Trade in Non-Factor Services: Past Trends and Current Issues

World Bank Staff Working Paper No. 410

August 1980

Prepared by: Andre Sapir (Consultant) and Ernst Lutz International Trade and Capial Flows Division Economic Analysis and Projections Department Development Policy Staff

Copyright © 1980 The World Bank 1818 H Street, N.W. Washington, D.C. 20433, U.S.A.

The views and interpretations in this document are those of the authors and should not be attributed to the World Bank, to its affiliated organizations, or to any individual acting in their behalf.

The views and interpretations in this document are those of the authors and should not be attributed to the World Bank, to its affiliated organizations, or to any individual acting in their behalf.

WORLD BANK

Staff Working Paper No. 410

August 1980

TRADE IN NON-FACTOR SERVICES: PAST TRENDS AND CURRENT ISSUES

A Background Study for World Development Report, 1980

Although the emerging interest in trade in services has resulted in some studies, research on trade in non-factor services (NFS) has been largely neglected. This is because of problems with the data and the diversity of NFS--they are heterogeneous collection of items usually classified according to five categories: shipping, other transportation, travel, other private services and other government services. In 1975, these items accounted for about 20 percent of world trade in goods and NFS.

This paper represents the first stage of a research project on trade in non-factor services. It (a) presents and analyzes the available data on trade in non-factor services; (b) formulates a series of preliminary hypotheses on the factors affecting NFS trade and presents the results of econometric analyses which can be used for projections in the global model for the World Development Report; (c) discusses the impediments to NFS trade as seen by both developed and developing countries; and (d) sets out issues which might be analyzed in the next stage of the project.

We have greatly benefitted from discussions with a number of colleagues, including, in particular, Nancy Adams, Robert Baldwin, Francis Colaco, Harald Hansen, Rachel McCulloch, James Riedel, Jo Saxe, Antoine Schwartz, James Simmons, Martin Wolf and John Zerby. However, they are in no way responsible for any of the shortcomings of this paper. We would like to express our appreciation to Angelito Santos for providing excellent research assistance and to May-O Kuo for the efficient typing.

Prepared by: Andre Sapir (Consultant) and Ernst Lutz
International Trade and Capital Flows Division
Economic Analysis and Projections Department
Development Policy Staff

Copyright © 1980 The World Bank 1818 H Street, N.W. Washington, D.C. 20433 U.S.A.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
1. Background	1
2. The Purpose and Approach of the Study	3
CHAPTER I: DATA ANALYSIS	5
1. The Data Base	5
2. Historical Analysis	6
3. Net Trade Positions	17
3.1 Travel	19
3.2 Shipping	19
CHAPTER II: ECONOMETRIC ESTIMATES AND PROJECTIONS	24
1. The Model	24
1.1 Shipping	24
1.2 Other Transportation	26
1.2.1 Passenger Fares	27
1.2.2 Port Services	27
1.3 Travel	29
1.4 Other Private Services	30
1.5 Other Government Services	30
2. Empirical Results	31
3. Projecting NFS Trade	33

	<u>Page</u>
CHAPTER III: PROTECTIONISM	36
1. Analysis of Trade and Investment Restrictions .	38
1.1 Exchange Controls	39
1.1.1 Travel Restrictions	41
1.1.2 Restrictions on Other Private Services	42
1.1.3 Investment Income Remittances	44
1.1.4 Conclusion	45
1.2 Other Types of Restrictions	46
1.2.1 Industries Primarily Affected by Trade-Type Restrictions	48
1.2.2 Industries Primarily Affected by Investment-Type Restrictions .	50
<pre>1.2.3 Industries Affected by Both Trade</pre>	50
1.2.4 Conclusion	52
2. Protectionism in Trade in Shipping Services	53
3. Toward Liberalization	58
CONCLUDING REMARKS	65
ANNEX I: CONCEPTS, DEFINITIONS AND ANALYSIS OF NFS TRADE, 1967-75	11
ANNEX II: TRADE MATRICES	II1
ANNEX III: NFS PROJECTIONS	III1
ANNEX IV: NFS TRADE RESTRICTIONS	IV1

