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Bilateralism and "Proportionalism" - Two Aspects   Albert O. Hirshman
    of Trade Structure

        In this Review for September 9, 1946, Hinshaw and Hinrichs pre-
sented a method of measurement of the degree of bilateralism in trade and
applied it to the trade statistics of 26 countries for the years 1928 and
1935. The present article comments critically on this method and draws
attention to another measurable aspect of trade structure, related to,
though quite distinct from, bilateralism.

        The measurement presented by Hinshaw and Hinrichs proceeds along
lines similar to those made familiar by the League of Nations in its Review
of World Trade, for the years 1934 (p. 70) and 1935 (p. 65). The League of
Nations method consisted in showing total trade of a given country as the
sum of (1) trade balanced bilaterally between that country and its trading
partners (2) the remainder made up by (a) the general trade balance (b) the
bilateral trade balances compensated multilaterally, i.e. twice the amount
of the bilateral export surpluses for the trade of a country with a general
import surplus and vice versa.

        To obtain an index of bilateralism varying between 0 and 100 the
bilaterally balanced trade -- (1) above -- is calculated as a percentage of
total trade (imports plus exports). This method of measurement was modified
in the Hinshaw-Hinrichs article by relating not the compensated trade to
total trade, but half of the compensated trade to imports only. This pro-
cedure, however, imparts a clear bias to the index. Assuming two countries,
A and B, trading exclusively with each other, A's imports from B being 200,

and A's exports to B being 100, the index for country A would be 50 per cent while the index for B would be 100 per cent. For the behavior of the index to be open to commonsense interpretation, it is clearly necessary that it be symmetrical with respect to the direction of a country's trade balance. The bias of the Hinshaw-Hinrichs index is strikingly illustrated by its behavior in the case of the U.S.S.R. The huge increase indicated in the degree of bilateralism for Russian trade from 53 per cent in 1928 to 92 per cent in 1935 is due primarily to the fact that while Soviet trade showed an import surplus in 1928, it had developed a considerable export surplus in 1935. If the unbiased method is used, i.e. if bilaterally compensated trade is computed as a percentage of total trade rather than as a percentage of imports alone, the increase in the degree of bilateralism of Russian trade is cut down by more than two thirds.

Within its own frame of reference, the old League of Nations method must therefore definitely be preferred to the method used by Hinshaw-Hinrichs. It is the correct measure of the commonsense concept of bilateralism. The contention of this article, however, is that even the League of Nations method stands in need of supplementation lest important developments in the structure of trade remain concealed. To make this clear, certain aspects of the behavior of the League of Nations index may be pointed out.

In the first place, the League index can become simply a measure of the relative importance of the general trade balance. This is particularly likely to be the case when there are strong variations of the export or import surplus relative to total trade from one year to another.

Secondly, important changes may take place in the way in which a given total import or export surplus is made up without affecting the value of the index. Thus, a given general import surplus can be the result of a combination of very large and very small import surpluses or of bilateral import surpluses which are all approximately equal (relative to total trade transacted bilaterally). But this difference in trade structure would not be reflected by the index since it is affected only by the magnitude of (1) the general trade balance and (2) the bilateral balances which are in a direction opposite to that of the general balance. These properties of the index are responsible for its "disappointingly" small increase from 1928 to 1935 (disappointing in the light of what might be expected on the basis of well-known developments of commercial policy and trade structure between these years).

It might be desirable to construct an index which would not be subject to these properties. This can be done by analyzing an additional aspect of trade structure, namely, the degree to which a country maintains the same ratio of imports to exports with all its trading partners. For want of a better term, this concept will be referred to in subsequent discussion as the "proportionalism" of trade.

The above definition implies that complete "proportionalism" of trade can coexist with a small degree of bilateralism. On the other hand, complete bilateralism necessarily carries with it complete "proportionalism."[1]

The League of Nations index of bilateralism and our index of "proportionalism" have been calculated for the trade of the countries and years selected by Hinshaw-Hinrichs, on the basis of the same source material (The Network of World Trade, League of Nations, 1942). However, while Hinshaw-Hinrichs calculated their index only for the intra-trade of the group of

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[1] Calling I and E the total imports and exports of the country whose "proportionalism" is measured, i_k and e_k its imports and exports with country K, then complete "proportionalism" would be present if we could write

$$i_k : e_k = I : E \text{ or}$$

$$i_k = e_k \cdot \frac{I}{E}.$$

Actual imports from K will therefore differ from what they would be under conditions of complete "proportionalism" by the expression

$$i_k - e_k \cdot \frac{I}{E} = I \left(\frac{i_k}{I} - \frac{e_k}{E} \right).$$

The absolute sum of these departures of actual from "proportional" imports for all n trading partners of the country considered, is

$$I \cdot \sum_{k=1}^{n} \left| \frac{i_k}{I} - \frac{e_k}{E} \right|$$

Dividing by total imports I, we obtain, in the expression

$$\sum_{k=1}^{n} \left| \frac{i_k}{I} - \frac{e_k}{E} \right|,$$

an index of the relative discrepancy of actual trade structure from complete "proportionalism." This index is easily seen to vary between 0 and 2. To make it vary between 0 and 100 and to make it increase, rather than decrease, when proportionalism increases, it should be written in the form

$$100 \left(1 - \frac{1}{2} \sum_{k=1}^{n} \left| \frac{i_k}{I} - \frac{e_k}{E} \right| \right).$$

It would be easy to derive the same index by starting with the discrepancy between actual and "proportional" exports. That the index is symmetrical with respect to imports and exports is clearly evident from the algebraic expression derived.

