labelled simply "Budapest." Only by converting gold franc prices to gold pengö prices and then expressing the latter as a percentage of the former, as is done in the Appendix, would the investigator discover that the International Institute of Agriculture series does not, while the Hungarian Institute series does, include the premia!

2. Following advice kindly given by Dr. V. P. Timoshenko of the Food Research Institute, Stanford University, I have presented the Liverpool price of Argentine rosafé wheat, as most nearly comparable in quality to Tisza.

might arise from either or both of two circumstances: (1) the fall in the *general* purchasing power of the pengö in foreign devisen, and (2) the higher cost of production of Hungarian wheat specifically in comparison with foreign wheat. What portion of the actual margins paid can be ascribed to each factor? To answer this question accurately it would be necessary to know whether exports other than wheat were granted premia equal to the wheat premium; but, as we have already discovered, under the system prevailing to the end of 1935, only the average premium was divulged.¹ But even a comparison with other export premia would not settle the question conclusively, since it would be quite imaginable, even if all premia on exports were equal, that the premia and hence the surcharges on imports might all be insufficient, in view of the actual depreciation of the pengö, and that part or all of the necessary subsidy to exports *in general* should simply be charged as a tax on wheat consumption and labelled a "subsidy to agriculture." The probabilities are indeed quite against this hypothesis in the Hungarian case; it illustrates, however, the practical impossibility of telling whether a given export is really economically self-supporting, once artificial rates of exchange have been worked into the economic fabric.

In November and December, 1935, when the system of differential premia was for the most part abandoned for "straight line" premia for three or four main groups of countries, the wheat premia shortly assumed a level around 50 per cent, the general premium paid on exports to free-exchange countries.² This coincidence raises another interesting question concerning causation: does the general export premium determine the wheat premium or does the wheat premium determine the general devisen premium? Obviously since wheat, despite its great significance to the Hungarian economy, does not exceed one-sixth to one-eighth of total exports, causation runs more strongly from devisen premium to wheat premium than vice-versa. To an unknown extent, however, the wheat premium represents an artificially high price for wheat and enters in, therefore, to the maintenance of the pengö at artificially high values, even at existing agios on foreign devisen. The impossibility of quantitative appraisal of this difference rests

1. Cf. p. 94, n. 1, above.

2. The wheat premia, as was explained earlier, are those for export to free-exchange or "gold" countries.

upon a lack of information concerning relative costs of production of various Hungarian products and their "marginality" as exports.

While industrial countries can readily support the prices of farm products by protective tariffs, this way is closed for countries with an agricultural export surplus. We have observed the expedients to which Hungary resorted: import quotas, interest and tax reduction, moratoria, credit extensions, minimum domestic prices and export subsidies. To these may also be added the toleration of export monopolies for agricultural products. Complete price control came into effect for horses, wine, game and onions; and export syndicates had some degree of control over the prices of seed, vegetables, eggs, feathers, goose liver, broom straw, dressed poultry, honey, butter, animal fats, bacon, livestock and animal products.¹ It is of course impossible to devise a method of measuring the results of this program aimed at lowering costs and raising prices for agriculture. In the opinion of technically competent Hungarian observers, however, all devices in the aggregate did not suffice to offset losses entailed by the pengő rate.²

Finally, there are important secondary repercussions from the Hungarian attempt to cancel out the pengő rate penalty through artificially maintained grain prices. In the first place, the high price of wheat and rye had a tendency to draw along the prices of substitute goods such as clover and maize,³ and this raised the cost to domestic consumers of end-products such as beef, milk and beer. In the second place, this circumstance reacted adversely upon exports, particularly upon flour, which had, of course, to carry the heavy cost of wheat. The accelerated decline of Hungarian milling, once the largest in Europe, represents one of the most radical of the indirect workings of exchange control,⁴ though Hungarian flour exports had already fallen off in the 'twenties in consequence of European protective tariffs.

1. Volkswirtschaft 1938, p. 209.

2. This opinion was expressed by at least one official of The Budapest Chamber of Commerce, the semi-official Pester Lloyd, The Hungarian Land Mortgage Institute, and the League of Nations representation in Budapest.

3. Österreichischer Volkswirt, Vol. 31, p. 903.

4. Tyler, Tenth Quarterly Report (April 26, 1934), p. 15; Volkswirtschaft, 1938, p. 108.

FOREIGN TRADE UNDER EXCHANGE CONTROL

A. Cyclical and Secular Developments.

Hungarian foreign trade during eight years of exchange control to mid-summer, 1939, has been dominated by two major forces — the course of world depression and recovery, and the restriction of international trade through autarchy. Preceding sections have narrated the history of control and have described the course of the cycle within Hungary. Here it may be added that over the cycle Hungarian industrial activity fell less than that of most countries and recovered more¹, but the volume of Hungarian foreign trade declined to a very much lower level than that of most countries and also recovered slightly less, as the table given below shows. Juxtaposition of the volume figures of 74 per

HUNGARIAN AND WORLD TRADE

1929 = 100

	HUNGARY*						WORLD†	
	Imports		Exports		Total Trade		Total Trade	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1931.....	82.3	50.8	82.2	55.4	82.2	52.7	85.5	57.9
1932.....	44.8	30.8	50.6	32.2	47.8	31.5	74.4	39.1
1933.....	50.8	29.3	74.1	37.6	62.8	33.4	75.1	35.2
1934.....	61.8	32.4	72.3	38.9	67.2	35.6	78.6	34.1
1935.....	69.5	37.3	73.5	43.0	71.5	40.6	82.3	34.7
1936.....	79.7	40.6	90.6	48.7	85.3	44.7	85.4	37.5
1937.....	83.8	45.5	106.7	57.1	93.6	50.9	97.0	46.0
1938.....	73.3	39.4	90.5	50.7	80.9	44.7	85.7‡	39.6‡

* Hungarian trade: percentages computed from value and volume figures given in *Statisztikai Negyedévi Közlemények* (Budapest, 1931-39).

† World trade: values in gold, League of Nations, *World Trade*; volume, *Institut für Konjunkturforschung*, Berlin.

‡ For 1938 the figure represents an unweighted arithmetic average of four quarters as reported by *Wirtschaft und Statistik*, Vol. 19, No. 5, p. 178.

cent for world trade in 1932 with 48 per cent for Hungary reveals the relative severity of both depression, particularly agricultural depression, and autarchic limitations upon trade for this particular country. Furthermore, the volume of Hungarian foreign trade lagged behind the recovery in world trade during 1937 and

1. While Hungarian industrial production fell to 76 in June 1932, world industrial production reached 69 (1929 = 100, cf. L. of N., *World Economic Survey 1936-37*, Geneva, 1937, p. 76); and while the former rose to 135 in October 1937, the latter rose only to 108 (*ibid.*, 1937-38, Geneva, 1938, p. 120).

1938 (94 per cent and 81 per cent in comparison with 97 per cent and 86 per cent), despite a notable improvement in the prices of farm products. Comparisons upon the basis of *volume* of trade, such as these, indicate much more reliably the relative position of Hungary than do value of trade figures, inasmuch as the statistics of her foreign trade rest upon valuations in official-par pengő.¹

The two major forces — business cycle and autarchic trend — come into bold relief again in the composition of trade by commodity groups. When *total* exports and *total* imports are divided into raw materials, half-finished, and finished goods, cyclical changes preponderate over the tendency to autarchy. At the low point of depression in 1933, Hungary experienced the climax

HUNGARIAN FOREIGN TRADE BY GROUPS OF COMMODITIES*

	Percentage of Total Exports									
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Raw	59.9	59.2	58.2	58.5	64.8	61.8	60.8	61.4	58.9	59.7
Half- finished	7.1	8.1	9.8	8.6	7.3	8.7	11.3	10.1	10.5	9.8
Finished	33.0	32.7	32.0	32.9	27.9	29.6	27.9	28.5	30.6	30.5
	Percentage of Total Imports									
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Raw	37.8	39.2	41.5	42.4	42.1	43.1	47.7	45.2	42.1	41.3
Half- finished	22.8	22.6	26.1	28.4	28.7	29.9	27.4	29.1	31.3	28.9
Finished	39.4	38.2	32.4	29.2	29.2	27.1	25.0	25.7	26.5	29.8

* From Statiztikai Havi Közlemények (Royal Statistical Office, Budapest), Vol. 33-42, 1930-39.

of difficulties ascribable to relatively high domestic prices, particularly in competition with foreign manufactured goods, so that agricultural products constituted a larger share of exports. The gradual progress of recovery in western European countries

1. Cf. Tyler, Eighth Quarterly Report (November 8, 1933), p. 17 and Ninth Quarterly Report (December 30, 1933), p. 11. Because of scantiness of published information concerning premia and surcharges, as well as quantities of import and export against pengő, "additional" exports, etc., it is impossible to deflate the figures to "real" pengő values. Published statistics on value of exports and imports give obviously absurd results. Thus in 1932, when the volume of Hungarian trade had fallen to 47.8 per cent in comparison with 1929, its value was reported at 39.1 per cent in value. If one accepted the official figures, one would have to conclude that despite the relatively great fall in agricultural prices, the unit price of Hungarian trade had fallen to 66 per cent of 1929, whereas the unit price of world trade had fallen to 53 per cent.

thereafter reversed the tendency, as foreign industrial costs mounted. On the side of imports following 1929, the gradual disappearance of plant extension and the lowering of standards of living reduced finished imports from 39 per cent to 25 per cent in 1935; but with the revival of Hungarian capital goods industries and the upturn of *per capita* income the share of manufactured goods in imports increased and that of raw materials fell. Even so, in 1938 the former category included only 30 per cent of imports as compared with nearly 40 per cent in 1929 — the fruition of a decade's efforts at industrial self-sufficiency.

If restricted to *industrial* imports, the three commodity groups reveal still more clearly the movement toward autarchy.

HUNGARIAN INDUSTRIAL IMPORTS*
Groups as Percentages of Total Imports

	Raw	Half-Finished	Finished
1928.....	16.1	28.6	55.3
1929.....	20.2	29.1	50.7
1930.....	23.8	29.5	46.7
1931.....	23.6	35.1	41.3
1932.....	28.3	36.4	35.3
1933.....	32.3	33.9	33.9
1934.....	34.6	34.0	31.3
1935.....	33.8	35.1	31.1
1936.....	33.9	35.3	30.8
1937.....	34.9	35.4	29.7
1938.....	31.0	34.1	34.9

* U. I. f. W., Reports.

Eleven years (1928 through 1938) brought an approximate doubling in the share of industrial raw materials, a 25 per cent increase in half-finished imports, and a 37 per cent decline in imports of finished industrial products. The tendency is again observed to have been most marked in the trough of depression, though a subsequent easing did not counteract the general trend.¹ Exchange control, introduced in 1931, merely intensified the pre-existing secular development toward autarchy; but it is impossible to measure its influence separately.

1. Imports by the machine, electrical, iron and other metals, textile, and leather industries, in which autarchic tendencies came to their culmination, represented 44 per cent of *total* imports in 1926 and 23 per cent in 1935. Cf. Hungarian General Credit Bank, Economic Report, Vol. 10, No. 2 and 3 (February, March, 1936).

Some indication of the relative importance of exchange control in the whole nexus of causation appears, however, in changes in Hungarian trade in 1933 and 1936. It will be recalled that toward the end of 1932 the attempt to enforce official pengő parities was abandoned for a system of multiple premia and surcharges. Whatever the defects of this innovation, it at least narrowed the gap between the nominal and real foreign values of the pengő and consequently brought about a reduction of the artificial stimulus to imports and penalty upon exports. The following year—undoubtedly partly because of the good harvest—brought at one step an increase in the volume of Hungarian foreign trade from 47.8 per cent to 62.8 per cent of the 1929 level, while world trade increased in volume from 74.4 per cent to merely 75.1 per cent.¹ Furthermore, Hungarian exports rose in volume from 50.6 per cent to 74.1 per cent, while imports—as one would expect from the rate changes—increased less, from 44.8 per cent to 50.8 per cent. The next largest upward step came in 1936, when the volume of Hungarian trade increased from 71.5 per cent to 85.3 per cent, though world trade showed a relatively modest gain from 82.3 per cent to 85.4 per cent. Hungarian exports again rose more than imports, the former from 73.5 per cent to 90.6 per cent, the latter from 69.5 per cent to 79.7 per cent. This increase followed the abolition of multiple pengő rates in favor of relatively uniform premia and surcharges; but again the comparison is complicated by the favorable harvest of 1936. Informed observers seem nevertheless to ascribe the improvements in both volume and favorable balance of Hungarian trade in 1933 and 1936 to the changes in exchange control;² and this judgment would seem to be confirmed by the increase, not merely of agricultural exports in the two significant years, but of industrial exports also.³

B. Trade by Countries

The question as to the effects of exchange control upon Hungarian trade with particular countries very largely resolves itself into the question of the effects produced by various international

1. Cf. the table given on p. 128 above.

2. *Pester Lloyd*, January 1, 1935, p. 17; Tyler, *Seventeenth Quarterly Report* (January 15, 1936); *Ung. Wirt. Jhrb.*, Vol. 13, p. 166; *Hungarian General Credit Bank, Economic Report*, Vol. 11, No. 2,3 (February, March, 1937).

3. Cf. *U. I. f. W.*, Vol. 41, p. 67.

arrangements for trade: how was trade affected by clearing, compensation and payment agreements? In its answer to the League of Nations questionnaire in January, 1935, concerning clearings, the Hungarian Government replied that "it is not possible to indicate in figures the effect of these agreements on the movements of goods, which are also influenced by numerous other and more important factors."¹ The answer is perhaps too sceptical, but it is indeed difficult to disentangle the effects of clearings; partly, as the Hungarian authorities held, because of "other and more important factors," but also because of statistical limitations.

It is not possible to present a quantitative summary of the historical course of trade under the contrasting categories of clearing, compensation, and free exchange merely from a list of the countries involved in each type of payment arrangement and the statistics of Hungarian trade by countries. Complications arise from the shift of countries from one category to another at other intervals than those utilized in trade statistics, from ambiguities of such terms as "Kompensation," "Verrechnung," and "Zahlungsabkommen," from inadequate information concerning the precise dates at which new agreements took effect and the mode of liquidating old balances. The one insurmountable difficulty is the fact that trade with one country may, and usually does, proceed partly in each of the main categories, but the amount of trade in each category by countries has never been reported. Thus Hungarian wheat exports to Austria and Italy, within certain limits, were paid for in free devisen, though the bulk of trade passed over clearings with barter transactions as an added possibility. Hungary had to pay for a certain percentage of petroleum imports from Rumania in free devisen outside the clearing. In other cases, such as in Hungarian commerce with Czechoslovakia and Italy, clearing was limited to certain totals, while compensation covered dealings exceeding the limits or not admitted to clearing.

To draw any comparison of the directions of Hungarian trade before and after the institution of exchange control it is obviously necessary to ignore changes in the status of a given country during the period of control as well as the other complications mentioned in the preceding paragraph. The device usually employed

1. League of Nations, Enquiry into Clearing Agreements (Geneva, 1935), p. 115.

is to classify countries under the dominant form of payment arrangement with Hungary as of a given date during exchange control, maintaining the same classification for all years both before and after the termination of free exchange. Such a comparison appears in the following figures.