LIST OF TABLES

		<u>Page</u>
1.	Selected Indicators for NFS Exports and Imports, by WDR Regions, 1967, 1971 and 1975	8
2•	Shares of NFS Export Categories, by WDR Regions, 1967, 1971 and 1975	9
3.	Growth Rates of NFS Exports and Imports, by Developed and Developing Countries and the World	14
4•	Tourist Expenditures and Receipts, by WDR Regions, 1975	18
5•	World Seaborne Trade, by Type of Vessel and Country Grouping, 1975	21
6•	World Trade in Merchandise, by Type of Commodity and Country Grouping, 1975	23
7•	Equations Used for Projections	35
8•	World Fleet, by Type of Vessel and Country Grouping, 1975	55

INTRODUCTION

1. Background

During the last decade, the traditional focus on trade of merchandise slowly began to give way to a more comprehensive approach which dealt with services as well as goods. In part this shift arose from a belief that more attention would be paid to trade in services in the future as a result of recent achievements in the field of merchandise trade. Limits to distortions in that area were accomplished by participants to the General Agreement on Tariffs and Trade (GATT). 1/While attempts to introduce the issue of trade in services in the recent Tokyo Round of Multilateral Trade Negotiations were largely unsuccessful, the even more recent fifth session of the United Nations Conference on Trade and Development (UNCTAD) did adopt a series of resolutions dealing with services.

Although the emerging interest in trade in services has resulted in some studies, 2/ research on trade in non-factor services (NFS) has been largely neglected. This is because of problems with the data and the diversity of NFS--they are heterogeneous collection of items, usually classified

^{1/} See, for instance, recent papers by Robert E. Baldwin, "The Multilateral Trade Negotiations: Toward Greater Liberalization?", 1979, American Enterprise Institute, Washington, D.C. and Beyond the Tokyo Round Negotiations, Trade Policy Research Centre, London, 1979; Ria Kemper, "The Tokyo Round of Multilateral Trade Negotiations: Results and Implications for Developing Countries," EPDIT Working Paper No. 9, October 1979, and Bela Balassa, The Tokyo Round and the Developing Countries, Journal of World Trade Law, forthcoming.

In particular, see B. Griffiths, <u>Invisible Barriers to Invisible Trade</u>, London: Macmillan, 1975, and US Department of Commerce, <u>US Service</u> <u>Industries in World Markets: Current Problems and Future Policy Developments</u>, Washington, D.C. 1976.

according to five categories: shipping, $\underline{1}$ / other transportation, travel, other private services and other government services. $\underline{2}$ /

In 1975, NFS constituted about 20 percent of world trade in goods and NFS, although their importance varied widely among different regions. For example, on the export side, the ratio between NFS and merchandise trade in Southern Europe was over 40 percent, while in the Middle East it was below 10 percent. In terms of the composition of NFS exports by region, it appears that "other private services" have consistently occupied the dominant position in industrialized countries. Among the less developed countries, "travel services" have played a major role in Latin America and Southern Europe, while in most other regions, "other private services" has become the largest item, following some shifts in the composition of NFS trade that have taken place since 1967.

Protectionism in trade in non-factor services has become an important policy issue. Restrictions are many. They include travel taxes, preferential bilateral shipping agreements, discriminatory taxes on foreign insurance companies and banks, restrictions on remittances from royalties, and a large variety of other such nontariff measures. Often, because of their importance to the balance of payments, non-factor services have been a convenient target of commercial policies aimed at countering short-term difficulties.

^{1/} Throughout this paper the term shipping is used interchangeably with shipment.

^{2/} See Annex I for a more detailed discussion of the concepts and definitions of NFS.