The index is simply calculated by computing the percentages held by imports from and exports to individual countries in total imports and exports and by then adding the differences between pairs of those percentages. It is identical with the League of Nations index of bilateralism in the special case of I being equal to E, since it then becomes

$$100 \left(1 - \frac{1}{I+E} \sum_{k=1}^{n} \left| i_k - e_k \right| \right)$$

which is precisely the algebraic definition of the League of Nations index.

countries selected, the indexes of bilateralism and of "proportionalism" reproduced in the table on the following page have been computed for the total trade of each of the countries listed.[1]

The most striking result apparent from the table is that, for all countries taken together, the increase of "proportionalism" from 1928 to 1935 is almost double the increase of bilateralism. While "proportionalism" increased in 20 countries out of 26, bilateralism was on the increase in only 14 countries, a bare majority. This means that the strong pressure toward bilaterally compensated trade which was exerted by many important trading countries between 1928 and 1935 did not achieve impressive results, presumably because of the general upsetting of trade balances during the depression. The greater increase in "proportionalism" shows that countries succeeded to a much more substantial extent in bringing their bilateral trade balances in line with the general balance. In how far this may have been the result of conscious policy or of a change in trade structure not consciously aimed at, is discussed below.

The countries in which the increase in bilateralism was most notably exceeded by the increase in "proportionalism" are Germany, the United Kingdom, Switzerland, Spain, Argentina and Australia. Strong advances of both bilateralism and proportionalism are noted for Denmark, the U.S.S.R., India, Brazil, and Canada.[2]

Four of the six decreases of the index of "proportionalism" are accounted for by Far Eastern countries (British Malaya, China, Japan, and the Netherlands Indies). For all four countries the decreases of bilateralism are even more marked. Upon going back to the source material, it is seen that this exceptional development is largely due to inter-trade among these countries having become much more unbalanced. In general, the Far-Eastern countries stand out as being most impervious to the tendencies toward bilateralism and proportionalism with respect to both movement and comparative levels of the indexes.

It should be pointed out once more that the index proposed here is not advocated as a better, or not even as an alternative index of bilateralism. Both indexes, the League of Nations index and the one proposed here, are equally "right" within their own frame of reference. Differences in construction and behavior derive from the difference in underlying concepts. The question to be decided is therefore not which index is better, but how relevant each concept is in any given situation or investigation. The following points can be made as to the relevance of the concept of "proportionalism" reflected in the index proposed here.

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[1] The author is indebted to Mrs. L. M. Doebler for help in the calculations.

[2] Whenever the levels of the two indexes are very close in both 1928 and 1935 this can generally be traced to approximate equality between exports and imports of the countries concerned.

Indexes of Bilateralism and of "Proportionalism"

Country	Indexes of Bilateralism		Indexes of "Proportionalism"		Increase(+) or decrease(−) between 1928 and 1935	
	1928	1935	1928	1935	Bilateralism	"Proportionalism"
Denmark	52.6	74.3	52.8	74.0	+ 21.7	+ 21.2
Switzerland	70.7	74.7	74.0	87.5	+ 4.0	+ 13.5
Germany	74.1	78.0	65.7	78.0	+ 3.9	+ 12.3
India	68.0	82.1	68.6	80.4	+ 14.1	+ 11.8
U.S.S.R.	58.1	69.8	60.5	71.3	+ 11.7	+ 10.8
Sweden	70.6	78.6	70.8	79.4	+ 8.0	+ 8.6
United Kingdom	65.4	68.0	70.7	77.5	+ 2.6	+ 6.8
Spain	66.8	68.9	64.9	71.6	+ 2.1	+ 6.7
Brazil	65.8	73.1	66.4	72.9	+ 7.3	+ 6.5
Canada	66.5	73.2	65.6	71.5	+ 6.7	+ 5.9
Czechoslovakia	77.1	82.0	76.8	80.8	+ 4.9	+ 4.0
Argentina	67.3	67.3	71.4	75.0	0.0	+ 3.6
United States	67.9	71.7	70.3	73.6	+ 3.9	+ 3.3
Australia	63.2	63.0	63.9	67.0	− 0.2	+ 3.1
France	71.9	74.9	71.7	74.2	+ 3.0	+ 2.5
Poland	71.6	69.8	68.6	71.1	− 1.8	+ 2.5
Italy	69.9	68.8	78.1	79.5	− 1.1	+ 1.4
Egypt	65.5	68.2	68.3	69.2	+ 2.7	+ 0.9
Belgium	78.5	76.9	78.3	78.9	− 1.6	+ 0.6
Netherlands	70.1	69.9	73.8	73.9	− 0.2	+ 0.1
Japan	75.2	71.9	73.1	72.1	− 3.3	− 1.0
British Malaya	51.0	47.1	51.2	47.8	− 3.9	− 3.4
Austria	73.8	73.2	82.5	78.6	− 0.6	− 3.9
Cuba	66.4	61.9	74.2	69.9	− 4.5	− 4.3
Netherlands Indies	65.2	53.2	70.5	63.8	− 12.0	− 6.7
China	75.2	57.5	80.9	66.9	− 17.7	− 14.0
All Countries[1]	68.8	71.4	70.0	74.9	+ 2.6	+ 4.9

[1] Average weighted by country trade totals.

(1) To start with a restrictive remark, it may be noted that the relevance of "proportionalism" is limited to the analysis of trade for countries whose import or export surplus relative to total trade exceeds, say, 5 per cent. Whenever imports and exports are very nearly equal, the concept of "proportionalism" practically merges into that of bilateralism and does, therefore, not deserve separate treatment.

(2) Many countries realize that they can afford a passive trade balance since they can count on a surplus from their non-commercial foreign transactions. Other countries know that they will have to develop a merchandise export surplus to meet the expected deficit on service and/or capital account. However, the latter countries may object, for reasons of economic security and political independence, to relying too heavily on their trade with one or a few countries for the financing of this deficit. The countries which can expect a surplus from service and capital transactions, on the other hand, may believe it possible to obtain on the whole better terms of trade by some shifting of imports from high import-surplus to low import-surplus and to export-surplus countries.