HUNGARIAN TRADE WITH CLEARING,
COMPENSATION, AND FREE-EXCHANGE COUNTRIES¹
(Imports and exports in each category as a percentage
of total imports and exports)

Category of countries	Imports				Exports			
	1930	1931	1933	1934	1930	1931	1933	1934
Clearing.....	69.0	61.6	70.3	70.6	80.4	77.4	74.7	74.8
Compensation.....	20.5	28.7	16.2	17.7	12.5	14.6	12.1	12.1
Free exchange.....	10.5	9.7	13.5	11.7	7.1	8.0	13.2	13.1

The years 1930 and 1931 effectively represent the situation before clearing and compensation began, since the Czech, Swiss, and Austrian clearings were in operation for only 2 months, 1 month and 15 days, respectively, at the end of 1931. Because the process of introducing clearings extended throughout 1932, this year is omitted. The years 1933 and 1934 represent the foreign trade of Hungary when clearing and compensation were extended to a total number of countries not subsequently exceeded. On the whole, the comparison of 1930-31 with 1933-34 reveals a strong inflexibility in Hungarian trade with each of *these particular groups of countries*. But it is only from this one angle, as will later become apparent, that one can agree with the Hungarian authorities in reporting to the League that "clearing agreements were not able to exercise a decisive influence on the movements of foreign trade."²

Though trade *by countries* grouped by predominant mode of

1. The classification is based on the relation of Hungary to other countries as of September 1934. Cf. U. I. f. W., Vol. 24, p. 44. Under clearing come Austria, Belgium, Czechoslovakia, France, Germany, Italy, and Switzerland; under compensation: Bulgaria, Denmark, Greece, Yugoslavia, Poland, Rumania, Spain, and Turkey; and under free exchange, all other countries. Percentages computed from Hungarian trade by countries in League of Nations, International Trade Statistics (Geneva, 1933), p. 142, and *ibid.*, (Geneva, 1935), p. 138.

2. The increase of *exports* to free exchange countries, which seemed to rejoice some Hungarian commentators, failed to bring any increase — there was actually a decrease — of free devisa as a percentage of total *payments* to Hungary, because the difference went to legal and illegal debt repayments. But cf. p. 135.

payment showed no particularly noteworthy alterations through the advent of exchange control, there did occur important changes in relative amounts of trade *paid for* in different ways. Statistics of *payments* for exports and imports under the separate heads of clearing, compensation, pengö payment and free devisen are available only for Hungary, Austria and certain other countries to which the League of Nations appointed economic and financial advisors.¹ What these figures reveal is that exports and imports

METHODS OF PAYMENT FOR HUNGARIAN EXPORTS AND IMPORTS²

Main Categories as Percentage of Total						
Exports	1932	1933	1934	1935	1936	1937
						I-VI
Clearing	42.4	47.5	58.8	59.8	61.1	61.3
Compensation	24.3	21.5	15.2	15.5	18.0	15.1
Total of clearing and compensation	66.7	69.0	74.0	75.3	79.1	76.4
Export against pengö	1.8	10.3	10.0	5.1	3.6	4.6
Free devisen obtained	31.5	20.7	15.0	19.7	17.3	19.0
Imports	1932	1933	1934	1935	1936	1937
						I-VI
Clearing	45.3	51.8	62.4	64.4	66.2	66.5
Compensation	30.1	28.7	18.3	18.7	19.9	18.3
Total of clearing and compensation	75.4	80.5	80.7	83.1	86.1	84.8
Devisen applied	24.6	19.5	19.3	16.9	13.9	15.2
Imports against marketable pengö			(6.5)	(1.4)	(.8)	(1.0)
Free devisen disbursed			(12.8)	(15.5)	(13.1)	(14.2)

passing through the clearings increased persistently as a share of the total for the five years 1932-36. So persistent was the increase that, despite the reduction of compensation deals, the percentage for clearing and compensation taken together increased also — for exports from 67 per cent to 79 per cent and for imports from

1. Unfortunately, through the merging of clearing payments with those made in free devisen, and of compensation with payments in pengö, the elaborate statistical matter published by Tyler in his Quarterly Reports to show "the results of exchange control," is practically useless. The same concealment of free devisen payments characterizes the summaries given in Ung. Wirt. Jhrb., Vol. 14, pp. 363-364. I have drawn upon the much more illuminating figures published by the Hungarian Institute for Economic Research.

2. Annual averages from quarterly percentages as given in the Reports (1932-37) of U. I. f. W. The improbability of seasonal variation in payment methods permitted the striking of an unweighted average.

75 per cent to 86 per cent. The decline in amount of exports yielding free *devisen* rigidly limited Hungarian importers in their choice of sources of supply. This adverse tendency asserted itself despite the avowed aim of the Foreign Trade Commission and the Foreign Trade Office to encourage exports to free exchange countries,¹ and also despite the exchange control reforms of 1932 and 1935.

Responsibility for the marked trend toward a smaller percentage of total payments to Hungary in the form of free *devisen* is borne partly, in the first place, by the spread of exchange control even after 1931. Most of these new countries were unimportant individually in Hungarian trade, but their collective and indirect effects were not negligible; and Italy, going over to really drastic exchange control in 1934, was third in importance in Hungarian exports and fourth in imports. Furthermore, the gradual reduction of gold reserves throughout continental Europe led to a diversion of imports to clearing countries such as Hungary. Finally, since Hungary had a favorable trade balance with her most important creditors, these countries could exploit their debtor position on current account to secure the earmarking of increasingly large shares of Hungarian export proceeds for the liquidation of old debts, a circumstance which caused bitter recrimination on the side of Hungary.

Latest developments show no improvement in the portion of Hungarian trade yielding free *devisen*. For the last period reported in detail, the first half of 1937, clearing and compensation declined slightly in favor of free *devisen* in both exports and imports.² An estimate for 1938, however, puts clearing and compensation at two-thirds with a further addition of 90,000,000 pengö as partly free or covered by gentlemen's agreements limiting the availability of *devisen*.³ The conclusion of payments agreements including Belgium, Switzerland, and France during 1936 and 1937 failed to work any noticeable betterment, simply because trade with these countries did not exceed 5 per cent of the total. In conclusion it may be observed that clearing and

1. Cf. p. 94 above.

2. Cf. p. 134.

3. *Volkswirtschaft*, 1938, p. 192; cf. also R. P. F. Edwards, Report on Economic and Commercial Conditions in Hungary, 1935-37, Dept. of Overseas Trade, No. 697 (H. M. Stationery Office, 1933), p. 203.

compensation covered from 8 per cent to 10 per cent less on the import side, because exports of wheat to Austria and Italy brought free devisen.

Very significant changes in Hungarian trade appear from a separation of exports¹ into geographic regions, though the influence of exchange control in this respect is probably secondary. The

HUNGARIAN EXPORTS BY GEOGRAPHIC DISTRIBUTION²

	1925-30	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Immediately adjoining countries ³	61.9	57.2	53.8	43.3	46.4	43.2	37.4	31.3	28.3	26.7	29.4
Germany and Italy	17.8	18.6	23.2	22.5	23.0	19.8	30.4	37.1	36.1	36.3	36.1
Other countries	20.3	24.2	23.0	34.2	30.6	37.0	32.2	31.6	35.6	37.0	35.5

proportion of Hungarian exports going to adjacent countries — Austria, Czechoslovakia, Rumania, and Jugoslavia — fell by half over the decade 1929-38; exports to Italy and Germany doubled from 1933-38; and exports to "other countries" increased by half from 1929-31, thereafter maintaining about this level. The abrupt drop in percentage of exports to adjacent countries came in 1931, when exports to Czechoslovakia dropped from the 1930 share at 16.8 per cent, giving to this country a rank second only to Austria's, to 4.2 per cent and a rank of sixth or seventh in Hungarian exports. This cataclysmic decrease, explained by the lapse of the commercial treaty with Czechoslovakia at the end of 1930, was never made good; and it is precisely this decrease which gave to "other countries" the sharp gain in their share of Hungarian exports from 23 per cent to 34.2 per cent, subsequently neither reversed nor intensified.

Another cataclysmic change appears in the strong gains made by Germany and Italy in 1934 and 1935 at the expense of the four countries immediately adjoining Hungary. By one bound exports to Germany doubled from 1933 to 1934, both in absolute magnitude (43,700,000 pengő to 89,500,000 pengő) and in relative

1. Changes on the side of imports simply reflect the diversion of exports analyzed in the text, or change in a fashion to suggest the operation of no general forces.

2. Compiled from Statisztikai Havi Közlemények, Vol. 24-41.

3. Austria, Czechoslovakia, Rumania, Jugoslavia. The figure for 1938 does not include Austria in Germany.

importance (11.2 per cent to 22.2 per cent). A new trade agreement, initialled on February 21 and put into force on April 1, 1934, providing wider opportunities for Hungarian agricultural exports,¹ paved the way for this movement; but the real impetus seems to have come from the Work-Creation program in Germany, with its increased demand for raw materials in general² and more particularly for foodstuffs demanded by newly employed laborers.³ Furthermore, because of the superior bargaining position of Germany,⁴ it would be natural to expect some favoring of exports to this country through the system of differential exchange agios then in force in Hungary, though the lack of published rates prevents confirmation of this belief. The German gain of 1934 was followed next year by a sharp increase of exports to Italy from 8.3 per cent to 13.5 per cent of the Hungarian total. In May, 1934, Italian exchange control had been tightened, and in July, 1934, the Rome Agreements of Italy, Austria, and Hungary had been ratified. With the outbreak of the Abyssinian War it was quite natural that Italy should draw her imports more extensively from clearing countries, particularly from Hungary, which declined to join in the League of Nations sanctions. But within the last eighteen months the change of greatest significance has been the absorption of Austria and Czechoslovakia into Germany. From 1937 to 1938 exports to the *Altreich* alone increased from 24 per cent to 28 per cent and imports from 26 per cent to 30 per cent of the Hungarian totals. In the first quarter of 1939 Greater Germany took 95 per cent of Hungarian meat export, 88 per cent of the hogs, and 75 per cent of the grain. The portentous political and economic significance of this situation is worthy of especial emphasis.⁵

Discussions of Hungarian trade under exchange control have so frequently referred to a tendency of exports to go to "distant"⁶

1. Tyler, Tenth Quarterly Report (April 26, 1934), p. 18.

2. Ungarns Handel und Industrie im Jahre 1936, pp. 22-25.

3. A. v. Mecsér, "Die Rückwirkungen des Anschlusses auf die Beziehungen zum Deutschen Reiches," *Ung. Wirt. Jhrb.*, Vol. 14, p. 23.

4. Whereas Germany constituted a fifth of the market for Hungarian products, they account for only two per cent of German imports. In this sense cf. also Mark Mitnitsky, "Germany's Trade Monopoly in Eastern Europe," *Social Research*, Vol. 6, pp. 22-39.

5. *The New Statesman and Nation*, Vol. 17, No. 432 (June 3, 1939), p. 850.

6. Hungarian General Credit Bank, *Economic Report*, Vol. 9, No. 10-11 (October, November, 1935); Tyler, *Third Quarterly Report* (July 15, 1932),

or even to "far distant"¹ countries that the idea became a shibboleth. Actually no non-European country figures prominently in Hungarian trade; and amongst European countries which might be thought of as "distant," such as England, Belgium, France and the Netherlands, there was no tendency for their share of Hungarian exports to increase under exchange control. If by "distant" one should mean simply Italy and Germany, we have already observed the persistent gain of these countries at the expense of the four countries adjoining Hungary, and the 10 per cent loss on the export side suffered by all six of the near and contiguous countries in comparison with "other countries." The latter change actually came before exchange control; and the growth of exports to Italy and Germany derived from a tendency toward a political entente with these countries, favorable trade agreements, the German work-creation program and the Italian war in Africa, rather than from exchange control. It is true of course, as Hungarian authorities have maintained, that in the *absence* of clearings and compensations, neither country could have drawn heavily upon Hungarian agricultural supplies. But political enmities and alliances play the largest rôle. To Austria and to the three remaining contiguous countries, which constituted the former Little Entente, Hungarian exports averaged 61.9 per cent over the period 1925-30; even by 1930 they had fallen to 53.8 per cent and by 1931 before the clearings came into operation to 43 per cent; on the other hand, the share of Germany and Italy rose from an average of 17.8 per cent during 1925-30 to 23.2 per cent in 1930 before the advent of exchange control, remained unaffected in 1932 by the introduction of clearing, and experienced its great augmentation in 1933-35 with the development of present political alignments.

Finally, we may observe the behavior of Hungarian trade with the most important of her creditor countries.² From 1930 to 1931 Hungarian *exports* to these countries increased in absolute amount by 11 per cent and in relative share of her total exports

p. 12; idem, Tenth Quarterly Report (April 16, 1934), p. 15; idem, Twelfth Quarterly Report (October 13, 1934), p. 10; League of Nations, World Economic Survey 1933-34 (Geneva, 1934), p. 149.

1. Hungarian General Credit Bank, loc. cit., Vol. 11 (February, 1937); Tyler, Twenty-Fifth Quarterly Report (February 26, 1938), p. 5.

2. Cf. figures for exports, imports, and balances with France, United States, England and Switzerland, p. 181, below.

from 12 per cent to 22 per cent; at the same time capital *inflows* from these very countries continued at 210,000,000 pengö for 1930 and 287,000,000 pengö for 1931, despite the conversion of the small unfavorable balance of trade in 1930 with the creditors into a large favorable trade balance in 1931! Under free exchange, such as obtained while most of these funds were moving, there is no necessity that as between two countries goods should move on balance in the same direction as capital. Yet there would be *some* tendency of this sort; a movement of goods directly contrary to the capital movement is unusual.

The explanation of this situation seems to lie in the fact that the outward movement of values had more powerful and intimate connections with commodity trade than did the much larger movement of funds inward. In response to pessimistic anticipations arising from the catastrophe to agricultural prices, Hungarian nationals engaged in a capital flight by exporting to the financially strong nations and taking payment in foreign currency and securities. As depression deepened, inventories and all things available for export were sacrificed to the flight into safer currencies. Foreigners who had made direct investments in Hungary may have withdrawn inventories and even some equipment. Capital flowing *into* Hungary, on the other hand, went largely into state and municipal improvements which competed with export industries only remotely for raw materials and factors, or into liquidity reserves, such as the Bank for International Settlements loan to the Hungarian central bank, which did not operate to raise costs.

Exchange control, including clearings, effectively stops repayments *via* third countries; after 1931 it would be natural, therefore, to expect a direct association of capital and commodity movements. Lending to Hungary ceased in 1932, and repayments by means of "additional exports" had scarcely begun: the neutral trade balance which actually appeared in that year fulfills expectations. After 1932 the expected favorable balances with creditor countries likewise were realized, their size depending upon the phase of the cycle within Hungary.

Hungarian exports turned strongly toward England and Switzerland during 1931, for as countries with a reputation for "sound" currencies they attracted a large part of the 48,600,000 pengö export balance developed by flight capital in that year. Expectations are also confirmed in the decline of Hungarian

exports and the increase of imports from particular countries after their devaluations, as in the case of trade with England in 1932 in comparison with 1931, and with Switzerland in 1937 and 1936. Finally it is to be observed that, though France was quantitatively half again more important than England as a creditor of Hungary, the favorable balances which Hungary developed in maintaining debt service for France were a small fraction of those for England. The French quota system seems to have purchased protection for domestic producers at a heavy cost to French foreign lenders.