An important question is whether protectionism in services has been increasing in recent years. While it is difficult to give clear-cut answers and quantify protectionist measures of a non-tariff nature, this work leads us to think that this has been the case. A possible explanation is the fact that agreements have been concluded in the area of merchandise trade and that some governments have moved their discriminatory measures into the yet unregulated area of trade in services.

As compared to merchandise trade, the potential for restrictions by developed countries against NFS imports from less developed nations is limited because of the nature of the NFS components. The bulk of the barriers to NFS trade have been imposed by the less developed countries themselves.

2. The Purpose and Approach of the Study

This paper is a status report on the first phase of a research project into trade in non-factor services being conducted with the International Trade and Capital Flows Division in the Economic Analysis and Projections Department (EPDIT) of the World Bank. The objectives of this phase of research were data collection, exploratory analyses designed to highlight issues for further examination, and development of a methodology for NFS projections for the World Development Report.

In addressing the subject of NFS, two approaches were possible -one broad, but rather superficial, the other specific and detailed, focusing
on one category of NFS. Because the results were to be integrated into a
larger study on trade patterns and problems, the first alternative was chosen.
This type of general approach was necessary as an exploratory step in this
largely ignored area.

The paper is divided into three chapters. As an introduction to the discussion, Chapter I presents and analyzes our data base. Based on this analysis, in Chapter II, a series of hypotheses are formulated concerning the determinants of some categories of NFS trade and tested by means of econometric estimation. Although the econometric work is primarily aimed at helping our understanding of the patterns of trade in non-factor services, it is also used for projecting this trade in a manner consistent with the requirements of the global analysis for the World Development Report. Chapter III discusses the impediments to NFS trade, both from the viewpoint of the industrialized and developing nations. Finally, some concluding remarks are offered, including a series of issues identified for further investigation. Definitions and background data are contained in four annexes.

CHAPTER I

DATA ANALYSIS

The historical analysis presented in this chapter is based entirely on a data set derived from various issues of the <u>Balance of Payments Yearbook</u> by the International Monetary Fund. They exclude a number of non-member countries, most notably the centrally planned economies. 1/ An attempt was made to include as many other countries as possible; a list of these appears in Table 1, Annex I. To simplify the reporting, the countries were grouped according to the 15 regions used by the World Bank in its World Development Report Series. Regions 1-12 are developing countries, 13-14 industrialized nations. (Region 15 -- Centrally Planned Economies -- was excluded because no data are available.) The time frame of the study was limited to the period 1967-1975 because the data for other years was unavailable or incomplete.

Because the IMF does not include a number of countries in its data, what it calls "world-total" trade figures fail to produce a balance between credit and debit. Further, the information contained in the <u>Balance of Payments Yearbook</u>, 1971-1977, Supplement to Volume 29, December 1978, indicates an additional statistical problem specific to trade in non-factor services. It can be detected in the following trade figures (in billions of SDRs), for 1975 for the world as a whole: 2/

^{1/} Also missing are, among others, Afghanistan, Angola, Hong Kong, Kuwait, Lebanon, Liberia and Portugal.

^{2/ &}quot;World" is defined as the total of those countries which are members of the IMF and for which data are available.

	(1) <u>Credit</u>	(2) Debit	(3) (1)-(2)	(4) (3)/(1)
Merchandise f.o.b.	613.6	598.4	15.2	0.025
Services	197.8	214.9	17.1	0.086
Non-factor services	140.8	156.8	16.0	0.114
Freight Merchandise insurance Other transportation Travel Other private services Other government services	20.6 0.8 27.7 35.5 44.1 12.6	30.8 2.3 29.3 35.1 44.1 15.0	10.2 1.5 1.6 0.4 0.0 2.4	0.495 1.875 0.058 0.003 0.000 0.190
Investment income	57.0	58.1	1.1	0.019

The figures reveal a rather large statistical discrepancy for NFS, in particular for shipping (freight plus merchandise insurance). It seems doubtful that the gap can be attributed entirely to the absence of data from a few countries. This lack of consistency in the data base is a constant problem in the general area of trade in invisibles. One consequence is that in general it is difficult to make clear statements about the surplus or deficit status in the NFS balance of certain regions or countries. Although some attempts to remedy this situation were undertaken in this work, the problem remains largely unsolved.