If such policies are followed the realization of "proportionalism" rather than of bilateralism would be the aim of commercial policy. Conscious attempts of this kind are generally not made on an overall basis (except that, in 1938, Turkey attempted to bring its imports from and exports to all its trading partners into a 8:10 relationship), but payments and commercial agreements often provide for some bilateral export or import surplus rather than for complete merchandise balance.[1]

(3) Even though conscious policy may aim at an increase of bilateralism, a special combination of circumstances may thwart these efforts, while resulting in an increase of "proportionalism." If, for instance, a country attempts to reduce its trade deficit by bilateral bargaining, it will naturally make a particularly vigorous effort in the case of those countries with which the import surplus is highest. If, at the same time, international economic developments cause a general worsening of the country's foreign trade position, the combined outcome of these opposing forces may be a situation in which bilaterally compensated trade is not larger and may even be smaller than before, but where, due to the particular effort brought to bear upon the countries with which the deficit was largest, the total deficit is more equally distributed among all the country's trading partners. This is probably the explanation for the near constancy of the degree of bilateralism and simultaneous substantial increase of "proportionalism" in the trade of the United Kingdom, Switzerland, Spain, and other countries between 1928 and 1935.

1/ The disparity of the percentages held by a trading partner's imports and exports in a country's total imports and exports is often brought up as an argument in commercial bargaining; insofar as the objective of commercial policy is equalization of the percentages rather than of the absolute amount of imports and exports, "proportionalism" is aimed at.

(4) Finally, it can be shown that the index proposed here has a meaning in terms of a generalized measurement of _bilateralism_ inclusive of the non-commercial items in the balance of payments.

To arrive at quantitative measurement of the extent of bilateralism in _all_ international economic relations, it would be necessary to ascertain the breakdown of the service and capital transactions as between pairs of countries. Should we arrive at knowledge of this breakdown, the issue of bilateralism vs. "proportionalism" would no more arise, since, because of the equality of total payments and receipts in the balance of payments, the two indexes would necessarily be equal (cf. supra p. 3).

In the absence of precise knowledge of the country breakdown of non-commercial transactions, there exists an infinite range of possible, and more or less plausible, assumptions about it. One extreme assumption would be to suppose that the bilateral balances of payments become active for those countries with which the trade balance is passive and vice versa; the opposite extreme would be to assume that all non-commercial receipts are concentrated upon countries with which there exists already an export surplus and all non-commercial payments upon countries with which there exists an import surplus. A reasonable method, lying between these extremes, consists in basing the unknown country breakdown of the non-commercial transactions upon the known, and usually dominant, pattern of trade. This can be done by assuming the share of non-commercial payments to (receipts from) countries A,B,C, etc. in total non-commercial payments (receipts) to be the same as the share of imports from (exports to) countries A,B,C, etc. in total imports (exports). But this is the very assumption which is embodied in the index of "proportionalism" when we wish to consider it as an approximate measure of balance-of-payments bilateralsim.[1] In addition to its contribution to our knowledge of a new aspect of trade structure, it can therefore be regarded as a first step toward the measurement of bilateralism within the balance of payments.

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[1] The assumption will generally make the bilateral balances inclusive of non-commercial transactions smaller than the bilateral trade balances. This is in accordance with what can be expected because of tied loans, payments agreements, short-term capital movements in the wake of trade, etc.

Indian Prices, Money Supply, and Foreign Trade   Arthur B. Hersey

India is an exporter of primary agricultural products and simple manufactures of jute and cotton. Because agricultural prices throughout the world have risen far above pre-war levels, it is not surprising that the general price level in India is now 2-1/2 to 3 times that of the first half of 1939. However, the expansion which has occurred in the volume of Indian currency and deposits is even greater, mainly because of the financing of heavy Allied war expenditures in India through the Reserve Bank of India. India's export potential, which was reduced during the war by the repercussions of a difficult food situation and by transportation shortages, continues to be subnormal. Meanwhile, import demands are stimulated by the high levels of profits and of liquid purchasing power within India. Ample exchange resources to finance imports from sterling area countries are provided, for the time being, by the large balances of inconvertible sterling held by the Reserve Bank of India. It is nevertheless possible that India's total exports still exceed total imports in value. Available statistics for 1946 are much too incomplete to verify this judgment, but it appears a reasonable one in view of (1) the high prices which India is obtaining for its exports, (2) the world shortages of food, textiles, machinery, and other goods desired by India, and (3) the import and exchange controls that are applied to imports from non-sterling countries.

1. Prices

The general average of Indian prices has risen since 1939 in about the same proportion as farm product prices in the United States, when allowance is made for altered exchange rates between the dollar and the rupee. This is illustrated by the figures in the first two columns of the following table:

Wholesale Prices in India and the U.S.
(First half 1939 = 100)

	India General Index 1/	United States Wholesale Prices			
		Expressed in rupees 2/		Expressed in dollars	
		Farm Products	All Products	Farm Products	All Products
1940	120	121	119	104	103
1941	132	147	132	127	114
1942	162	189	150	163	129
1943	230	219	157	189	135
1944	243	220	158	190	136
1945	246	229	160	197	138
1946 Mar.	256	238	166	205	143
Sept.	274	275	188	237	162

1/ The "All-India" Index of the Economic Adviser to the Government of India (shifted from original base of week ending August 19, 1939 = 100).

2/ B.L.S. indexes (shifted from original base of 1926 = 100), adjusted upwards by 16 per cent to reflect the change in dollar exchange rates against sterling and the rupee in September 1939.

Until about April 1942 the rise in Indian wholesale prices lagged behind the average increase in United States agricultural prices. In fact, it was manufactured goods and non-agricultural materials which led in the rise in India, and until the Japanese began to move into Southeast Asia prices of foodstuffs and other agricultural commodities were relatively stable. The fall of Rangoon (Burma) in March 1942 cut off India's principal outside source of rice. Together with the rapid enlargement of British defense expenditures in India this development completely transformed the picture. Shortages of food and other commodities were intensified by speculative withholding of supplies, as well as by the shortcomings of the Indian transportation system when placed under the burden of extra demands by the military. Food prices more than doubled in the next twelve months and the rise in other agricultural prices was almost as steep. Other prices also rose, though not so rapidly.