C. *Export and Import Prices: Terms of Trade*

In the introductory chapter it was argued on purely *a priori* grounds¹ that the introduction of exchange control and clearings would raise costs and prices in international trade: exports would bring higher (gross) prices, if sold to clearing rather than to free-exchange countries, and imports from clearing countries would cost more than if they were purchased from free-exchange countries. It is strange that the League of Nations Report on Exchange Control restricted its argument to the side of exports; but fortunately for present purposes the statistical verification for exports happens to be drawn from the case of Hungary. Furthermore, the League appears to have had more complete trade statistics at its disposal than those published by the Royal Hungarian Statistical Office, in which the quantity of, and total price paid for, a particular export is not always given for each country. The figures of the Report are particularly valuable, therefore, for their inclusion of *all* countries for several of Hungary's most important exports. Prices in several cases are 50 per cent higher for exports

HUNGARY: AVERAGE EXPORT PRICES OF CERTAIN ARTICLES, 1936²
(In Pengő per Quintal)

	To Exchange-Control Countries	To Other Countries	To All Countries
Wheat	16.01	11.15	14.09
Wheat flour	22.70	12.96	18.53
Chickens, etc.	132.0	87.0	118.0
Fresh butter	198.0	115.0	158.0
Eggs	89.0	70.0	87.5
Malt	23.49	18.68	19.68
Rye	12.69	8.51	12.63

1. Cf. pp. 24-26.

2. League of Nations, Report on Exchange Control (Geneva, 1938), p. 34.

to clearing countries, and for wheat flour the margin exceeds 75 per cent. The extent of these differentials and the exhaustiveness of the figures as to countries seem to leave no doubt that in 1936 Hungarian trade fulfilled the theoretical expectation.

However, if the price differentials had antedated exchange control — price differences resting upon differences in quality, in method of quotation, in “terms” allowed the purchaser — the evidence of 1936 would be inconclusive. To explore this possibility, I have carried back the calculation of export prices for three of the commodities in the Report to 1931, before clearings were established. The very restricted size of the sample is explained by the necessity of selecting commodities of standard quality and by

PRICES OF HUNGARIAN EXPORTS TO CERTAIN FREE
AND EXCHANGE-CONTROL COUNTRIES¹
(Average Prices in Pengő per Quintal)

Commodity exported	1931	1932	1933	1934	1935	1936	1937	1938
Dressed poultry								
England.....	185.7	117.7	113.4	97.8	85.9	84.6	....	....
Germany.....	194.0	143.8	122.3	109.2	122.1	126.5	....	....
Butter								
France 1931-33	280.7	169.8	135.5	65.0	109.9	114.4	135.0	135.9
England 1934-38	276.0	199.9	157.4	203.0	197.9	204.4	211.0	204.7
Germany.....								
Flour								
England.....	28.0	23.0	15.8	18.0	11.8	13.0	....	....
Czechoslovakia	26.8	23.0	21.7	....	....	28.0	....	....

the fact that, even in the most exhaustive trade statistics published, it is practically impossible to discover complete series of both volume and value of exports by commodities by specific countries. However, in the case of the three commodities for which somewhat interrupted series could be shown there is no instance in which the tendency of export prices to exchange-control countries (Germany or Czechoslovakia) to exceed export prices to free countries (England or France) is explained by a price differential existing before the introduction of clearings. Furthermore, although the samples include only single countries in either category in contrast with the League's figures including all countries, the figures show also that the year 1936, the only one pre-

1. Compiled from data of volume exports by countries in quintals and total value of specific commodities exported to given countries, as given in *Statisztikai Havi Közlemények*, Vol. 36-41.

sented by the Report, is not an isolated case or a mere accident.

On the side of imports, not included in the Report, limitations such as those encountered for exports restrict the figures presented here to mere illustrative examples. Average prices paid for raw

**PRICES OF HUNGARIAN IMPORTS FROM CERTAIN FREE
AND EXCHANGE-CONTROL COUNTRIES¹**
(Average Prices in Pengő per Quintal)

Commodity imported	1931	1932	1933	1934	1935	1936	1937	1938
Raw coffee								
England.....	140.0	155.0	130.3	121.1	78.9	78.1	91.2	67.2
Germany....	140.0	180.0	145.7	121.1	85.2	106.5	126.1	128.9
Anthracite coal								
Poland.....	3.50	3.50	3.50	2.78	2.57	2.56	2.30	2.30
Germany....	3.50	3.51	3.48	2.96	3.10	3.08	3.05	3.19
Cocoa beans								
England.....	....	....	....	44.2	43.0	53.0	74.4	50.3
Germany....	....	....	....	44.2	43.0	51.0	88.0	62.2

coffee imports began in 1931 with absolute equality, but immediately thereafter revealed the *a priori* expectation that more would have to be paid to the exchange-control than to the free-exchange countries. For the single year 1934 coffee prices again came to equality when, under the operation of the so-called Swedish clause, Germany extended her imports without extra expenditure in devisen, and was consequently in a position to offer some commodities at reduced prices; but with the abrogation of Swedish clause agreements in 1935 the original tendency reasserted itself, and by 1938 Hungary was actually paying double the English price for its coffee imports from Germany. In 1934 and 1935, while Poland still maintained freedom of payments, her anthracite coal cost Hungary less than Germany's; thereafter the same relation persisted, undoubtedly because of Germany's ability, as overwhelmingly the greatest market for Hungarian exports, to drive a hard bargain.² Figures are not available for cocoa-bean imports

1. Source as on p. 141.

2. The opinion is expressed in the Royal Institute of International Affairs, South-Eastern Europe, pp. 196-200 that Germany either did not strive or at any rate did not succeed in utilizing her mere size as an importer to turn the export-import price relation in her favor. The evidence for this contention is that for a number of southeast European countries following 1933-34 export prices rose relatively to import prices. The recovery of agricultural relatively to industrial prices is quite forgotten!

into Hungary in the early years of exchange control, and they show no marked changes from 1934 through 1936; but in 1937 and 1938 the expected rise in cost of German supplies to Hungary puts in its appearance.

The evidence given in the League Report and the further indications adduced here support the generalization that, as applied to Hungary, exports bring higher gross prices and imports entail higher costs in trade with exchange-control than with free-exchange countries. Though the terms of trade may be shifted in these price changes by differing cost and demand functions, there can be no *a priori* certainty as to which country, as between two exchange-control countries, will gain or lose. But the terms of trade are only half the story: when volume of trade is also considered, the ordinary tendency of clearings to enforce an equality of exports and imports by levelling downward, makes it practically certain that both countries derive a smaller gain from international trade.

As between a free-exchange and a clearing country, or as between the situations of one country before and after the institution of exchange-control, the foregoing evidence would show that the second situation involves a loss even in terms of trade. For since clearing raises the cost of imports, and since there is no reason for believing that import costs in the free relations should fall, the average cost of imports must be raised for the country under clearing arrangements. On the side of exports, the higher gross prices would mean a reduction in net prices except in the limiting cases of demand and cost functions which throw the interest and risk costs of sales through the clearing entirely on the buyer. The probability of this constellation is small. Consequently clearing involves losses in both terms and volume of trade, if comparison is made with free exchange.

The Hungarian Institute of Economic Research publishes a monthly and annual index of the prices of exports expressed as a

HUNGARIAN EXPORT PRICES AS A PERCENTAGE OF IMPORT PRICES¹
(1925-27=100)

1929	92.0	1933	81.8	1937	94.4
1930	90.4	1934	94.4	1938	97.0
1931	84.7	1935	102.9	1939	
1932	85.4	1936	98.0	April	92.0

1. U. I. f. W., Vol. 1-42.

percentage of the prices of imports, the so-called "foreign trade price shears." Over the years 1929-1935 the fall and rise in Hungarian terms of trade as measured by this index follow the collapse and recovery of agricultural prices relatively to industrial prices, and whatever adverse effects exchange control may have had are submerged in this major movement. But since the agricultural shears continued to close from 1935 to 1937,¹ it would be reasonable to conclude that the adverse movement in Hungarian terms of trade in 1935, 1936, and 1937 rests directly upon exchange control and other autarchic devices. The implications of this deterioration, either natural or induced, in the "gain from trade" appear with catastrophic severity in the matter of foreign debt.

FOREIGN DEBTS UNDER EXCHANGE CONTROL

The introduction of exchange control in 1931 was occasioned for Hungary as for other countries by withdrawals of foreign capital threatening the collapse of the monetary standard. We have already followed early developments — the stop-gap prohibition of all outward capital transfers under the exchange-control decrees, and the petrifying of long-term debts under the Moratorium of December, 1931. Since the Moratorium, unlike the Standstill on short-term foreign debts, was a matter of one-sided action, it included the entire body of long-term debts (2,470,736,088 pengő), exempting only the League Reconstruction Loan of 1924. Amortization and interest were maintained on this loan until August, 1932; for the following year service had to be suspended entirely; and thereafter only interest was paid, half in exchange and half in coupons or blocked pengő. With this exception and one per cent interest on the Bank for International Settlements loan, Hungary paid nothing in devisen upon its foreign obligations until 1937, and even where transfer was made indirectly by "additional exports" and so forth, interest alone and at reduced rates was paid. The first renewal of the Moratorium in December, 1932, carried with it one-sided reductions in nominal interest to 5 per cent; the renewal of the Moratorium was simply made by annual decree thereafter.

Hungarian debtors paid the pengő equivalent of sums owing to foreigners on long-term debt — principal and interest — into

1. Cf. p. 115 above.

a "Foreign Creditors' Fund"¹ with the Hungarian National Bank. Except for interest service on the Bank for International Settlements and League loans, disbursements from this fund were made into "Blocked Inland Pengő Accounts" held by authorized Budapest banks to the credit of foreigners. Utilization of blocked pengő held by foreign owners under the Moratorium depended upon permission of the Hungarian National Bank; in fact, the use was limited with some exceptions to defraying expenses incurred by the owner through travel or residence in Hungary.² On the basis of permitted uses, these so-called "coupon pengő" or "coupons" were traded in at varying percentages of parity on the chief foreign markets at Zurich, Amsterdam, and London. If, as in December, 1933, the coupons sold at 73.8 per cent of par, a 5 per cent bond yielded effectively 3.69 per cent; if, as in November, 1936, coupons sold at 30.3 per cent, the yield dropped to 1.52 per cent.

So far as obligations of the State, embracing about half of Hungary's foreign long-term debts, are concerned, payments into the Fund came to be a mere formality. From the Autumn of 1932 to June, 1933, the government fell into arrears to the Fund by 34,400,000 pengő; thenceforth it constantly increased the amount which was paid by means of Treasury bills, as may be seen from the statistical summary in the Appendix,³ relying as a matter of fact exclusively upon this method. But even this financing entailed a less than proportional burden upon government credit, inasmuch as, from about the same time onward, the Fund advanced to the Treasury and to the state railways sums exceeding half the in-payments. In certain quarters this move was censured as inflationary or at least as preventing the deflation necessary to provide price-differentials to accomplish transfer in real goods.⁴ The official Hungarian attitude, warmly supported by the banks and economists, was that the very desideratum in the administration of the fund was avoidance of deflation.⁵ The matter turns in principle simply upon the degree to which it is politically and

1. On February 26, 1935 the designation of the Fund was changed to "Cash Office of Foreign Credits."

2. Tyler, Twenty-third Quarterly Report (July 15, 1937), p. 15.

3. Cf. p. 185 below.

4. *Ö. I. f. K.*, Vol. 6, No. 2, p. 39 ff., and Vol. 7, No. 6; cf. also Machlup in the *Neues Wiener Tagblatt*, January 1, 1933.

5. *U. I. f. W.*, Vol. 14, p. 116. Cf. also Stephan Varga, "Bemerkungen zu den Problemen von Aufbringung and Transfer," *Economic Essays in Honour of Gustav Cassel* (London, 1933), p. 654-658.

economically possible to reduce standards of living by the deflationary method of inducing actual transfer. In the actual course of events the maximum outstanding loan of 57,000,000 pengő in June, 1936, does not seem particularly alarming in comparison with a monetary circulation of 598,000,000 pengő, though it admittedly contributed something to the upward divergence of Hungarian from gold-bloc prices.

In dealing with short-term foreign debts the maintenance of good relations with foreign bankers induced the Hungarian authorities to resort to attempts at agreement rather than to unilateral action. Of 1,838,000,000 pengő in this debt category, only 823,000,000 pengő could be covered by agreements, partly because the foreign creditors were scattered and not represented in any organized fashion. Even upon the Standstill debts three months elapsed between the end of the first on August 1, 1932, and the acceptance of the second agreement, and a month again elapsed between the Second and the Third Standstills. The latter, entered upon in March, 1933, was significant in its provision for a 5 per cent annual amortization quota, if the creditor agreed to pengő payment. Although the Third Standstill was expected to run for one year, it was substantially modified on October 20 by the famous Pengő Transfer Agreement.¹ The possible employment of blocked pengő under earlier arrangements had largely been restricted to domestic applications — to granting mortgage loans, purchasing Hungarian shares, mortgages and bonds, acquiring real estate and land, and granting pengő credit to banks.² Under the "Berkovitz Plan" of October 19, 1932, a limited extension of blocked pengő to "additional exports" at a discount from par value was introduced. The Pengő Transfer Agreement now regularized this practice by allowing additional exports against the 5 per cent capital amortization quota, and in addition against *voluntary* repayments by industries (not banks), provided there was no discrimination between foreign creditors, and finally against other pengő balances approved by the Bank.³ License for additional export required that 20 per cent of the export value be paid in free devisen.

1. Sometimes called the "Martins Agreement," because of the use of Martins Bank, London, as the clearing bank for blocked pengő balances.

2. Hungarian National Bank, special publication, Administration of the Foreign Exchange Control in Hungary (Budapest, June 13, 1933), p. 17.

3. Tyler, Eighth Quarterly Report (November 8, 1933), p. 12.

The Standstill Agreement was renewed for one year on April 4, 1934, with the possibility of one-half per cent interest reductions (to $\frac{7}{8}$ per cent) for prompt payment. The principle of equal treatment of all creditors, originally applied to voluntary payments but considerably modified in the Pengő Transfer Agreement, was now removed altogether. After a temporary extension for three months on April 1, 1935, the Standstill was renewed for a seventh time on June 25, 1935, for one year beginning July 15, with another interest reduction of one-half per cent and a shortening of the compulsory amortization quota to 3 per cent; and this quota persisted until the thorough revision of Hungary's entire foreign debt service in the summer of 1937. When the Standstill was again renewed on July 6, 1936, it included, beside the British and American short-term banking creditors, also the Swiss, French and Dutch. Obligatory capital repayment for state and municipal obligations was raised from one per cent to three per cent prevalent for other Standstill debts; claims for repayments in pengő were made transferable between parties included in the Standstill, and finally pengő balances were made applicable to shares traded on the Budapest Stock Exchange, though such shares had to remain blocked for three years. The Standstill Agreement of 1937 marked a new epoch in Hungarian exchange control by providing for the first time that payments should be made entirely in free exchange. From its inauguration on July 15 this arrangement has, except for certain categories, paid $4\frac{1}{4}$ per cent interest and one per cent amortization.

Under the general prohibition of outward capital transfers under the *devisen* decrees, payments of Hungarian debtors on foreign debts were sequestered into certain blocked accounts. Various exigencies caused the reclassification of these accounts from time to time, but their composition in 1937 can be taken as representative. There were then eight varieties, four of them genuinely blocked, two merely transition accounts, and two in effect free.¹ The most important category embraced "Blocked

1. The accumulated balances of the various blocked accounts have never been revealed. The description of the accounts given in the text is based chiefly upon the following sources: Administration of the Foreign Exchange Control in Hungary, pp. 13-15; *Devisenbewirtschaftung in Ungarn*, 8th ed. (Budapest, April 20, 1937), pp. 4-8; 9th ed. (Budapest, December 20, 1937), pp. 4-8. Josef Judik, "Devisenbewirtschaftung in Ungarn," *Ung. Wirt. Jrbh.*, Vol. 8, pp. 319-320; *Österreichischer Volkswirt*, April 23, 1932.