2. Historical Analysis

Table 1 indicates that, on the average, exports (imports) of NFS represent about 20 percent of total exports (imports) of goods and NFS in the 14 regions. Thus, trade in NFS amounts to about a quarter of the trade in goods. These proportions seem to have remained fairly stable between 1967 and 1975.

The importance of NFS trade varies widely among the 14 regions. On the export side, in 1975, Southern Europe (region 12) had by far the largest ratio of trade in NFS to goods, followed by Singapore (region 9). At the other end of the spectrum, two of the Middle Eastern/ North African regions (5 and 6) had ratios below 10 percent. On the import side, two of the African regions South of the Sahara (1 and 2), along with the OPEC surplus countries (region 6), had high ratios, while Singapore's was on the order of 10 percent. Globally, these ratios had similar orders of magnitude for developed and developing countries. Underlying the ratios and their changes over time were the growth rates for goods (including NFS) and of NFS for both exports and imports; these are shown in Table 2, Annex I.

When the composition of NFS exports by region is examined (Table 2), it can be observed that "other private services" have consistently occupied the dominant position in industrialized nations. Among the developing countries, "travel" services have been predominant in Latin America and Southern Europe (regions 10, 11, and 12), to be expected as they are nearest the big travel spenders, i.e., the industrialized countries (regions 13 and 14). In the other developing regions, the composition of earnings changed during the period 1967-1975. There was a shift away from "other government services" in low income Africa (region 1) and in Asia (regions 7, 8 and 9) and away from "travel" in North Africa and the Middle East (regions 5 and 6), and a shift toward "other private services," mainly in two African regions and Asia. In 1975, in 9 of the 14 regions, "other private services" were first among the NFS items; they were second in 4 other regions. Only in region 6 (Libya and Saudi Arabia) has this item been insignificant during the entire period.

SELECTED INDICATORS FOR NFS EXPORTS AND IMPORTS, BY WDR REGIONS, 1967, 1971 and 1975 Table 1:

(at current prices)

	Exports of NFS in % of Imports of OF NFS	50.2	26.2	56.1	6.92	37.3	23.9	43.2	87.7	307.3	59.9	76.8	172.3	102.6	84.1
1975	Imports of NFS as % of Imports of Goods and NFS	30.3	31.9	24.1	19.9	25.1	36.5	17.6	15.0	10.9	22.3	20.8	16.7	20.9	19.5
	Exports of NFS as % of Exports of Goods and NFS (22.7	9.6	15.4	23.5	6.9	4.2	9.0	.15.5	35.7	16.3	18.5	42.0	21.0	15.9
	Exports of NFS in % of Imports of NFS	0.09	38.2	58.3	84.9	37.3	38.6	38.1	101.8	176.5	60.5	32.6	200.8	108.3	76.7
1971	Imports of NFS as % of Imports of Goods and NFS	28.7	27.3	24.7	22.8	25.6	31.2	20.0	16.6	10.0	25.5	26.3	19.4	23.0	24.3
	Exports of NFS as % of Exports of Goods and NFS	22.2	11.0	17.9	26.0	6.2	4.8	10.0	18.8	23.7	17.71	22.9	46.3	23.7	18.2
	Exports of NFS in % of Imports of NFS	54.8	36.2	61.1	107.9	51.4	28.5	6.64	137.6	271.3	61.5	87.9	180.6	111.5	73.2
1967	Imports of NFS as % of Imports of Goods and NFS	31.5	29.7	22.6	21.2	22.7	36.1	17.2	16.6	8.7	24.8	24.8	18.1	23.4	26.6
	Exports of NFS as % of Exports of Goods and NFS	19.9	11.8	13.8	26.3	8.1	5.9	12.9	25.9	24.9	16.4	19.6	41.5	25.1	19.2
	WDR	н	7	m	7	'n	9	7	∞	6	10	11	12	13	14

Source: Balance of Payments Yearbook, IMF, various issues.