During 1944 and 1945 the general level of prices in India was fairly stable, as was also the case with United States prices. Price controls, instituted in India in the latter part of 1943, were reasonably effective. It can be said, at least, that the official prices for the two dozen commodities covered by the Indian wholesale price index were pretty well stabilized. Price controls were backed up by an excess profits tax and by sales of Government of India securities outside of the banking system.

The apparent success of price controls in India in this period of continuing monetary inflation would almost certainly have been much less if world prices for agricultural commodities had continued to rise as before. Further increases in Indian export prices would have led to further price increases throughout India's predominantly agricultural economy. Be this as it may, serious efforts to control prices had been so long delayed that throughout the last two years of the war the entire price structure in India was inflated to approximately the same degree as the agricultural price structure alone in the United States.

During 1946 Indian wholesale prices have again risen. By September the increase (over the 1945 average level) was 11 per cent, compared with 17 per cent in the United States. Official quotations for manufactured goods, previously about in line with other prices at approximately 2-1/2 times pre-war, showed only a small further rise. Prices of primary commodities, which dominate the Indian price index, averaged in September more than 2-3/4 times as high as before the war. Among these, agricultural products were priced at about 3 times the pre-war level. Domestic prices of major export commodities averaged 2.9 times pre-war prices.

2. Currency, deposits, and assets abroad

The growth of the Indian money supply has been more than double the rise in wholesale prices: in March 1946 the circulation of notes was seven times as large as before the war, while demand deposits of the commercial banks had grown nearly sixfold. The aggregate increase in these two components of the money supply was the equivalent of about 4.8 billion dollars (at the present exchange rate). Little or none of this expansion is to be ascribed to expansion of commercial bank assets, either for financing government deficits or in extending credit to private borrowers. By far the most

important factors were (1) British war expenditures and (2) India's favorable balance in other external transactions. The Reserve Bank of India is obliged by statute to sell rupees in exchange for sterling to His Majesty's Government on demand. The bulk of British war expenditures in India were financed by such purchases of rupee exchange; total sterling payments by H.M.G. (including reimbursement to the Government of India for such of its war expenditures as, by agreement, were not applicable to the defense of India) amounted to the equivalent of 4.9 billion dollars in a 6-1/2 year period from the beginning of the war. Other net acquisitions of sterling by the Reserve Bank of India totalled 1.3 billion dollars, approximately the amount of the favorable balance in reported merchandise trade.[1] The sum of sterling obtained in these two ways, 6.2 billion dollars, was reduced by the use of 1.2 billion dollars to repatriate sterling debts of the Government of India. There was left a net accretion in official sterling assets of 5.0 billion dollars.

It is evident that, broadly speaking, the more than sixfold expansion of the Indian money supply originated in payments received for exports and domestic deliveries of goods and services to other nations. In the following table this connection between expansion in the domestic money supply and growth of foreign exchange resources may be seen by comparing lines 5 and 13. (Amounts given in the table in crores of rupees should be multiplied by 3 to give the approximate equivalent in millions of dollars at the present exchange rate.)

Other elements of change in the structure of Indian banking assets and liabilities, as shown in this table, are also of interest. Commercial bank loans, on the one hand, and time deposits on the other, approximately tripled. The banks' security holdings showed an increase of larger proportions, but this element of expansion appears to have been fairly completely offset by a substantial increase in Government deposits at the Reserve Bank of India. The eventual reduction of these Government cash balances to a more normal level will add considerably both to the money supply and to bank reserves,[2] unless net disbursements by the Government take the form of or are offset by a drain of funds for imports and other external payments.

Sales of Government securities to non-banking investors were apparently sizeable during the war. It is estimated that only about 45 per cent of the 3.7 billion dollar war-time growth of the Government's rupee public debt found its way into holdings of the scheduled banks or of the Reserve Bank of India. The fiscal policy of the Government of India thus made a definite contribution to control of inflation. Moreover, as already noted, investments by the banking system were offset by the building up of Government cash balances.

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[1] Invisible outpayments on official account exceeding 1 billion dollars were offset by unusually large inpayments on a variety of accounts of which little is known.

[2] In March 1946, the reserves of "scheduled banks" included 81 crores of rupees in balances with the Reserve Bank (of which 40 crores was excess to statutory requirements) and 36 crores of rupees in cash.

Selected Liabilities and Assets of Indian Banking System

(In crores of rupees = 10 million rupees = $3.6 in fiscal 1938-39 = $3.0 in March 1946)	Average of Friday figures		
	Fiscal year April 1938– March 1939	March 1946	Increase
1. Notes in circulation[1]	174	1,217	+1,043
2. Cash held by "scheduled banks"	6	36	+ 30
3. Net note circulation[2]	168	1,181	+1,013
4. Demand liabilities of scheduled banks	124	704	580
5. Total 3. + 4.	292	1,885	+1,593
6. Time liabilities of scheduled banks	103	296	+ 193
7. Govt. deposits at Res. Bank of India[3]	15	545	+ 530
8. Total 5. + 6. + 7.	410	2,726	+2,316
9. Loans[4] of scheduled banks	116	361	+ 245
10. Investments of scheduled banks(estimated)[5]	100	600	+ 500
11. Rupee earning assets of Res.Bank of India[6]	42	92	+ 50
12. Total 9. + 10. + 11.	268	1,053	795
13. Sterling assets of Res. Bank of India[6]	71	1,720	+1,649
14. Total 12. + 13.	339	2,773	+2,444

Note: "Scheduled banks" are those required to hold minimum reserves with the Reserve Bank.

[1] Excluding one-rupee notes of Government of India. Circulation of notes and token coins of one-rupee denomination on March 31, 1946, was 166 crores of rupees.