Inland Pengö Accounts," held like all other regulated accounts in specified devisen banks by private and corporate debtors in Hungary. Into these particular accounts were paid interest and redemptions falling under the Moratorium by the Foreign Creditors' Fund of the National Bank.¹ In-payments required permission of the Hungarian National Bank, as also the utilization (possible only within Hungary) of the funds by foreigners. A second category, "Inland Pengö Accounts," included some funds tied up from the bank holidays of 1931, payments on non-mercantile liabilities arising after January 31, 1932, but not covered by the Standstill, and some merchandise debt payments prior to that date. "Inland Merchandise Pengö Accounts" embraced payments only upon merchandise debts originating after January 31, 1932. In- and out-payments were subject to the same provisions as "Blocked Inland Pengö Accounts." But whereas "Inland Pengö Accounts" could not be utilized by foreigners for Hungarian exports, "Inland Merchandise Pengö Accounts" could be by special permission. Finally there were "Old Bill-of-Exchange Accounts" which arose from the deposit of foreign exchange before July 17, 1931, and which like the other blocked deposits required permission for their use.

The Standstill Agreement required that the private person in Hungary should not repay an existing merchandise debt until he elsewhere obtained a new merchandise credit of equal magnitude to supplant it. Pending the presentation of documentary proof regarding the new credit, payments on existing merchandise credits were made according to certain technical determinants into either "Blocked Bill-of-Exchange Accounts" or "Suspense Accounts"; after approval of the new credit, the sums were transferred to the "Blocked Inland Pengö Accounts" mentioned above. "Suspense Accounts" also received in-payments by Hungarian importers during the 6-8 weeks delay after application until permission to pay the foreign seller had been granted by the Bank.

Finally there were two accounts arising from deposits made by foreigners subsequently to July 17, 1931, for which in- and out-payments required no permission of the Hungarian National Bank, and for which the Bank upon petition made payment in genuine

1. These accounts include also the service on certain old and new merchandise debts, on certain old non-mercantile liabilities outside the Standstill, and deposits made by foreigners of pengö bank notes.

foreign exchange. These deposits were called "Free Foreign Pengö Accounts" and "Free Foreign Exchange Accounts," the difference being that with the former the foreign depositor accepted a pengö equivalent of his surrendered *valuta*, whereas with the latter he maintained the account in terms of some specific foreign currency. Neither of these varieties belongs to the category of genuine blocked accounts.

Amongst the various types of blocked accounts only four, as we have seen, represented genuine blocking, and of these only two, resulting from the Moratorium and the Standstill, were sufficiently traded in to be quoted continuously on the chief international markets. The curve of quotations on Standstill pengö (Fig. 13, p. 106) as a percentage of parity shows that, once the value of these pengö had assumed an absolute magnitude given by foreign evaluations in view of permitted uses at about 50 per cent of par, their general course paralleled quite closely the Zurich quotations upon pengö notes, which in turn, according to previous analysis,¹ can be explained in terms of monetary policy and the behavior of prices in Hungary.

Two major exceptions to this parallel movement are the high level of Sperrpengö values from September, 1933, to July, 1934, in the teeth of a decline in pengö note quotations, and the disproportionate rise of Sperrpengö relatively to notes from March to July, 1937. The first of these departures rested upon an exception made by the Hungarian National Bank to its general rule restricting Sperrpengö to industrial exports and permitting temporarily the purchase of farm products as "additional exports" to further the marketing of the large crops of 1933.² When the Bank returned to its regular practice Sperrpengö dropped rapidly in the latter half of 1934 from 58.3 per cent to 44.4 per cent. This movement re-established the parallel with pengö notes, which declined from 75 per cent to 66 per cent meanwhile, and with the inverse movement of the price of gold on the Budapest market (Fig. 13, p. 106). Seasonal advances in the value of Sperrpengö can also be observed in the fourth quarter of 1935 and the third quarter of 1936, indicating presumably that for a short period the Bank permitted the use

1. Cf. pp. 105-118 above.

2. Eugen Róz, "Das dritte Jahr der Devisenbewirtschaftung," Ung. Wirt. Jhrb., Vol. 10, p. 243 ff.

THE PRICES OF HUNGARIAN COUPONS (1) AND STANDSTILL PENGÖ (2) IN ZÜRICH¹ AS
PERCENTAGES OF PARITY²

	1932		1933		1934		1935		1936		1937		1938	1939
	1	1	2	1	2	1	2	1	2	1	2	1	1	
January.....		52.2		72.2	56.1	....	47.7	36.6	45.0	29.1	40.2	20.2	17.1
February.....		55.5		71.6	56.6	....	47.7	28.9	42.2	26.4	40.0	21.7	21.7
March.....		47.7		71.0	55.5	....	47.5	27.8	42.2	25.2	43.1	14.7	26.0
April.....		51.1		71.0	56.1	....	47.5	38.3	42.2	26.0	45.4	10.1	24.0
May.....		53.3		71.6	54.4	29.4	46.9	27.2	42.5	24.8	54.3	8.0	25.6	
June.....	72.2	64.4		70.5	58.3	30.5	46.9	29.4	46.3	24.4	47.3	5.0		
July.....	72.2	67.7	52.7	60.5	56.1	29.4	46.6	31.1	46.6	24.1	55.9	6.6		
August.....	78.3	68.8	52.2	61.1	54.4	29.1	46.3	30.5	46.1	20.2		6.6		
September.....	81.0	72.2	53.3	57.2	52.7	33.0	46.3	30.5	48.0	19.6		6.2		
October.....	81.0	73.3	54.4	59.4	47.7	33.0	48.3	30.7	43.5	19.4		....	
November.....	68.3	74.4	57.2	58.3	45.5	36.4	48.0	30.3	39.6	19.4		....	
December.....	61.1	73.8	56.1	55.8	44.4	35.5	48.0	29.9	40.4	19.4		....	

1. Except for 1938 and 1939, for which quotations pertain to the Budapest market.

2. The original data are Swiss francs per 100 pengö. For these data through 1937, but excluding 1935, I am indebted to the Chase National Bank, New York; for the data for 1935, 1938, and 1939 I have to thank Dr. William Fellner, formerly of the Hungarian Institute for Economic Research, now of the University of California. Coupons were not dealt in before June, 1932, nor Standstill pengö before July, 1933, and dealings in the latter were suspended after July, 1937. Missing quotations within these limits are indicated by leaders.

of these blocked accounts for agricultural exports.¹ The sudden advance of Standstill pengö from 40 per cent in February, 1937, to 54.3 per cent and 55.9 per cent in May and July rests upon market anticipations of the favorable debt settlement. After this settlement in July the National Bank became the sole purchaser of Standstill pengö; market quotations disappeared, but there existed a continuous offer by the Bank at about 47 per cent, representing a mean of prices for two and one-half years previously.

Quotations on Hungarian coupons, or interest obligations under the Moratorium, have tended irregularly downward as the prospects of maintenance of contractual interest have gradually become extinct, and as the field of utilization has, with occasional reversals, been narrowed down. Thus the recovery from 48 per cent to 75 per cent from March to November, 1933, is definitely linked with the development of regular trading in coupons for purposes of travel in Hungary by other persons than the original coupon-holders.² The violent fall from 56 per cent to 29 per cent between December, 1934, and May, 1935, was precipitated by an ordinance of February 24, 1935, reducing the possibility of illegal repatriations. From May, 1935, throughout the balance of the year, there appears to have been something of a recovery in this business, lying at the bottom of the advance of coupon quotations to 30 per cent; but the final categorical prohibition of security repatriations in January, 1936, again ushered in declining coupon prices.³ The debt settlement of July, 1937, apparently reduced yields below what had been expected and caused a shading off in coupon prices; but the really disastrous plunge came in March, 1938, with the German seizure of Austria and foreign misgivings concerning the fate of Hungary. The revival of coupon prices during the early months of 1939 was probably a by-product of the large amount of funds poured into Hungary from Germany via the Zurich market preceding the Hungarian general elections in May.⁴

Save for the very limited cases of payment in free exchange which have already been noted, service upon Hungarian foreign debts prior to July, 1937, proceeded through payments "in kind," i. e. through creditors' acquisition of goods and titles or the utiliza-

1. Devisenarchiv, Vol. 1 (August 25, 1936), p. 921.

2. Cf. Róz, loc. cit.

3. Die Stunde (Vienna), January 23, 1936.

4. New York Times, May 21, 1939, p. 18.

tion of services in Hungary, or through "additional exports." The last possibility rested upon a readiness of foreign creditors to accept quantities of Hungarian exports even at the artificially high price given by the application of the official rate of exchange, in order to realize immediately upon their claims. This concession was transferred to the Hungarian exporter through his being given permission by the National Bank to receive from foreign creditors the blocked pengő (at par) and to sell such pengő at an "additional export premium" paid by the Bank in domestic pengő. Hungary was indeed the first country to exploit creditor concessions as a means of liquidating debts cheaply and at the same time sustaining exports and employment. The rate at which debt service was maintained through this device depended, it was said, upon the export being one "of which the foreign-exchange proceeds are not required for the maintenance of Hungary's economic life."¹ Since this criterion came to be recognized in the course of time as rather too abstract and vague for particular cases, additional exports were subsequently defined quite simply as those for which the National Bank "pays a premium exceeding the ordinary amount."²

Under the First Standstill (March 31, 1932) foreign creditors were limited in the utilization of blocked accounts to investments of various categories within Hungary. But the Berkovitz Plan

EXPORT AGAINST PENGŐ: HALF-YEAR TOTALS³

In Millions

1932:	I.....	2.9	1936:	I.....	6.2
	II.....	1.6		II.....	10.6
1933:	I.....	7.6	1937:	I.....	13.4
	II.....	27.9		II.....	7.7
1934:	I.....	20.4	1938:	I.....	4.4
	II.....	14.9			—
1935:	I.....	9.8	Total.....		135.6
	II.....	8.2			

(October 19, 1932) opened up the possibility of realization through exports; a decree of April 8, 1933, permitted application of Standstill balances to the travel of third parties; and finally the Pengő

1. Text of the Pengő Transfer Agreement (October 20, 1933), p. 3 as distributed in mimeographed form.

2. Devisenbewirtschaftung in Ungarn, 9th ed. (Budapest, 1938), p. 44.

3. Ung. Wirt. Jhrb., Vol. 14, p. 363.

Transfer Agreement (October 20, 1933) extended and regularized additional exports. Ostensibly because the demand for Hungarian industrial products was "inelastic,"¹ permission for additional exports was only exceptionally given for agricultural products — chiefly in the crop-moving periods of 1933–34 and 1936–37,² as the figures on page 152 show.

The extent of export premia is not known. The nominal rate appears to have been rather regularly between 105 per cent and 110 per cent,³ but varying portions of the export devisen had to be surrendered by the Hungarian seller at the *regular* export premia — for example, latterly at 50 per cent to free devisen countries — and since these proportions have not been allowed to become public, the effective "additional export" premium rates cannot be determined. The volume of exports in this category has been estimated reliably for 1933–1936 at 6,000,000 pengö, 24,000,000 pengö, 32,000,000 pengö, and 34,000,000 pengö, and somewhat less reliably for 1937 at 60,000,000 pengö.⁴ Since these sums include premia on an unknown fraction of the total, it is impossible to know how much of the Standstill debts was liquidated in this way. Responsible Hungarian commentators have complained that the high "additional exports" premia encouraged mushroom industries in Hungary, called into being for the very purpose of producing "additional" exports; furthermore, the Hungarian exporter was often tempted to share his profits to induce the foreigner to absorb more of these exports. The process resembles exchange dumping and tends to depress the pengö on foreign markets. In the debt settlement of 1937 additional exports were contemplated as an important mode of carrying forward the service upon Standstill debts.⁵ It was left to the Hungarian National Bank to determine the extent of transfer which could be thus maintained without disaster to the domestic economy.

1. According to the verbal report of a high banking official in Budapest.

2. Cf. pp. 149, 151 above.

3. Devisenbewirtschaftung in Ungarn, loc. cit.; Neue Freie Presse, October 9, 1935.

4. For 1933 and 1934, Josef Judik in Villaggazdasie Szemle, February 4, 1935; for 1935 and 1936, Ungarns Handel und Industrie im Jahre 1936 (Budapest, 1936), p. 22; for 1937, The Royal Institute of International Affairs, South-Eastern Europe, p. 120. The last estimate seems impossibly large, since the entire debt service after the agreements of 1937 was estimated at 45–50,000,000 pengö.

5. Economist, September 18, 1937, p. 565.

The premia now approximate the general level paid for exchange on free devisen countries at about 50 per cent.¹

A new epoch in Hungarian economic history since the credit crisis of 1931 was heralded in June, 1937, by the first offer of terms upon which the Hungarian authorities stood ready to resume effective transfer on the debt service in free devisen. Culminating in this event were three favorable circumstances: the simplification of premia and surcharges in 1935, the improvement in terms of trade for Hungary through the rise of agricultural prices, and the large harvests of 1936. The proposals for a settlement made by Fábinyi and Imrédy on behalf of Hungary were favorably reported upon to their constituencies by the League Loan Committee, the Council of Foreign Bondholders and the American Protective Association. Excluding commercial debts, which required no negotiation, and the *Caisse Commune* obligations, which Hungary inherited from the old monarchy, the outstanding foreign indebtedness at mid-summer 1937 was 1,750,000,000 pengö divided as follows:

Long-term Debt		Short-term Debt	
State	379,000,000 Pengö	State	219,000,000 Pengö
Others	869,000,000 Pengö	Standstill and similar	246,000,000 Pengö
		Pre-exchange-control	170,000,000 Pengö
		Exchange control	246,000,000 Pengö
Total	<u>889,000,000 Pengö</u>	Total	<u>881,000,000 Pengö</u> ²

By the close of 1937, 1,238,000,000 pengö of this total of 1,750,000,000 pengö had been arranged for or virtually so; and by the close of 1938, after amortization of 20,000,000 pengö, the settlement of nearly the entire 1,750,000,000 pengö foreign debt could be announced.³ This signified, in the opinion of one of the Hungarian National Bank directors, that recovery from the worst effects of the world financial crisis had largely been achieved.⁴ Payment in blocked accounts ceased.

The full contractual debt service prior to the settlement

1. Pester Lloyd, May 15, 1937.

2. Josef Judik, "Die ungarische Devisenbewirtschaftung und die Neuregelung des Auslandsschuldendienstes," Ung. Wirt. Jhrb., Vol. 13, pp. 306-319. The Royal Institute of Economic Affairs, South-Eastern Europe, pp. 121-122, gives the total at 1,838,000,000 pengö without disclosing the source of the figure.

3. Tyler, Twenty-fifth Quarterly Report (February 26, 1938), p. 13, and Volkswirtschaft 1938, pp. 251-252.

4. Ung. Wirt. Jhrb., Vol. 14, p. 365.

would have involved on long-term account 90,000,000 pengő and 30,000,000 pengő in interest and amortization, and on short-term account 30,000,000 pengő and 30,000,000 pengő. By the terms of the settlement this contractual total of 120,000,000 pengő was reduced to 50,000,000 pengő annually; an increase of about 10 per cent over the actual accomplishment under various devices of exchange control during the preceding two or three years.¹ Interest from 1½ per cent to 1¾ per cent was agreed upon with long-term creditors, while Standstill creditors received one per cent in interest and 4¼–4½ per cent amortization annually.