[2] Approximate; cash held by banks includes rupee and small coin as well as Reserve Bank notes.

[3] Entirely Central Government, except 33 crores in March 1946.

[4] Including advances and bills discounted.

[5] Estimated on basis of data for other dates.

[6] Including Issue Department and Banking Department.

Deficit expenditures of the Central Government were much smaller than British expenditures in India. Regular budget expenditure increased from 95 crores of rupees in the fiscal year 1939-40 to 506 crores in 1945-46 (the latter figure excluding both 347 crores of war expenditure recoverable from the United Kingdom and a small amount of defense expenditure charged to capital account). All but 30 per cent of the total budget expenditure over the 7-year period was met from current revenue. The cumulated budget deficit was equivalent to about 1.9 billion dollars. In addition, defense expenditures charged to capital account amounted to 0.5 billion dollars. These two sums plus the retirement of 1.3 billion dollars of sterling debt and the accumulation of 1.5 billion dollars of cash balances are more than sufficient to account for the 3.7 billion dollar increase in outstanding rupee public debt.[1]

[1] Additional interest-bearing obligations (including tax deposits, government railway reserve funds, and other liabilities) also increased; accruals from these sources together with other capital transactions (including repayments of advances by provinces) explain the discrepancy between new borrowings and apparent requirements.

The peak in Reserve Bank holdings of sterling (5,220 million dollars) was reached in April 1946. By October 11 these balances had been drawn down to the extent of 250 million dollars, a sizeable amount when viewed against India's usual balances of trade, invisibles and international capital transactions. Presumably both private capital transactions and an import surplus vis-a-vis the sterling area contributed to the demand for sterling assets. The only important change in other Reserve Bank accounts accompanying the decline in sterling balances was a 170 million dollar decrease in Central Government deposits. Notes in circulation remained close to the peak figure.

3. Foreign trade

In the four months October 1945-January 1946 (the latest for which Indian trade data are available) exports were at an annual rate of about 920 million dollars and imports at a rate of 720 million dollars, the export surplus amounting therefore to 200 million dollars a year.[1] On the assumption that average prices for these exports and imports were about the same as in earlier months of 1945 (2.2 times pre-war[2] in the case of exports and 1.8 times pre-war for imports), the physical volume of exports was only 72 per cent of the 1936-38 average and that of imports 83 per cent of pre-war. At pre-war prices these quantities of exports and imports would have given a favorable balance of trade, but the surplus would have been almost negligible.

Since January the unit values of Indian exports and imports have undoubtedly risen. Total values of imports have probably increased more than those of exports. Imports of foodstuffs have been fairly substantial. Great Britain is making a strong effort to retain its markets in India; its deliveries of new and used cotton textile machinery to India, for example, are reported to be as large as deliveries to its own cotton industry. Exports, on the other hand, continue to be affected by war-time scarcities. Grain exports are impossible. Acreage for jute has been so sharply restricted as practically to eliminate exports of raw jute, although much of the production of gunny cloth and bags in India is available for export. There are rigorous controls on the export of peanuts, linseed and other oilseeds. Exports of raw cotton are subject to quota restrictions. The strong market for cotton piece goods within India is a deterrent to export business. Of the major items of export, tea and possibly textiles are the only ones likely to exceed pre-war quantities during coming months.

Should a decline in the level of farm product prices in the United States occur in 1947 and 1948, its impact upon India's trade position would obviously be unfavorable. Such a decline may be expected to be transmitted to primary commodity markets throughout the world. Although the physical quantity of Indian exports in 1947 will probably be little influenced by price factors, the balance of trade in value terms might be significantly altered.

[1] Exports valued f.o.b. and including reexports; imports valued c.i.f.
[2] The pre-war base used here is the period April 1938-May 1940. On a 1936-38 base the indexes would be a little higher. These indexes are computed by the Government of India directly from the trade statistics; they are apparently weighted by current rather than base year quantities and the index of export prices is therefore not wholly comparable with indexes of domestic prices.

4. The future of Indian domestic prices

A further likely consequence of weakness in world prices for primary products would be downward pressure upon the general price level within India. This in turn would further unsettle the already uncertain prospects for industrial and commercial development in India. In two earlier periods of falling world prices, 1920-21 and 1930-32, Indian domestic prices were partly insulated from the forces of deflation by depreciation of the rupee's foreign exchange value. From February 1920 to March 1921 the value of the rupee, greatly influenced at that time by the price of silver, was allowed to depreciate by 53 per cent against sterling (from 2 s. 10 d. to 1 s. 4 d.) and by 46 per cent against the dollar (from 48 cents to 26 cents). In 1931 the depreciation of sterling, to which the rupee was pegged,[1] involved automatically a 30 per cent depreciation of the rupee against the dollar. Exchange rate changes of these magnitudes were sufficiently great to cushion very appreciably the contemporary declines in Indian prices. In the absence of comparable changes of the Indian exchange rate in 1947 and 1948, maintenance of the present inflated price level in India seems very unlikely.

[1] Since 1925 the rupee has been pegged to sterling at a rate of 1 s. 6 d.

United States Coal for Europe   C. R. Harley

European nations shared with the United States a deep concern over the disruptive effects threatened by the recent work-stoppage of bituminous coal miners which ended with dramatic suddenness on December 7.