What had been accomplished during the six years since the introduction of exchange control by Hungary toward the liquidation of her foreign debts? The most authoritative statement emanates from Dr. Josef Judik, former Director of the Economic Division and at present a Director of the Hungarian National Bank: of the 4,310,000,000 pengő indebtedness at the close of 1931, 2,500,000,000 pengő remained in July, 1937; of this difference of 1,810,000,000 pengő, about 32 per cent (1,376,000,000 pengő) had disappeared simply as a result of foreign devaluations, and 350,000,000 pengő represented illegal capital repayments through security repatriations.² According to Dr. Judik's own estimates, only 70,000,000 pengő would remain as the "substantial amount" of regular amortization to which he refers. The League of Nations report of balances of payments, however, gives the following:

CAPITAL ITEMS IN THE HUNGARIAN BALANCE OF PAYMENTS³

(+Inward; –Outward; in Million Pengő)

	Long Term	Medium and Short Term	Total
1932.....	+1.4	+ 5.2	+ 6.6
1933.....	+ .2	+ .3	+ .5
1934.....	+ .0	-16.0	-16.0
1935.....	+1.6	-49.0	-48.0
1936.....	-1.7	-55.9	-57.6

1. Volkswirtschaft 1938, loc. cit.

2. In a statement before the Hungarian Parliament Dr. Grecsak estimated debt reductions by devaluation and bond repatriation at half the original sum,— i.e. at somewhat over 2,000,000,000 pengő in comparison with Judik's 1,726,000,000 pengő. Cf. Neue Züricher Zeitung, June 9, 1937. After the dollar and pound but before the gold block devaluations, Kemény writing in the Österreichischer Volkswirt of February 23, 1935 (pp. 346–347) estimated the devaluation gains at 1,100,000,000 pengő and repatriations at (par values) of 300–350,000,000 pengő — together 1,450,000,000 pengő.

3. League of Nations, Balances of Payments 1937 (Geneva, 1938), p. 117.

Over the five years 1932–1936 the League statistics show net total repayments of 114,800,000 pengő. Subsequent balances are not available, but there is every reason to suppose that to July, 1937, repayments proceeded at no less a rate than in 1936. If so, we would have something like 140,000,000 pengő amortization since 1931, or twice the amount got residually from Dr. Judik's estimates. But the difference is, after all, merely between 1.2 per cent and 2.4 per cent, representing the share of debt reduction during the period 1932–1936 by means of all devices, including devisen payments and additional exports, carried through legally under the exchange control apparatus! Of course it is not to be forgotten that net outward interest payments of a magnitude about equal to amortization were also transferred.¹

In retrospect it appears that the transfer of debt service went forward upon a very modest scale; but even spokesmen of the creditor countries pointed out that the effective interest rates should be judged in view of money rates in the creditor countries themselves during the depression.² Fully a fifth of the State debt and nearly a third of the private long-term debt was contracted at $7\frac{1}{2}$ per cent, and in the latter category rates up to 14 per cent were not unknown.³ The incubus which such rates would have imposed on the whole economy warranted the conclusion reached by the *Economist* as early as October, 1933, that the one-sided regulations of the Hungarian authorities in the end benefited not only the distressed debtors but also foreign creditors.⁴ Two further factors assume great significance — the terms of trade and the portion of Hungarian favorable balances available for debt service. In an earlier connection we saw how by 1933 Hungarian export prices in terms of import prices had reached 82 per cent of their 1925–27 level.⁵ Had trade proceeded at 1928–29 prices in 1938, imports would have been 68 per cent and exports 126 per cent of their 1928–29 values, and the favorable balance would have been 400,000,000 pengő instead of 113,100,000 pengő.⁶ But of the

1. The League's figure (*loc. cit.*) for the five years is 121,400,000 pengő; to which I have added for the first half of 1937 12,600,000 pengő, giving a total of 134,000,000 pengő.

2. *Economist*, December 7, 1935, p. 1125–1126.

3. *Magyar Statisztikai Szemle*, Vol. 10, p. 1932.

4. *Economist*, October 28, 1933, pp. 815–816.

5. Cf. p. 143 above.

6. *Ung. Wirt. Jhrb.*, Vol. 14, p. 188.

favorable balance not more than 20 per cent brought in free devisen.¹ The reasons for resort to the additional export device and its continuance since the 1937 debt settlement are thus not far to seek.

A comparison unfavorable to the genuineness of Hungary's efforts to maintain the debt service might be made between the approximate 140,000,000 pengő of transfer carried on through official channels to July, 1937, and the 350,000,000 pengő of repatriations of Hungarian bonds: illegal repayments amounted to two and one-half times as much as legal repayments. One might legitimately enquire whether repatriations did not bespeak a much greater capacity to repay than the actual accomplishment, and whether the former did not assume its great magnitude simply because it was profitable, whereas the latter remained small simply because delay, bringing with it devaluations and creditor concessions, was also the profitable course. There would be nothing implausible in ascribing to Hungarian debtors motives of a sort which the creditors might also have discovered in themselves. A somewhat more reasonable apology for the situation, however, lies in the practical obstacles to carrying through refunding agreements upon the manifold issues of industrial bonds, each with its scattered group of owners, and in the absolute necessity for industrial and government units to reduce the dead hand of interest in a depression of unparalleled severity.

THE TECHNICAL EFFICIENCY OF HUNGARIAN EXCHANGE CONTROL

The Hungarian control system has been subject to illegal and legal evasions similar to those practiced in Germany and Austria — outright smuggling, circumvention by various technicalities, juggling of blocked pengő accounts to apply the funds to prohibited uses, and false bills of lading. The last practice was ubiquitous and particularly interfered with the functioning of clearings. As officials in the exchange authority have pointed out, a decline in the actual pengő rate, instead of stimulating exports and improving the Hungarian balance, increased the motive for Hungarians to undervalue their goods in bills of lading for export over the fixed parity clearings, with the result that this force at least operated toward a progressive worsening of the balance of trade.

1. Cf. p. 134 above.

Hungarian exchange control was peculiarly subject to evasion through the repatriation of securities. In diametrical contrast with Germany, where repatriation was managed by the Gold-diskontbank as the one important source of export subsidy as long as the foreign supply lasted, Hungary prohibited but did not succeed in suppressing the private acquisition of domestic securities from foreign holders. Prior to the first measure directed against the practice in October, 1932, the business flourished upon the enormous differentials between domestic and foreign quotations, often amounting to from 66 per cent to 75 per cent.¹ Funds for these purchases had to be got abroad by illegal ways — by direct smuggling of currency, by leaving the proceeds of exports on deposit abroad, and by concealing ownership of foreign balances. Hungarian corporations could buy up their own securities at bargain rates, despite high prices for "bootlegged" foreign currencies and high payments for the services of smugglers. Occasionally payment was made in newly issued bonds, but frequently the corporations simply pocketed the proceeds as profits and covered the shrinkage of capitalization by drawing upon commercial banks for loans. Ultimately the central bank was thus brought into the position of financing a fair share of the operations violating its own exchange-control regulations.

The original Moratorium decree of December 22, 1931, required that matured obligations and coupons should be paid into the Foreign Creditors' Fund; an administrative rule provided that out-payments should be made into free pengő accounts only when the bonds belonged to Hungarian nationals. Abuse of this ruling by the purchase of bonds belonging to foreigners led to a decree on October 31, 1932, that when application was made for redemption into free pengő accounts the bond should be deposited for eight days to permit the National Bank to establish its ownership by a Hungarian. Evidently the enforcement of this ruling was ineffective, for on February 24, 1935, substantially the same ordinance was repeated, this time complemented with the requirement of central bank permission for each security transaction with foreigners.² The sudden decline of Hungarian coupons on the Zurich market between December and May from 56 per cent

1. Kemény, *Österreichischer Volkswirt*, December 24, 1932, p. 312.

2. Tyler, *Eighteenth Quarterly Report* (April 18, 1936), p. 12; *U. I. f. W.*, Vol. 26, p. 130.

to 29 per cent of parity¹ shows that the measure was effective, especially in conjunction with the simultaneous abolition of the Budapest free gold market.² Finally, on January 22, 1936, the importation of Hungarian bonds was categorically prohibited; the proceeds of coupons could be paid to free pengő accounts only if the bond were deposited with the National Bank.³ With the exception of a short period two years later, repatriations virtually disappeared.⁴ A sporadic recurrence of the practice attended the debt settlement of 1937 and the development of an inland demand for non-State foreign bonds, but the evasions were quickly suppressed.⁵

Repatriation undoubtedly constituted the most serious lacuna in Hungarian exchange control. Statistical apprehension of its magnitude is of course as difficult as legal apprehension of the practice. For 1932 estimates put repatriation as low as 40–50,000,000 pengő⁶ and as high as 100–150,000,000 pengő.⁷ By the end of 1934 the cumulative total was estimated at 300–350,000,000 pengő⁸ and by the time of the 1937 debt settlement at 520,000,000 pengő in original values or 350,000,000 pengő in depreciated foreign currencies.⁹ This magnitude, almost equalling the total favorable trade balances from the half-year 1931 to the half-year 1937 and exceeding estimated regular amortizations during the same period by 250 per cent,¹⁰ exercised a strong downward pressure on the foreign value of pengő. Even a doctrinaire opponent of state intervention could take no satisfaction from this breakdown of exchange control. The inferior position of the foreign creditor resulting from the Moratorium was exploited, not to public but to private advantage; and the adverse turn to Hungarian terms of trade entailed the very costs which exchange control was designed to avoid. The continuance of large repatriations through four

1. Cf. coupon quotations on p. 150.

2. Cf. pp. 160–161 below.

3. Cf. Tyler, *loc. cit.*

4. Tyler, *Twenty-first Quarterly Report* (January 16, 1937), p. 9; Ungarns Handel und Industrie im Jahre 1936 (Budapest, 1937), p. 47.

5. Tyler, *Twenty-third Quarterly Report* (July 15, 1937), p. 12.

6. Georg Kemény, *Pester Lloyd*, January 6, 1933, p. 13.

7. *Economist*, February 25, 1933, p. 409.

8. Georg Kemény, *Österreichischer Volkswirt*, Vol. 27, p. 347.

9. Judik, *cf.* p. 155.

10. Cf. p. 157.

years of exchange control bespeaks a lack of administrative effectiveness or a sinister yielding to particular interests.

Evasion in the form of repatriation was undoubtedly facilitated by the existence of a free market for gold in Budapest. Although the export of precious metals came under the general embargo of exchange control, arbitraging operations, known at times to have involved thousands of bonds at a single deal, were made easy through this method of acquiring "stable" values.¹ The general impression seems to be that the gold market was tolerated as a sort of safety valve for liquidity preferences and demand for a non-depreciating asset, perhaps also as a necessary adjunct to the profitable business of repatriation.

During most of its history, especially during the persistent rise of the price of gold in 1934, various Hungarian commentators characterized the Budapest gold market as "artificial," "narrow and speculative," "not significant for exports"—in short an altogether fallible index of the value of pengö.² Nevertheless, several other indices told about the same story. Until the devaluation of the dollar, black market quotations on American exchange indicated approximately the same amount of pengö depreciation as did the price of gold.³ The securities market is said to have followed gold prices rather closely, and the premia of wheat quite obviously did so, by the evidence of Fig. 13, p. 106. Finally, as has already been explained in some detail, the price of pengö notes in Zurich varied inversely to the Budapest gold price with considerable regularity; and the price of Standstill pengö⁴ took a course similar to that of pengö notes, although at a lower absolute level. The agios on free exchange countries announced at the close of 1935 as a part of the rate unification coincided with current quotations of gold. Shortly afterward, in March, 1935, the gold

1. *Österreichischer Volkswirt*, Vol. 27, p. 145.

2. These opinions were expressed verbally by numbers of persons in official positions.

3. The following quotations from the black market for dollars are derived from Tyler, *Quarterly Reports*:

Date	Pengö per Dollar on the Black Market	Premia on Dollars	Premia on Gold on the Gold Market
December 31, 1931.....	8.3-8.5	47	70
January 12, 1932.....	7.7	40	47
March 30, 1932.....	8.1	42	37
April 30, 1932.....	7.8	40	37
July 15, 1932.....	7.7	39	37
October 27, 1932.....	7.3	28	26

4. Cf. p. 150.

market was suppressed, though the virtual devaluation involved in the new agios would have rendered its persistence nearly innocuous.

How much the evasions of exchange control in Hungary amounted to in the aggregate is a matter of guesswork. Statistics of devisen receipts and disbursements by the National Bank and their expression as percentages of exports and imports published regularly in the Quarterly Reports of the League of Nations representative in Austria have practically no significance, despite their perennial reproduction in the Reports of the Hungarian Institute for Economic Research, the London Economist and in the daily press. The percentages give no index of the exhaustiveness of the Bank's control over devisen, the main cause of divergence between exports and devisen received in any given quarter being the time lags between notification of export, actual export, and receipt of payment. Over a long period of time, however, these lags assume relatively small significance. Total devisen expenditures over the period 1932 to 1937 expressed as a percentage of total imports is 101.1 per cent; total devisen receipts expressed as a percentage of total exports is 89.7 per cent.¹ Since expenditure of devisen usually follows importation, the former percentage exceeds 100 per cent only because of lack of consistency in the modes of reporting devisen and imports; the later percentage would not be much increased by the liquidation of payments receivable, since these are short-term accounts and the totals embraced six whole years' trade.

Something like nine-tenths, therefore, of export proceeds as recorded have been apprehended by the bank. Evasions by false bills of lading, smuggling, importations not really made, etc. fail to be revealed in such figures. One harassed official of the Hungarian Bank declared that evasions would eventually put an end to exchange control; another official of the same Bank thought the Hungarian control fairly effective, but explained that devisen escaping the Bank's control were precisely the "marginal increment" necessary for the debt service. Devisen outlays for rearmament were evidently not considered marginal; the foreign creditor automatically shouldered much of the burden of the lack of efficiency of the exchange control.

1. Devisen receipts and disbursements by half-years are summarized in Ung. Wirt. Jhrb., Vol. 14, pp. 363-364.

CONCLUSION

A brief retrospect over the analysis of Hungarian exchange control may serve to bring the chief areas of economic light and shadow into sharper definition. Like other heavily indebted European states in 1931, Hungary found exchange control to be a virtual necessity in coping with a flight of capital, since the reduction of prices and wages was precluded as a political impossibility. The automatic process by which exchange control through mere temporizing gradually passed from an emergency measure to an integral part of the national economy is officially defended as a necessary consequence of a state of perpetual crisis in international financial and monetary affairs extending to the present. But these external difficulties were no less real for Austria, where exchange control was slowly reduced to a control over capital repayments and to clearing with exchange-control countries. Hungary accepted a totalitarian philosophy in economic matters and, probably without much deliberate choice, retained exchange control as an already established instrument of protectionism and *étatisme*.

Whatever were the measures taken toward simplifying the control system or extending the field of freedom in payments, they were, as we have observed, generally welcomed as economic gains by the business community with the exception of the cartels. Three changes of significance in this direction were (1) departures from the official pengő parity beginning late in 1932; (2) abandonment, late in 1935, of differential exchange rates as between countries and commodities in favor of a simpler scheme of linear premia surcharges; (3) resumption of devisen payments on foreign debts in the summer of 1937. The very fact that, aside from some increases in stringency from the angle of purely technical administration, the changes in exchange control reduced its extent or its intensity judged from a norm of free exchange, may fairly be taken as evidence that the authorities themselves, however much they protested loyalty to the principle, nevertheless found exchange control to be an onerous system.

The mitigations did not prevent the inclusion of something like 80 per cent of Hungarian foreign trade under clearing, compensation, and sales and purchases against pengő—none of them yielding freely disposable bills of exchange; nor did they prevent artificiality in exchange rates, despite the (rather incomplete)

recognition of pengő depreciation through the official agios on devisen; nor finally did they dispense with the non-price allocation of import devisen through authoritarian allocation and the certificate system. The essential characteristics of exchange control persisted. What consequences have we been able to unearth as pertaining specifically to exchange control in the welter of regulation extending from import and export quotas, prohibitions, licenses, to tariff protection?

An examination of the economic history of Hungary over the period 1931-1939 shows that exchange control was surely secondary to the influence of world depression and recovery. So far as concerns the external value of the pengő, as measured by Budapest gold premia, by the price of pengő notes in Zurich, by wheat premia and finally by the official agios on foreign exchanges, the larger movements can be explained in ordinary equation-of-exchange terms such as domestic production and monetary policy relatively to similar forces abroad. In the long run exchange control had no greater influence on the value of the monetary standard than the reduction of further pengő depreciation through further capital flights. In the domestic scene exchange control, through penalizing exports and subsidizing imports, increased the discrepancy between agricultural and industrial prices. Whether the state aids to agriculture even offset the burden imposed by exchange control seems very doubtful. Furthermore, the premium system on grain exports, by its artificial support of the pengő rate, made impossible any clear view as to the economic rentability even of "non-subsidized" exports.