During the twelve months ending September 1946, United States exports of coal amounted to some 41 million long tons, a volume of shipments exceeding the pre-war annual average (1936-38) by 250 per cent. About 88 per cent of these exports consisted of bituminous coal; both the total volume of exports and the percentage share of bituminous would have been still larger but for the substitution of anthracite for bituminous necessitated by the soft coal strike of April and May. The effect of this earlier strike upon exports in the second quarter of 1946 and the sharp expansion of shipments since that time may be seen in the following table:

United States Coal Exports by Quarters
(In thousands of long tons)

	Quarterly Average 1936-38	Oct.-Dec. 1945	Jan.-Mar. 1946	April-June 1946	July-Sept. 1946	Quarterly Average 1945-46
Bituminous	2,551	7,658	8,550	5,107	14,609	8,981
Anthracite	409	1,007	904	1,160	1,910	1,245
Total	2,960	8,665	9,454	6,267	16,519	10,226

While in the pre-war period over 90 per cent of United States coal exports went to Canada, during the twelve months under review some 15 million long tons, or 38 per cent of total shipments, were sent to Europe. The importance of these supplies for certain European countries can hardly be exaggerated. Computations based upon <u>confidential</u> data prepared by the European Coal Organization[1] indicate that during the six-month period April through September imports from the United States constituted substantial percentages of total coal imports and supplies for the following countries:

Imports of Coal from the United States
During the Period April-September 1946

Country	Thousands of metric tons	Imports from U.S. as percentage of total imports	of total supply
France	2,557	48.0	8.7
Italy	2,491	81.2	63.4
Netherlands	812	46.4	13.9
Belgium	655	43.8	5.4
Denmark	473	23.8	23.8
Sweden	442	23.7	22.3
Norway	381	35.6	35.6
Portugal	197	61.2	36.3
Switzerland	180	21.4	21.4
Finland	138	29.8	29.8

Although imports from the United States have alleviated the European coal situation, coal shortages continue to hamper European reconstruction. France, Belgium, and the Netherlands, with substantial domestic production, are faring much better than the non-producing countries of Western Europe. Total coal supplies of these countries, from production and imports, are equal to about 90 per cent of the 1935-38 supply. In France alone, however, has domestic production reached the pre-war level. Italy, Switzerland, Portugal, and the Scandinavian countries, dependent almost entirely upon imports, are struggling along with supplies 30 to 50 per cent below pre-war. Since transportation, public utilities, and food processing plants receive preference in the use of available coal, industry in general and private consumers are granted extremely small amounts. In Norway, Sweden, and Finland, the shortage of coal has resulted in a great increase in the consumption of timber for space-heating and industrial uses with the result that exports of lumber have declined.

It is clear that, with the landed cost of American coal approximately double that of British or Continental coal, only the drastic scarcity of alternative supplies is responsible for the high consumption of United States coal. In the years immediately before the war, exports from the

[1] The European Coal Organization was formally established in January 1946 after six months of successful operation on a provisional basis. The Organization allocates available coal supplies from European and foreign sources among the principal European consumers other than Russia. Membership includes Belgium, Denmark, France, Greece, Luxembourg, Netherlands, Norway, Poland, Turkey, the United Kingdom, and the United States; Italy, Sweden, Portugal, and Finland are associated with the Organization and abide by E.C.O. recommendations.

principal European coal producers totalled about 90 million metric tons
(88.5 million long tons) per year. Of this amount the United Kingdom
supplied over 40 million metric tons, Germany over 30 million, Poland
about 10 million, and Holland and Belgium together 8 million tons. Total
Europe, including the United Kingdom, was a net exporter of coal, supplying
substantial tonnages to Africa, the British Dominions, and even South America.

The present situation is very different. The London Economist[1]/
recently estimated that European coal production had fallen from a pre-war
level of 435 million tons to a current level of 290 million. British pro-
duction is 40-45 million tons below pre-war, a situation traceable to re-
duced employment in the mines, excessive absenteeism, and a decline of over
10 per cent in output per man per shift. Production in western Germany is
down 65-70 million tons--to less than half the pre-war figure. Coal mines
now under Polish control are producing about 45 million tons compared with
pre-war production of 70 million.

Polish exports, however, are somewhat above the pre-war level
since Poland now holds Silesian mining properties of some 30 million tons
annual capacity which were formerly owned by Germany. Exports are now
running at an annual rate in the neighborhood of 20 million tons, of which
about 10 million tons are consigned to Russia, the Russian zone of Germany,
Rumania, Yugoslavia, and Hungary; the remainder is shipped to other European
countries, with Sweden receiving a substantial share. Exports from western
Germany amounted to about 1 million tons monthly during the first three
quarters of 1946, but are now being sharply curtailed as a result of near
exhaustion of the stockpile of 6 million tons held in the Ruhr at the be-
ginning of the year. The Netherlands and Belgium are receiving substantial
net imports at the present time. British coal exports to all destinations
(exclusive of bunker coal) during the first nine months of 1946 were at an
annual rate of no more than 5 million tons, of which only 45 per cent was
sent to Continental Europe.

Substantial improvement in the European coal situation will not
occur until production of coal in the British-controlled fields of the
German Ruhr is greatly increased. A minor improvement of production in
this area may result from increased imports of foodstuffs and machinery
made possible by the agreement of December 2 between the United Kingdom and
the United States regarding economic fusion of their respective occupation
zones in Germany. Some 100,000 German prisoners of war are reported to be
working in the coal mines of France, Belgium, and the Netherlands. A speeding
up in the repatriation of these and thousands of other German workers (as
required by the Geneva Convention) has recently been urged by Secretary of
State Byrnes and a gradual influx of experienced miners to the Ruhr may
perhaps be anticipated over the next year. Increased consumption of coal
within Germany, however, appears to be in prospect in view of increasing
acceptance of the contention that European reconstruction demands somewhat
higher production in German basic industry than was originally contemplated.
Accordingly it is probable that for many months the industrial areas of
Europe will continue to rely heavily upon imports of coal from the United
States.

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1/ Cf. Economist, August 31, 1946, p. 349.

Russian Platinum Exports   Alexander Gerschenkron

     According to a recent report Russian platinum has again appeared
on the market, and several thousands of ounces are said to have been sold
within the past few weeks. There is some question as to why the Russians
failed to take advantage of the extremely favorable price situation which
existed last summer and began to export only when prices had already begun
to fall. The explanation given in trade circles here, that Russian pro-
duction was interrupted by the war and is now being slowly restored, checks
well with such evidence as has been forthcoming from Russia.