Despite the authoritarian regime of exchange control, Hungarian foreign trade still shows the dominant force to be cyclical variations in western Europe and America. But secular developments fall under the sway of autarchic devices, amongst them exchange control. The percentage of total imports embraced under finished industrial products fell from 55 per cent in 1928 to 35 per cent in 1938. Although world agricultural prices rose relatively from 1935 to 1938, Hungarian foreign trade, which had declined more than the world average, failed to keep abreast of world recovery. It was notably in 1933 and in 1936, after the two major changes in exchange control toward recognition of pengő depreciation and simplification of rates, that foreign trade experienced

its largest single advances, but the conclusiveness of this evidence is decreased by abundant harvests just at these junctures.

Drastic changes in direction of foreign trade inexplicable upon the basis of international division of labor attended the exchange control regime. The steady increase of the share of both exports and imports carried on under clearing and compensation over the years 1931-1936 (from 67 per cent to 76 per cent, and from 75 per cent to 86 per cent, respectively) is not in itself tantamount to a dislocation of trade by countries, but rather by modes of payment. Had the clearing and compensation method not increased, however, it would not have been possible that Italy and Germany should have so greatly expanded their shares in Hungarian trade. The fundamental cause or prime mover of changes in direction of trade was not exchange control, but it implemented the real factor, an international political re-alignment. The sharp turn of Hungarian exports toward England and Switzerland in 1931 was a reflection of a flight of capital before exchange control became really effective. In this respect the control had a negative or preventive operation against changes in direction of trade; and the ossifying of trade channels under exchange control against free economic forces must not be neglected merely because it fails to strike attention in trade statistics.

In two aspects of international economic relations the effect of exchange control was unmistakable. Both from the basis of *a priori* expectation and from striking individual instances, it appears that the presence of clearings tended to raise prices of imports into a clearing country and the prices it obtains from exports to a clearing partner, both cases being taken relatively to imports from and exports to free-exchange countries. The terms of trade between clearing countries may turn either way, but are deteriorated relatively to free-exchange countries. Hungary's greatest loss in terms of trade came from the agricultural depression; but the export penalty involved in the par pengő or in insufficient agios on free devisen accentuated the loss. Finally we have found exchange control clearly operative in one of its primary purposes — the prevention of capital flight. Even if illegal repatriations at two and one-half times the magnitude of permitted transfers are counted in the total, the repayment of something like five per cent on capital account over the period 1932-37 would be only a fraction of the outward flow of capital, had it been

freely permitted. But if the same facts are viewed from the angle of an "orderly liquidation" of foreign obligations under authoritarian auspices, the record is certainly unimpressive.

Save for the not completely successful obstacles put in the way of capital flight, we have failed to discover a net economic gain which Hungary could legitimately ascribe to exchange control. But by no means uncommon is the contention that, whatever were the asperities and shortcomings of exchange control in Hungary, it succeeded at least in "maintaining the pengő at home at its original legal parity,"¹ in assuring confidence as to the preservation of the monetary standard,² or in actually securing stability in the value of the pengő at home.³ The ostensible aim of exchange control in preserving the real foreign value of the standard is thus admittedly not attained; but *something* was thought to have been accomplished. Just what? Since prices within Hungary responded quite clearly to underlying money and production variables, the only thing actually preserved was the fictitious parity of the pengő, a fiction which did not even pertain to domestic economic matters.

For the preservation of this fiction and for protection to industry given by exchange control, the Hungarian consumer ultimately paid the cost. The fall in agricultural prices was partly offset by multifarious state aids, such as interest abatements, moratoria, and the wheat and rye premia studied in Section B. Industry held a relatively favored position under the shelter afforded by the limited devisen allocation for imports. The system of subvention to agriculture was regressive from the viewpoint of consumer income: premia rested upon consumption taxes, and a large part of the proceeds went to landed interests, not to agricultural laborers or small farmers. According to M. Körmeny-Ekes, "Half the country is shared between about 840,000 small holders; one-fifth between 10,000 middle-sized estates."⁴ In industry the successful maintenance of prices prevented any sharing of its relatively favored position by consumers of its products.

1. Devisenarchiv, Vol. 3 (Folge 39, September 27, 1933), p. 486.

2. Pester Lloyd, January 1, 1935, p. 17.

3. According to an unpublished pronouncement of the President of the Royal Hungarian Bureau of Foreign Trade in 1935.

4. "Big Estates in Hungary," Hungarian Quarterly (Spring issue, 1937), quoted in South-Eastern Europe, p. 58.

Even in 1929 wages in Hungary stood at very low absolute levels, factory labor receiving an average hourly wage of 32 filler or 6.4 cents.¹ By 1932 money wages had declined to 84 per cent, by 1933 to 78 per cent, and by 1935 to 77 per cent, a decline in each of these years unparalleled for eighteen countries reported

COST OF LIVING INDICES FOR HUNGARY*
(1925-27=100)

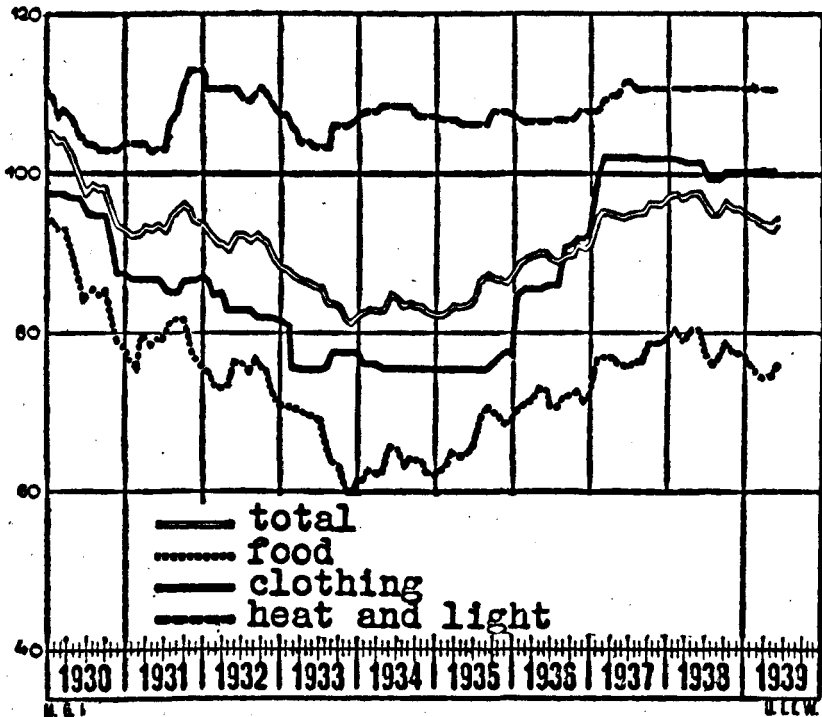


FIG. 18

*U. I. f. K., Vol. 41, p. 53.

by the League.² The decline in agricultural money wages in 1933 to 47 per cent of 1929 similarly exceeded all other countries but one. As shown by Fig. 18, the cost of living declined by the end of 1933 to 80 per cent of its level in 1925-27, or to slightly less than 80 per cent of its level in 1929. As a result real wages for

1. Ö. I. f. K., Vol. 10, No. 11, p. 257.

2. League of Nations, World Economic Survey 1934-35 (Geneva, 1935), pp. 136-137; *ibid.*, 1936-37 (Geneva, 1937), p. 112.

labor as a whole declined somewhat, registering a low point of 91 per cent in the first quarter of 1933. Instead of securing something of a compensation for extensive unemployment by a gain in real wages, the "normal" expectation for depression, Hungarian labor actually had to accept a reduction in real wages. For agricultural labor real wages fell to about two-thirds the 1929 level, though employment was probably fairly well maintained.

It is, of course, impossible to assess precisely the responsibility borne by exchange control for this situation. It would be natural to expect an adverse turn in real wages in consequence of the peculiar severity for Hungary of world agricultural depression, which carried national income to 48 per cent of the 1929 figure in 1932, the greatest reduction in national income reported in League statistics.¹ Reference, however, to Fig. 17, p. 120, showing the relative course of fixed and free prices of industrial raw materials, indicates where part of the responsibility lies. Coal, lignite, and firewood show a slight rise after 1930 rather than a reduction in price, and the "heat and light" component of the cost of living index in Fig. 18 behaves in the same way. Exchange control, as we have seen,² contributed in a variety of ways to raise or maintain prices for industrial raw materials such as these fuels and hence to hold up the cost of living.

The cost of living was buttressed, however, from other angles by exchange control. The "food" component (Fig. 18) may seem to have shown as great elasticity as could be expected, falling to 60 per cent by the end of 1933; but because of cartel price-maintenance, protective tariffs, quotas, exchange control, and the artificially high level of grain prices, the reduction in prices of agricultural staples was not passed on in comparable measure to the consumer. Studies made by Professor Heller of the Technical University of Budapest disclose the results upon consumption in the cases of beer, milk, and sugar.³ Between 1928 and 1932 barley fell in price by 50 per cent, but the price of beer was not reduced and beer production slumped from 670 to 231 thousand hectoliters. From January, 1931, to December, 1932, milk consumption in Budapest under rigid milk prices declined from 9.3 to 8.2 million

1. League of Nations, *World Economic Survey 1935-36* (Geneva, 1936), p. 104.

2. Cf. pp. 118-119, above.

3. Tyler, *Seventh Quarterly Report* (August 10, 1933), p. 15.

liters. From January, 1931, to April, 1933, sugar consumption fell from an index of 119 (1927 = 100) to 85, the price of sugar in Budapest averaging 1.02 pengö per kilo, as compared with .50 pengö in London and .40 pengö in New York. Since real wages did not increase during the depression years, there is little wonder that the entire period of industrial recovery from 1933 to 1938 failed to show a recovery even to levels reached in early depression years.¹ Only in the latter half of 1938 and early in 1939 did the index of real wages, under the "forced draft" applied to production by the Five Year Plan, show advances: to 114, 115 and 116 in successive quarters compared with annual averages of 106 and 104 in 1930 and 1931. By this time, however, the severe narrowing of consumer choice through various protectionist measures, together with either spontaneous or prescribed lowering of qualities in fabricated goods, puts the supposed advance in real wages under considerable suspicion.

From one viewpoint, the maintenance of the parity pengö and protection from foreign competition through exchange control become two aspects of one thing — the effort to maintain for the country artificially favorable terms of trade. To the degree to which parity is *actually* maintained, "protection" and favorable terms are actually secured — admittedly at an economic cost. A discussion of free trade versus protection is unnecessary in the present connection; it suffices that the official apology for the Hungarian protective policy rested chiefly upon non-economic grounds, upon the necessity of providing the producer a psychology of security against the hazards arising from the Peace Treaty, international monetary disturbances and political stress.² But even from the angle of protection, the artificial pengö rate was a dangerous instrument, for it transferred the granting of protection from the explicit form of tariff schedules to the secret and arbitrary form of administrative decisions in the allocation of import bills, favoring some industries by providing cheap exchange for imported materials and others by limited allocations for imported finished goods. The secrecy maintained concerning allocations to particular firms converted exchange control into a formidable weapon of internal politics.

To the degree that pengö parity was sacrificed to the realities

1. U. I. f. K., Vol. 42, p. 137.

2. "Das Wirtschaftsjahr 1937," Pester Lloyd, December 25, 1937.

of the situation, artificially favorable terms of trade and protection disappeared *pari passu*; there remained only the fiction of parity and the tremendous apparatus for providing trade channels over informally devalued rates. Administrative recognition of pengő depreciation lagged behind events, but in the main this was the course followed in Hungary. Why, then, was not the pengő officially devalued and foreign payments liberated from most of the trammels of exchange control? At least three opportunities for the step presented themselves before the recent advent of war closed off the possibility of currency reforms.

The first opportunity was afforded by the devaluation of the Austrian Schilling. During 1933 and 1934, when the Austrian National Bank by a series of subtle steps permitted the *de facto* devaluation to become increasingly patent and overt, Austria accounted for a larger share of Hungarian exports and imports than any other country.¹ Furthermore, the pengő and Schilling had suffered about the same degree of *de facto* depreciation, at least until the middle of 1934. It will never be quite clear that the Hungarian authorities acted wisely in passing by this opportunity. The panic psychology and fear of inflation characterizing the financial crisis of 1931 had subsided and the bottom of the depression had already been passed. But there were three respects in which Hungary's economic and financial structure was weaker than Austria's. Unlike Austria, Hungary had received no foreign loan to support the central bank in liquidating some of the worst consequences of depression;² the agricultural depression bore much more severely upon Hungary; and finally Hungary had nothing parallel to the working agreement with foreign short-term creditors incorporated into the Credit-Anstalt funding arrangements.

While the first opportunity was admittedly not a clear case, the second, afforded by the gold-bloc devaluations in September, 1936, was much less ambiguous. Here again the proportion of Hungarian trade involved with the five devaluing countries was substantial — 16 per cent on the side of imports and 26 per cent of exports. Most significant, however, was the prospect that the era of important devaluations had apparently come to a close,

1. Imports, 20 per cent and 23 per cent in 1933 and 1934; exports, 27 per cent and 24 per cent. The next rival was Germany at 19.7 per cent and 18 per cent, and 11 per cent and 22 per cent.

2. Kemény, in *Österreichischer Volkswirt*, Vol. 27, p. 347.

so that the Hungarians needed no longer to fear substantial changes in the pound and dollar, an obstacle frequently adverted to throughout the period 1931-36.¹ Agricultural prices had shown marked improvement, budgetary deficits had fallen steadily, and the pengö had shown remarkable stability for two years. The revision of clearing rates of exchange with gold-bloc countries and the subsequent abolition of clearing with France and Switzerland afforded occasions when the pengö might gracefully have been devalued.

Early in 1934 Count Bethlen advocated the abolition of the fictitious value of the pengö as soon as four conditions were fulfilled: (1) that the budget be brought to balance; (2) that reliable export markets be secured; (3) that the Hungarian National Bank experience a substantial increase in its reserves; and (4) that an understanding be reached with Hungary's foreign creditors.² In passing it may be remarked that Austria achieved the virtual abolition of exchange control without any of these conditions being realized in her own economy. By the summer of 1937, with the successful culmination of the debt agreements, all these conditions may fairly be said to have been realized in Hungary. Foreign commentators confidently predicted revision of the official valuation of the pengö,³ and yet the step was not taken. Somewhat belatedly in January, 1939, the reserves of the National Bank were revalued at 50.2 per cent higher values in pengö, tantamount to a one-third devaluation. But Hungarian national policy was already caught in the ruck of the German advance to the east; under the domination of German exchange control and the Mark sphere of influence, Hungary remained as one of five countries whose currencies had not been devalued since 1929 — Germany, Bulgaria, Hungary, Lithuania and Poland.

1. *Economist*, Vol. 117, p. 816.

2. *Österreichischer Volkswirt*, Vol. 26, p. 417.

3. *Economist* (June 5, 1937), Vol. 120, p. 572.