     In addition, however, the opinion has been expressed that Russian
platinum may become in the long run a disrupting factor in the platinum
markets. It would seem that there is little ground for such an expectation.
To explain this statement, it may be useful to review the vicissitudes of
international platinum marketings since the turn of the century. The pre-
1914 market was dominated by Russia and Colombia, which together produced
about 90 per cent of the total output. For more than a decade after 1903,
an international syndicate succeeded in maintaining the price of platinum
at a high level until it disintegrated under the impact of World War I.
Production in Russia ceased completely during the revolution while at
approximately the same time South Africa and Canada became significant
producers. By 1924/25 international control of the market through allo-
cation of sales quotas was again in effect. Soviet Russia seems to have
established relations with the syndicate at an early date, although the
precise nature of these relations was uncertain. One authority[1] states
that Russian sales were probably limited by the cartel, while another
declares that Russia became a formal member and remained in the syndicate
at least up to 1927.[2]

     During those years Russian production was rapidly recovering and
Russia, still producing a large share of total world output, was dissatisfied
with the limitations imposed on it by the syndicate. Accordingly in 1927
Russia severed whatever connection she may have had with the cartel. The
result was disruption of the cartel and a fall in prices to about one-fifth
of their previous level. In view of this development it is very unlikely
that Russia profited from her action. At any rate, according to a widely
quoted German source, the cartel was re-established in October 1931 in the
form of the Consolidated Platinum Company, Ltd., London. It included
Canadian and South African producers and English and German distributing
companies. A few weeks later the Colombian producers and Russia joined the
cartel. Quotas assigned by the cartel were as follows: Russia, 50 per cent;
Canada, 26 per cent; Colombia, 9 per cent; South Africa, 15 per cent.[3] The
quota for Russia probably corresponded roughly to the Russian share in world
production of the metal. Whatever losses Russia may have suffered through
the earlier disruption of the cartel, her leading position seems to have
been recognized in the new group. However, a radical change in the situ-
ation was close at hand.

1/ Ballande, Laurence, Essai d'étude monographique et statistique sur les
    ententes économiques internationales, Paris, 1936, p. 206.
2/ Staley, Eugene, Raw Materials in Peace and War, New York, 1937.
3/ Wirtschaftsdienst (Hamburg), December 4, 1931, p. 197.

About 1934 a turning point occurred in the platinum market as a result of which the commanding position in the industry passed to the Canadians. In that year the International Nickel Company began to exploit the copper-nickel Frood mine in Ontario where platinum was obtained as a by-product. The cost of production was limited to the expense of refining, which in the late 'thirties amounted to about 1-1/2 dollars per troy ounce, while the amount of platinum obtained became a function of the copper output.

The volume of Canadian output of platinum increased from 27,000 troy ounces in 1933 to 139,000 in 1937 and 155,000 ounces in 1939, while Russia's production in the latter year (possibly including related metals) was estimated at 145,000 ounces.[1] Their low-cost production made the Canadians impervious to threats of competition and they were able to dominate and regulate the market with little regard to foreign producers. In fact, maintenance of high prices was contrary to the interests of Canadian producers whose problem was to broaden the demand for platinum. A considerable amount of research was undertaken which succeeded in increasing industrial utilization of platinum. Yet to make industrial use possible the price could not exceed 30-35 dollars per troy ounce, or about one-quarter of the level in the mid-'twenties. When, in the course of the various financial panics of the 'thirties, a tendency developed for platinum to be used by speculators for hoarding, the International Nickel Company interfered in order to prevent price increases which would have reduced the industrial demand for the metal.

The result was Canadian price leadership in the platinum market. The Russians were able to sell certain amounts of platinum at the price fixed by International Nickel. However, any attempt to undersell the Canadians would have been futile as long as the Canadian cost of production amounted to less than six per cent of the market price. It is therefore quite credible, as reported by German sources, that the Russians left the cartel sometime in 1936. The abnormal price developments of recent months may indeed be influenced by the reappearance of Russian platinum. In the long run, however, the basic fact remains that Russia will not be able to increase substantially the volume of its sales of platinum on world markets through any type of price manipulation. It is more profitable for the Russians to follow the Canadians than to fight them. For this reason, it is unlikely that Russia will prove to be a disrupting force on the platinum market.

[1] Deutsche Bergwerks-Zeitung (Essen), March 24, 1944.

The Structure of Russian Industry: An Addendum   Alexander Gerschenkron

In the "Note on the Structure of Industry in Russia" (cf. the preceding issue of this Review) the tentative conclusion was reached that the relationship between output of producers' goods and that of consumers' goods which is contemplated for the last year of the current Five Year Plan (1950) is very close to that originally projected for the last year of the Third Five Year Plan (1942). This conclusion was suggested by scrutiny of the proposed output for a number of key commodities in these two groups of Russian industry. It may be worthwhile, on the basis of this conclusion and additional data, to estimate the relationship existing between these two groups at the end of the war. This in turn will present an

opportunity for examining more closely some official pronouncements on the subject, and for correcting a statement made in the earlier "Note."

Assuming identical structures for Russian industry in 1942 and 1950, the following table may be drawn up:

	1942 [1] (In billions of 1926/27 Rubles)	Per cent	1950 (In billions of 1926/27 Rubles)	Per cent
Producers' goods	112	62.2	127.5	62.2
Consumers' goods	68	37.8	77.5	37.8
Total	180	100.0	205.0 [2]	100.0

[1] V. Molotov, "The Third Five Year Plan for the National Economic Development of the USSR." Report made to the 18th Congress of the C.P.S.U. (B), March 14 and 17, 1939, in: The Land of Socialism To-day and Tomorrow, Moscow, 1939.

[2] Pravda, March 21, 1946.

In introducing the Plan in his speech to the Supreme Soviet, the President of the Gosplan, N. A. Voznesenski, said: "In the sphere of industrial output of foodstuffs and products of mass consumption the Plan envisages an annual rate of growth of output of 17 per cent so as not only to restore but to exceed the pre-war level." It may be assumed that Voznesenski had a simple rather than a compound rate of growth in mind, as the former is generally referred to in Russia. From the foregoing statement some light may be shed on the situation in 1945. An average annual increase by 17 per cent leading, as assumed, to an output of consumers' goods of R 77.5 billion in 1950 implies that the output of these goods in 1945 amounted to R 41.9 billion. In the same speech M. Voznesenski disclosed, although somewhat indirectly,[1] that the total value of industrial output in 1945 was approximately R 127 billion. These figures indicate the following composition for Russian industry in 1945:

	In billions of 1926/27 Rubles	Per cent
Producers' goods	85.1	67.0
Consumers' goods	41.9	33.0
Total	127.0	100.0

From this tabulation it appears that between 1945 and 1950 the output of consumers' goods is to increase by R 35.6 billion; that of producers' goods by R 42.4 billion. This implies an average annual rate of growth for producers' goods (on a non-compound basis) of about 10 per cent a year, as against a 17 per cent rate for the growth of output of consumers' goods. The share of the latter in total output would increase from 33 per cent in 1945 to almost 38 per cent in 1950.

[1] Cf. Review of Foreign Developments, October 7, 1946, Supplement, p. 47, footnote.

This conclusion is clearly inconsistent with another statement of Voznesenski, quoted in the last issue of the Review, according to which the rate of growth of output of producers' goods is to be somewhat higher than that for consumers' goods. Voznesenski's statement that output of consumers' goods will increase by 17 per cent annually cannot be reconciled with forecasts of a still higher rate of growth for producers' goods. This may be demonstrated by the following two rather extreme examples. Let us first assume (though this would be quite inconsistent with the data on projected output of individual products) that the total value of consumers' goods output in 1950 is projected to amount to only R 55 billion; this would make it just a little higher than the corresponding figure for 1940 (R 53.6 billion), which M. Voznesenski declared would be exceeded. On the basis of a 17 per cent annual increase in production of consumption goods, the structure of industry indicated for 1945 would be as follows:

	In billions of 1926/27 Rubles	Per cent
Producers' goods	97.3	76.6
Consumers' goods	29.7	23.4
Total	127.0	100.0

While it is not entirely out of the question that consumption levels were reduced to this extent, the foregoing figures imply an average rate of increase of output of producers' goods of no more than 11 per cent. On the other hand, if we assume (which is also quite implausible) that in 1945 the share of consumers' goods in total industrial output was the same as in 1937, that is 42 per cent, the 1945 output of consumers' goods would have amounted to about R 53 billion, and the indicated 1950 output would be R 99 billion; this would mean that the output of producers' goods for 1945 was R 74 billion, and that for 1950 would be R 106 billion. This implies an average annual growth of output of producers' goods of less than 9 per cent.

It is difficult to escape the conclusion that Voznesenski in his statement on a somewhat higher rate of growth of producers' goods actually referred to absolute growth. It does make sense to assume that the absolute increase in output of producers' goods between 1945 and 1950 will be somewhat in excess of that of consumers' goods, as was indicated by the calculation on page 18 where a differential of about R 7 billion was shown. It is quite possible that this differential may be somewhat larger. But as long as Voznesenski's 17 per cent of growth for consumers' goods is accepted, it seems impossible to assume a still higher rate of growth of producers' goods.

Accordingly, the situation may be summarized as follows: As pointed out in the "Note" in the preceding issue of the Review, the war left Russian industry heavily weighted in favor of output of producers' goods. This is confirmed by the foregoing estimates. It was implied in that "Note," however, that the relative preponderance of producers' goods industries would increase further in the course of the current Five Year Plan. This opinion, which was suggested by Voznesenski's statement, seems incorrect. The Plan apparently provides for an increase in the share of consumers' goods industries in total industrial output. The fact remains, however, that this increase would mean at best a return to the low share of consumers' goods which was projected in expectation of the war.

Economic Union of Yugoslavia and Albania   J.H.F.

The governments of Yugoslavia and Albania have announced an agreement for coordinating the economic plans of their countries, abolishing customs borders between them, and unifying their financial and monetary arrangements. The Yugoslav Government has promised Albania "generous support and considerable assistance in means of production and otherwise" in order to raise Albania to a higher economic level. The agreement was signed on November 27.

This pact presumably is the first step toward complete political and economic union of Yugoslavia and Albania (and possibly Bulgaria) which has been expected since the establishment of communistic regimes in these three countries. The economic importance of union between Yugoslavia and Albania would be small. Albania can offer Yugoslavia very little, apart from some oil fields developed by the Italians in the inter-war period. Yugoslavia, on the other hand, might become a primary source of foodstuffs for Albania, and, at a later date, might supply textiles and some capital equipment. As long as the Yugoslav economy, however, remains in its present state of disorganization, Yugoslavia will find it very difficult to ship to her neighbor goods which she desperately needs for her own people.

The political importance of a complete union would be greater than the economic, since it would give Yugoslavia a larger degree of control of the Eastern shore of the Adriatic and at the same time would extend considerably her border line with Greece. In view of these facts, the Yugoslav Government would probably be willing to make economic sacrifices, just as in the inter-war period Italy, for similar reasons, invested considerable sums in Albania, without receiving (and presumably without expecting) financial returns.

In this connection it should be noted that Yugoslavia recently imported a number of German "specialists" who are supposed to assist the government in mapping and executing a plan of economic reconstruction and development. This move is an astonishing departure from the previous Yugoslav policy of killing, jailing, or exiling all members of her own German minority, which had been prominent for about 200 years in developing the country's natural resources. It remains to be seen whether the newcomers will turn out to be experts in agriculture, industry, and commerce, or in the techniques of less peaceful pursuits.