NATIONAL BANK OF HUNGARY

 Monetary Series¹

Date	Reserves in Gold and Devisen In 1,000 Pengö	Bills Discounted In 1,000 Pengö	Notes, Fractional Money, and Deposits (Seasonally Adjusted) ² In 1,000 Pengö	Demand Deposits of the State In 1,000 Pengö
1931				
I.....	164,475	265,060	510,664	
II.....	136,391	279,726	495,294	8,948
III.....	115,832	353,501	590,005	32,371
IV.....	125,160	401,869	588,081	30,311
1932				
I.....	123,249	418,904	555,328	30,731
II.....	118,890	432,035	536,043	23,157
III.....	117,962	415,290	517,881	58,538
IV.....	120,592	421,988	486,975	41,678
1933				
I.....	120,410	468,901	487,212	59,070
II.....	121,017	476,475	504,281	35,608
III.....	101,617	437,496	504,398	49,413
IV.....	90,877	569,527	501,240	64,534
1934				
I.....	93,440	588,221	511,387	49,035
II.....	90,273	570,030	500,719	29,478
III.....	93,125	533,908	493,686	47,750
IV.....	99,279	565,164	511,220	71,612
1935				
I.....	98,825	538,040	516,034	64,995
II.....	99,844	525,241	542,290	70,682
III.....	94,174	491,952	545,097	75,028
IV.....	112,237	523,648	581,581	104,550
1936				
I.....	111,858	516,461	585,964	96,576
II.....	105,310	499,899	597,324	98,437
III.....	110,134	470,144	617,121	129,689
IV.....	126,414	487,757	656,103	169,657
1937				
I.....	131,480	463,745	693,785	178,980
II.....	137,906	400,366	710,543	148,249
III.....	141,779	384,213	723,239	174,590
IV.....	142,592	409,930	722,759	203,026
1938				
I.....	149,947	469,942	785,383	207,968
II.....	155,930	439,212	904,809	163,195
III.....	219,086	520,457	941,347	122,077
IV.....	220,598	466,163	1,050,369	141,243
1939				
I.....	211,429	481,057	1,147,617	141,264

1. Data for all series, unless otherwise noted, from Quarterly Reports, U. I. f. W. For columns 1, 2 and 4, quarterly figures as of March 31, June 30, September 30, and December 31.

2. Quarterly averages. Data for notes and fractional money are unadjusted figures published by the Hungarian Institute for Economic Research; data for deposits from the London Economist. Seasonal adjustment has been carried through here *de novo*.

INDEX OF INDUSTRIAL PRODUCTION IN HUNGARY

Seasonally Adjusted¹

Quarterly Averages

(1929 = 100)

1931		1935	
I.....	86.9	I.....	101.5
II.....	90.0	II.....	104.7
III.....	85.7	III.....	110.6
IV.....	87.3	IV.....	110.0
1932		1936	
I.....	89.5	I.....	113.5
II.....	75.6	II.....	117.2
III.....	78.4	III.....	121.0
IV.....	83.5	IV.....	121.7
1933		1937	
I.....	85.4	I.....	125.6
II.....	85.4	II.....	132.7
III.....	90.4	III.....	135.3
IV.....	91.3	IV.....	125.4
1934		1938	
I.....	93.6	I.....	122.7
II.....	103.6	II.....	116.2
III.....	99.3	III.....	130.1
IV.....	100.4	IV.....	131.1
		1939	
		I.....	147.0

BUDGET BALANCES OF HUNGARY

Including State Undertakings

In Million Pengö²

1930-31.....	-229.5	1935-36.....	-34.6
1931-32.....	-179.7	1936-37.....	+ 8.1
1932-33.....	-108.5	1937-38.....	-67.9
1933-34.....	- 66.3	1938-39.....	- .1
1934-35.....	- 70.4		(estimated)

DISCOUNT RATE OF THE HUNGARIAN NATIONAL BANK³

Per Cent		Per Cent	
May 30, 1930 to June 15, 1931, 5½		April 18, 1932 to June 30, 1932, 6	
June 16, 1931 to July 23, 1931, 7		July 1, 1932 to Oct. 17, 1932, 5	
July 24, 1931 to Sept. 10, 1931, 9		Oct. 18, 1932 to Aug. 28, 1935, 4½	
Sept. 11, 1931 to Jan. 19, 1932, 8		Aug. 29, 1935 —	4
Jan. 20, 1932 to April 17, 1932, 7			

1. Data are quarterly unadjusted indices of industrial production of the Hungarian Institute for Economic Research; seasonal adjustment has been carried through here *de novo*.

2. Ung. Wirt. Jhrb., Vol. 14, p. 297.

3. Quarterly Reports, U. I. f. W.

HUNGARIAN PRICE INDICES¹
(Base: 1925-1927)

		Sensitive Prices	WHOLESALE PRICE INDICES			Cost of Living Index Hungarian Stat. Office	Wholesale Prices in England (Base: 1925-27) Board of Trade Index Revised to Gold Basis
			General Wholesale	Agricultural Products	Industrial and Half-finished		
1931	I.....	91.3	74.8	69.0	88.9	92.1	68.2
	II.....	91.0	75.6	69.4	89.3	92.3	67.8
	III.....	91.3	75.6	70.5	88.4	93.5	67.3
	IV.....	90.5	74.1	69.4	87.5	93.0	67.5
	V.....	81.7	72.7	68.9	85.3	93.5	66.6
	VI.....	75.4	72.2	68.1	85.6	93.3	65.8
	VII.....	78.4	72.2	69.2	85.2	94.8	64.9
	VIII.....	76.9	70.9	66.1	85.0	95.4	63.0
	IX.....	81.2	71.7	66.6	85.3	96.0	58.9
	X.....	84.7	72.8	67.0	86.4	95.0	51.6
	XI.....	87.1	75.4	70.2	89.2	93.6	50.1
	XII.....	85.2	75.0	68.1	90.9	93.2	44.3
1932	I.....	82.9	73.0	66.3	89.0	92.2	45.2
	II.....	82.9	72.9	66.0	88.6	91.0	45.4
	III.....	79.7	71.9	65.1	86.8	91.0	48.8
	IV.....	79.2	69.5	62.4	85.8	90.7	48.3
	V.....	77.5	68.7	62.0	84.5	92.4	46.3
	VI.....	75.1	66.9	61.2	83.7	92.2	44.5
	VII.....	73.9	65.4	58.4	83.1	91.6	42.8
	VIII.....	76.0	64.8	56.6	83.4	92.4	42.7
	IX.....	77.3	65.2	57.5	83.3	92.1	44.2
	X.....	76.6	64.4	56.3	83.0	91.5	42.0
	XI.....	77.3	63.1	55.0	82.2	89.6	40.5
	XII.....	77.1	61.7	53.0	81.8	88.4	40.5
1933	I.....	76.4	61.3	53.2	77.7	88.2	41.4
	II.....	75.7	61.7	53.6	78.9	87.2	41.4
	III.....	76.3	61.6	53.5	78.7	86.8	41.1
	IV.....	76.7	60.6	51.2	78.5	86.5	40.9
	V.....	79.0	60.7	50.3	79.8	86.0	40.7
	VI.....	72.4	61.7	51.0	80.4	85.9	41.7
	VII.....	72.4	61.3	50.0	81.7	83.5	42.3
	VIII.....	72.9	59.4	47.6	79.5	83.5	41.4
	IX.....	78.6	58.6	46.6	79.2	83.2	39.5
	X.....	78.6	58.7	46.5	79.5	81.4	39.2
	XI.....	77.7	58.7	46.8	78.6	80.8	40.7
	XII.....	78.1	59.7	48.0	78.6	81.9	41.2

¹ All indices from U. I. f. K., Vol. 1-42.

HUNGARIAN PRICE INDICES — *Continued*
(Base: 1925-1927)

	Sensitive Prices	WHOLESALE PRICE INDICES			Cost of Living Index Hungarian Stat. Office	Wholesale Prices in England (Base: 1925-27) Board of Trade Index Revised to Gold Basis	
		General Agricultural Wholesale Products	Industrial and Half-finished				
1934	I.....	78.2	60.0	48.5	78.3	82.0	40.8
	II.....	78.2	62.5	50.9	78.6	82.6	39.2
	III.....	77.8	62.0	51.1	77.9	82.4	38.6
	IV.....	75.2	61.1	50.0	77.4	82.6	38.6
	V.....	73.0	64.2	55.1	77.3	84.6	38.5
	VI.....	75.0	63.2	53.8	77.2	84.3	38.2
	VII.....	74.4	62.5	52.7	76.3	83.2	38.7
	VIII.....	75.2	64.1	54.8	76.2	83.5	39.0
	IX.....	78.2	64.9	56.1	76.3	83.3	37.6
	X.....	77.4	65.2	56.7	76.4	83.2	37.6
	XI.....	78.9	65.7	57.4	76.6	82.4	37.5
	XII.....	77.8	65.5	57.5	76.1	82.3	37.7
1935	I.....	78.4	66.1	59.4	75.4	82.3	37.9
	II.....	77.2	67.4	60.5	75.4	82.8	37.5
	III.....	78.9	66.5	59.5	74.6	83.4	36.5
	IV.....	77.5	66.7	58.8	74.2	83.3	37.4
	V.....	77.2	66.5	58.4	73.7	83.4	38.9
	VI.....	71.9	67.1	58.7	75.7	84.1	38.8
	VII.....	74.0	70.2	63.0	77.7	86.5	38.9
	VIII.....	73.5	70.8	64.3	77.5	87.2	38.9
	IX.....	74.4	72.8	65.9	79.0	86.9	40.0
	X.....	76.6	76.0	70.2	80.1	86.7	40.7
	XI.....	76.4	76.8	71.6	80.4	86.5	40.7
	XII.....	80.4	77.5	72.5	81.0	87.0	40.8
1936	I.....	81.3	76.3	70.3	81.8	88.6	40.8
	II.....	81.6	76.8	71.0	81.9	89.1	40.6
	III.....	81.6	76.4	70.0	82.3	89.3	40.6
	IV.....	79.0	75.0	67.6	82.2	89.9	40.6
	V.....	76.5	73.7	65.9	82.1	89.8	40.3
	VI.....	76.3	72.2	63.9	82.2	89.0	40.8
	VII.....	77.8	73.0	64.6	82.4	88.7	42.0
	VIII.....	78.7	73.6	65.8	82.4	90.3	42.4
	IX.....	81.6	74.4	67.0	82.9	90.5	42.7
	X.....	90.7	77.6	71.6	83.7	90.9	42.2
	XI.....	90.3	78.6	72.3	84.6	90.1	42.9
	XII.....	91.2	80.7	74.8	85.2	91.1	44.9

EXCHANGE CONTROL IN AUSTRIA AND HUNGARY 175

HUNGARIAN PRICE INDICES—*Continued*
(Base: 1925-1927)

		WHOLESALE PRICE INDICES				Cost of Living Index Hungarian Stat. Office	Wholesale Prices in England (Base: 1925-27) Board of Trade Index Revised to Gold Basis
	Sensitive Prices	General Wholesale	Agricultural Products	Industrial and Half-finished			
7	I.....	91.7	84.0	78.0	87.6	94.6	45.9
	II.....	90.9	84.5	76.8	88.1	95.3	46.4
	III.....	92.6	85.4	77.7	87.7	95.2	49.1
	IV.....	92.6	83.6	74.7	91.3	94.9	48.6
	V.....	89.1	83.4	74.3	91.2	94.8	49.1
	VI.....	87.5	82.2	74.0	89.9	95.0	47.9
	VII.....	87.2	83.2	76.2	89.3	95.2	48.5
	VIII.....	87.3	82.8	75.9	89.0	95.4	47.8
	IX.....	88.0	81.8	75.5	87.7	96.5	46.5
	X.....	87.2	81.2	75.2	86.8	96.5	45.5
	XI.....	85.5	80.1	74.2	86.9	96.2	44.3
	XII.....	85.1	79.4	74.1	86.7	96.8	44.4
8	I.....	85.3	78.9	73.4	86.8	97.6	44.0
	II.....	84.4	78.3	71.9	86.7	96.7	43.7
	III.....	84.6	77.8	71.2	86.2	96.8	42.6
	IV.....	83.5	78.2	72.2	85.7	97.5	42.1
	V.....	80.3	76.2	70.6	84.8	97.5	41.7
	VI.....	74.1	75.9	69.9	84.1	95.8	41.7
	VII.....	73.0	75.8	69.0	84.0	94.8	40.9
	VIII.....	73.5	76.3	70.4	84.4	94.8	39.5
	IX.....	76.1	77.9	72.0	84.7	96.1	38.8
	X.....	76.6	78.0	71.9	84.2	95.7	38.5
	XI.....	78.6	77.3	70.9	84.2	95.5	37.4
	XII.....	78.8	76.3	69.2	84.1	95.2	36.9
9	I.....	77.4	76.3	69.9	83.0	94.6	37.0

INDICES OF THE FOREIGN VALUE OF PENGÖ

Date	Pengö Note Quotations in Zurich as Per Cent of Parity ¹	Gold Price in Budapest as Per Cent of Parity ²
1931		
VII.....	.....	111
VIII.....	.....	126
IX.....	.....	132
X.....	.....	147
XI.....	.....	144
XII.....	.....	170
1932		
I.....	.....	147
II.....	.....	144
III.....	.....	147
IV.....	.....	137
V.....	.760	147
VI.....	.732	147
VII.....	.736	137
VIII.....	.751	132
IX.....	.771	126
X.....	.784	126
XI.....	.814	118
XII.....	.809	126
1933		
I.....	.791	137
II.....	.743	137
III.....	.734	132
IV.....	.745	137
V.....	.745	137
VI.....	.752	132
VII.....	.730	140
VIII.....	.759	132
IX.....	.710	137
X.....	.738	137
XI.....	.754	137
XII.....	.766	132

1. Percentages computed from prices in Swiss francs as given by the Schweizerische Nationalbank in its Monatsberichte, and by Züricher Nachrichten; monthly averages.

2. Percentages of par computed from pengö prices of one kilogram gold as given in various daily newspapers in Budapest; median between daily high and low quotation, middle of month.

EXCHANGE CONTROL IN AUSTRIA AND HUNGARY 177

INDICES OF THE FOREIGN VALUE OF PENGÖ—Continued

to	Pengö Note Quotations in Zurich as Per Cent of Parity	Gold Price in Budapest as Per Cent of Parity
34		
I.....	.757	132
II.....	.749	137
III.....	.712	142
IV.....	.707	142
V.....	.703	142
VI.....	.682	145
VII.....	.682	147
VIII.....	.682	145
IX.....	.694	145
X.....	.685	145
XI.....	.666	150
XII.....	.647	153
35		
I.....	.644	153
II.....	.615	162
III.....	.628	158
IV.....	.615	...
V.....	.609	...
VI.....	.628	...
VII.....	.639	...
VIII.....	.653	...
IX.....	.652	...
X.....	.637	...
XI.....	.621	...
XII.....	.613	...
36		
I.....	.625	...
II.....	.649	...
III.....	.650	...
IV.....	.649	...
V.....	.659	...
VI.....	.668	...
VII.....	.649	...
VIII.....	.659	...
IX.....	.667	...
X.....	.603	...
XI.....	.609	...
XII.....	.613	...

INDICES OF THE FOREIGN VALUE OF PENGÖ—*Continued*

Date	Pengö Note Quotations in Zurich as Per Cent of Parity	Gold Price in Budapest as Per Cent of Parity
1937		
I.....	.616	...
II.....	.611	...
III.....	.617	...
IV.....	.641	...
V.....	.667	...
VI.....	.667	...
VII.....	.643	...
VIII.....	.636	...
IX.....	.623	...
X.....	.644	...
XI.....	.630	...
XII.....	.632	...
1938		
I.....	.622	...
II.....	.625	...
III.....	.608	...
IV.....	.530	...
V.....	.514	...
VI.....	.540	...
VII.....	.549	...
VIII.....	.527	...
IX.....	.464	...
X.....	.517	...
XI.....	.498	...
XII.....	.384	...
1939		
I.....	.284	...
II.....	.327	...
III.....	.318	...

EXCHANGE CONTROL IN AUSTRIA AND HUNGARY 179

VALUE OF HUNGARIAN IMPORTS AND EXPORTS BY QUARTERS¹
(in Million Pengö)

	Imports	Exports		Imports	Exports
1929 I.....	247.3	183.3	1934 I.....	74.6	96.3
II.....	296.7	214.4	II.....	88.8	87.0
III.....	262.1	280.7	III.....	83.7	95.9
IV.....	257.6	360.1	IV.....	97.8	125.0
<hr/>			<hr/>		
1929.....	1,063.7	1,038.5	1934.....	344.9	404.2
1930 I.....	198.0	218.4	1935 I.....	84.0	99.8
II.....	210.9	233.4	II.....	89.3	92.7
III.....	218.9	213.0	III.....	94.0	106.6
IV.....	195.5	246.9	IV.....	135.0	152.4
<hr/>			<hr/>		
1930.....	823.3	911.7	1935.....	402.3	451.5
1931 I.....	142.2	130.4	1936 I.....	106.6	113.6
II.....	163.7	126.5	II.....	114.7	101.6
III.....	125.5	142.3	III.....	103.1	143.3
IV.....	108.0	171.2	IV.....	112.1	145.9
<hr/>			<hr/>		
1931.....	539.4	570.4	1936.....	436.5	504.4
1932 I.....	85.0	72.2	1937 I.....	99.9	149.9
II.....	84.2	79.4	II.....	122.7	143.0
III.....	75.2	81.4	III.....	127.9	135.5
IV.....	84.1	101.5	IV.....	133.1	159.6
<hr/>			<hr/>		
1932.....	328.5	334.5	1937.....	483.6	588.0
1933 I.....	70.1	78.6	1938 I.....	95.8	133.6
II.....	74.1	80.7	II.....	104.5	118.0
III.....	78.3	109.0	III.....	98.2	141.6
IV.....	90.1	123.0	IV.....	120.0	129.4
<hr/>			<hr/>		
1933.....	312.6	391.3	1938.....	418.5	522.6
			1939 I.....	122.1	142.5

1. U. I. f. K., Vol. 36, p. 52, Vol. 41, p. 67, and Vol. 42, p. 67.

THE PURCHASING POWER OF HUNGARIAN AGRICULTURE¹
(1924-25 to 1926-27 = 100)

1924-25.....	94	1932-33.....	48
1925-26.....	103	1933-34.....	47
1926-27.....	103	1934-35.....	49
1927-28.....	105	1935-36.....	54
1928-29.....	109	1936-37.....	65
1929-30.....	106	1937-38.....	69
1930-31.....	79	1938-39.....	83 (estimated)
1931-32.....	58	1939 (I-III).....	74

HARVEST OF THE MOST IMPORTANT AGRICULTURAL
PRODUCTS IN HUNGARY²

Year	Wheat	Rye	Barley	Oats	Corn	Potatoes	Sugar Beets
	Million Quintals						
1925...	19.5	8.3	5.5	3.7	22.4	23.6	15.3
1926...	20.4	8.0	5.6	3.6	19.5	19.2	14.5
1927...	20.9	5.7	5.2	3.3	17.4	20.6	14.6
1928...	27.0	8.3	6.7	4.0	12.6	14.7	14.4
1929...	20.4	8.0	6.8	4.1	17.9	21.7	16.1
1930...	23.0	7.2	6.0	2.6	14.1	18.4	14.6
1931...	19.8	5.5	4.8	1.9	15.2	14.5	9.7
1932...	17.5	7.7	7.2	3.2	24.3	15.6	8.5
1933...	26.2	9.6	8.4	3.6	18.1	18.6	9.4
1934...	17.6	6.2	5.4	2.6	21.0	21.2	9.2
1935...	22.9	7.3	5.6	2.5	14.2	13.9	7.7
1936...	23.9	7.1	6.6	2.6	25.9	24.5	11.2
1937...	19.6	6.2	5.6	2.7	27.6	25.6	10.1
1938...	26.9	8.0	7.2	3.1	26.6	21.4	9.7

1. U. I. f. W., Vol. 41, p. 79, and Vol. 42, p. 78; seasonally adjusted.

2. U. I. f. W., Vol. 42, p. 78.

HUNGARY'S EXPORT AND IMPORT TRADE WITH HER CHIEF
CREDITOR COUNTRIES¹

	In Million Pengö									
Exports	1930	1931	1932	1933	1934	1935	1936	1937	1938	
France.....	16.2	26.2	14.6	17.6	13.9	10.7	9.6	12.3	10.1	
United States.....	3.9	4.0	2.7	5.9	5.2	8.8	13.3	17.2	12.8	
England.....	51.5	55.9	22.2	31.3	31.5	36.8	44.0	42.0	41.5	
Switzerland.....	36.9	37.6	15.8	20.3	19.7	18.5	30.0	24.9	16.8	
Total in Pengö.....	108.5	123.7	55.3	75.1	70.3	74.8	96.9	96.4	81.2	
Total as per cent of all Exports.....	12.0	21.7	17.2	19.2	16.0	16.6	19.2	16.4	15.6	
Imports										
France.....	23.3	17.7	13.5	17.4	10.3	4.5	4.6	4.3	6.2	
United States.....	39.6	23.1	14.1	20.6	19.7	19.6	23.2	21.4	25.1	
England.....	34.2	20.9	15.0	13.6	18.0	20.2	22.2	25.0	21.4	
Switzerland.....	18.8	13.4	11.7	5.5	8.0	12.4	10.2	11.1	10.4	
Total in Pengö.....	115.9	75.1	54.3	57.1	56.0	56.7	60.2	61.8	63.1	
Total as per cent of all Imports.....	14.1	14.0	16.3	18.4	16.5	14.7	13.7	12.9	14.3	

THE BALANCE OF HUNGARIAN TRADE WITH HER
PRINCIPAL CREDITORS¹

	1930	1931	1932	1933	1934	1935	1936	1937	1938
France... -	7.1	+ 8.5	+ 1.1	+ .2	+ 3.6	+ 6.2	+ 5.0	+ 8.0	+ 3.9
United States..	-35.7	-19.1	-11.4	-14.7	-14.5	-10.8	- 9.9	- 4.2	-12.3
England	+17.3	+35.0	+ 7.2	+17.7	+13.5	+16.6	+21.8	+17.0	+20.1
Switzerland...	+18.1	+24.2	+ 4.1	+14.8	+11.7	+ 6.1	+19.8	+13.8	+ 6.4
Total..	- 7.4	+48.6	+ 1.0	+18.0	+14.3	+18.1	+36.7	+34.6	+18.1

1. Computed from trade statistics in Statisztikai Havi Közlemények (Royal Hungarian Statistical Office, Budapest), Vol. 35-41.

WHEAT PRICES IN THE HUNGARIAN AND WORLD MARKETS

Mean Monthly Prices per Quintal¹

	1	2	3	4	5
	Pre-devaluation Gold Swiss Francs		1931 Gold Pengö	Actual Pengö	Col. 4 as Per Cent of Col. 3
	Rosafe in Liverpool	Tizza in Budapest	Tizza in Budapest	Tizza in Budapest	Premia on Wheat Exports
1932					
VIII...	10.92	9.60	10.66	13.87	130.1
IX...	11.18	9.69	10.74	13.92	129.6
X...	10.43	9.80	10.88	13.30	122.2
XI...	9.16	9.51	10.57	12.45	117.7
XII...	8.77	9.24	10.27	12.80	124.6
1933					
I...	8.86	10.11	11.23	14.85	132.2
II...	8.35	10.28	11.42	15.27	133.7
III...	8.20	10.06	11.17	14.82	132.7
IV...	8.29	9.80	10.88	14.37	132.1
V...	8.85	9.13	10.14	13.67	134.9
VI...	8.98	8.82	9.80	13.37	136.4
VII...	9.96	7.69	8.54	9.92	116.2
VIII...	8.96	6.24	6.93	8.47	121.6
IX...	8.00	5.49	6.10	8.00	131.1
X...	7.02	5.15	5.72	7.75	135.5
XI...	7.29	5.19	5.77	7.77	134.7
XII...	7.25	5.18	5.76	7.25	126.1
1934					
I...	7.12	5.29	5.88	8.30	141.2
II...	6.63	5.88	6.53	9.30	142.4
III...	6.19	6.39	7.10	10.10	142.3
IV...	6.36	6.44	7.16	10.07	140.8
V...	6.81	7.13	7.92	14.25	179.9
VI...	7.18	8.14	9.04	12.77	141.3
VII...	7.70	9.76	10.84	16.10	148.5
VIII...	9.01	10.14	11.26	16.40	145.6
IX...	8.29	10.26	11.40	16.30	143.0
X...	7.35	10.11	11.23	16.25	144.7
XI...	7.28	9.78	10.86	16.42	147.5
XII...	7.31	9.63	10.70	16.72	156.3

1. Data for Cols. 1 and 2 from International Institute of Agriculture, International Yearbook of Agricultural Statistics, 1937-38 (Rome, 1938), p. 880; for Col. 4, from U. I. f. W., Vol. 35, p. 72, Vol. 41, p. 88. Cols. 3 and 5 are computed.

WHEAT PRICES IN THE HUNGARIAN AND WORLD MARKETS — *Continued*

Mean Monthly Prices per Quintal

	1 Pre-devaluation Gold Swiss Francs	2 Tisza in Budapest	3 1931 Gold Pengö Tisza in Budapest	4 Actual Pengö Tisza in Budapest	5 Col. 4 as Per Cent of Col. 3 Premia on Wheat Exports
	Rosafe in Liverpool				
1935					
I...	7.26	9.96	11.06	17.65	159.6
II...	6.95	10.05	11.16	17.92	160.6
III...	7.16	9.98	11.08	16.95	153.0
IV...	8.28	9.31	10.34	16.87	163.2
V...	8.17	9.24	10.26	16.95	165.2
VI...	8.14	9.72	10.80	16.22	150.2
VII...	7.77	8.89	9.88	14.97	151.5
VIII...	8.79	9.13	10.14	15.52	153.1
IX...	10.10	9.34	10.37	16.17	155.9
X...	10.73	10.33	11.47	18.22	158.8
XI...	9.34	10.35	11.50	18.22	158.3
XII...	10.94	10.17	11.30	18.45	171.1
1936					
I...	....	9.99	11.10	18.32	165.0
II...	....	9.65	10.72	17.92	167.4
III...	....	9.34	10.37	16.90	163.0
IV...	....	9.41	10.45	16.07	153.8
V...	....	9.21	10.23	14.87	145.4
VI...	....	8.60	9.55	14.82	155.0
VII...	....	8.95	9.94	15.00	151.4
VIII...	12.17	8.97	9.97	14.95	149.9
IX...	12.14	9.67	10.74	16.67	156.2
X...	12.24	10.68	11.87	17.92	151.0
XI...	12.02	10.90	12.11	18.47	152.5
XII...	13.63	11.67	12.96	20.10	155.1
1937					
I...	13.92	12.84	14.26	21.10	148.0
II...	13.39	12.11	13.45	18.75	139.4
III...	13.86	11.99	13.32	21.35	160.3
IV...	15.97	12.53	13.92	19.70	141.5
V...	15.68	12.27	13.63	20.02	146.9
VI...	....	11.97	13.30	19.65	147.7
VII...	14.92	12.58	13.97	21.12	151.2
VIII...	14.30	12.44	13.82	20.22	146.3
IX...	14.09	12.47	13.85	20.80	150.2
X...	14.15	12.57	13.96	20.87	149.5
XI...	13.96	12.60	14.00	20.67	147.6
XII...	13.84	12.62	14.02	21.65	154.4

WHEAT PRICES IN THE HUNGARIAN AND WORLD MARKETS — *Continued*
 Mean Monthly Prices per Quintal

	1	2	3	4	5
	Pre-devaluation Gold Swiss Francs		1931 Gold Pengö	Actual Pengö	Col. 4 as Per Cent of Col. 3
	Rosafe in Liverpool	Tisza in Budapest	Tisza in Budapest	Tisza in Budapest	Premia on Wheat Exports
1938					
I...	14.64	12.90	14.33	21.20	147.9
II...	14.17	12.64	14.04	20.92	149.0
III...	13.29	12.72	14.13	21.07	149.1
IV...	12.94	12.96	14.40	21.55	149.6
V...	12.45	14.33	15.92	24.25	152.3
VI...	11.46	15.08	16.75	23.62	139.3
VII...	11.08	12.44	13.82	20.32	147.0
VIII...	9.53	12.15	13.50	20.25	150.0
IX...	8.63	12.26	13.62	21.25	156.0
X...	8.11	12.46	13.84	20.62	149.0
XI...	7.48	12.45	13.83	20.37	147.3
XII...	7.38	12.31	13.67	20.50	150.0
1939					
I...	7.08	12.29	13.64	20.50	150.3
II...	7.03	12.40	13.70	20.50	149.6
III...	6.76	12.42	13.78	20.90	151.7

THE HUNGARIAN "FOREIGN CREDITORS' FUND" OR "CASH OFFICE OF FOREIGN CREDITS"¹
(In million Pengö)

Dates	Receipts in	Receipts in	Disbursements	Arrears	Loans to State	Cash
	Cash and Treasury Bills	Treasury Bills		to the Fund	and to State Railways		on Hand Amounts
	Cumulative Figures					
Jan. 1, 1932 to June 30.....	58.32	.....	10.70	8.26	.....	48.14
July 1 to Sept. 30.....	76.11	.....	23.78	26.37	.....	52.85
Oct. 1 to Nov. 30.....	89.00	.....	27.60	30.30	.....	61.92
Dec. 1, 1932 to March 31, 1933.....	110.30	.....	42.20	49.10	.....	66.40
April 1 to June 30.....	123.45	.....	59.71	55.79 ³	10.50	52.80
July 1 to Sept. 30.....	167.40	25.60	75.60	25.47 ³	19.50	47.30
Oct. 1 to Nov. 30.....	174.80	25.60	80.90	27.75 ³	18.50	50.62
Dec. 1, 1933 to March 31, 1934.....	202.60	43.30	103.10	22.06 ³	16.50	42.38
April 1 to June 30.....	216.60	46.20	110.90	20.94 ³	22.60	39.35
July 1 to Sept. 30.....	230.20	51.30	122.80	23.95 ³	23.00	36.30
Oct. 1 to Nov. 30.....	240.50	53.70	127.10	23.81	22.00	41.20
Dec. 1, 1934 to March 31, 1935.....	247.40	61.40	134.20	27.00	25.00	40.30
April 1 to April 30.....	259.40	62.40	142.40	28.80	46.00	22.20
May 1 to Sept. 30.....	274.30	67.60	154.60	31.60	46.00	20.10
Oct. 1 to Dec. 31, 1935.....	291.20	71.80	164.90	31.30	46.00	25.00
Jan. 1, 1936 to March 31.....	299.30	76.20	177.10	35.50	45.50	17.50
April 1 to June 30.....	315.80	80.30	181.90	20.50	57.00	14.10
July 1 to Sept. 30.....	331.30	85.00	194.80	17.00	56.50	12.90
Oct. 1 to Dec. 31, 1936.....	342.40	87.60	205.70	15.00	56.50	12.40
Jan. 1, 1937 to March 31, 1937.....	356.50	91.10	214.70	5.40	55.50	15.70
April 1 to June 30.....	363.60	93.70	219.50	5.90	55.50	20.80
July 1 to July 16.....	378.60	97.10	223.40	.....	54.50	30.20
July 17 to Dec. 31, 1937.....	378.50	97.10	223.00	.....	54.50	30.80

1. Compiled from Tyler, Quarterly Reports; not all items of the statement are included.
2. Not taking account of devaluation.
3. Taking account of pound and dollar devaluation.

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