SHARES OF NFS EXPORT CATEGORIES, BY WDR REGIONS, 1967, 1971 and 1975 Table 2:

(at current prices, in percent)

	ا سا			- 9											
	Other Government NFS	19.4	18.8	1.2	8.2	30.9	2,7	13.9	17.2	2.7	5.5	4.8	3.8	7.1	14.1
	Other Private NFS	25.1	27.6	45.2	6.04	31.9	3.2	26.5	30.5	58.2	27.1	22.5	27.6	33.4	28.4 ⋅
1975	Travel	14.8	13.7	20.9	29.5	20.9	37.6	21.2	28.3	11.8	38.1	46.1	42.0	23.3	18.5
	Other Transportation	29.5	24.9	26.7	11.0	12.2	56.5	22.5	15.3	22.9	17.2	20.0	15.4	18.0	23.9
	Freight and Insurance	11.2	15.0	0.9	10.4	4.1	0.0	15.9	8.7	4.4	12.1	9.9	11.2	18.2	15.1
	Other Government NFS	26.5	22.5	2.4	13.7	16.5	5.1	17.0	38.0	23.4	8.3	9.9	5.3	7.8	15.7
	Other Private NFS	17.7	27.6	44.3	28.9	26.0	2.5	25.5	21.7	8.0	24.7	20.7	23.9	30.6	28.8
1971	Travel	20.1	11,4	19.8	33.2	40.2	36.3	13.0	23.6	21.1	37.8	54.0	48.4	23.6	20.3
1	Other Transportation	26.6	22.2	28.1	5.9	12.4	56.1	26.0	0.6	52.4	15.4	13.9	14.2	16.2	21.7
	Freight and Insurance	0.6	16.3	5.5	18.2	6.4	0.0	18.5	7.7	2.3	13.9	4.8	8.3	21.8	13.6
	Other Other Private Government NFS NFS	33.5	20.3	2.8	14.5	16.9	11.8	30.8	50.3	6.94	11.1	8.1	10.0	8.8	17.1
	Other Private NFS	14.1	31.3	50.0	26.1	23.7	3.0	25.1	20.3	1.1	22.3	15.4	16.3	31.0	26.4
1961	Travel	17.9	9.1	15.8	28.3	37.0	46.2	7.8	16.5	11.7	36.6	59.7	51.9	22.8	22.9
	Freight Other and Transportation	24.3	28.7	26.1	18.9	13.7	39.1	20.8	6.2	38.9	20.6	13.6	12.2	15.3	21.5
	Freight and Insurance	10.2	10.6	5.3	12.1	8.7	0.0	15.5	6.7	1.4	9.3	3.3	6.7	22.1	12.1
	WDR	1	2	m	4	5	٠	7	*	6	10	11	12	13	14

Source: Balance of Payments Yearbook, IMF, various issues.

Rather different types of items accounted for the exports of "other private services" in developing and developed countries. In the latter, the main components were usually insurance and banking services, construction and engineering services, or fees and royalties from affiliated foreign companies (the latter were the main ones in the US). In less developed countries the principal item has been earnings of residents working abroad temporarily; in some cases, this item included large amounts normally classified as unrequited transfers. Nevertheless, some developing countries have succeeded in earning appreciable foreign exchange from the export of other services. This has been the case, for example, in India, Korea and Singapore, which became major exporters of construction/engineering 1/ and consultancy services, in particular to the Middle East.

As far as the composition of NFS imports is concerned, Table 3,

Annex I, indicates relatively balanced and stable distribution among the five

NFS categories in industrialized countries. However, "other private services"

and "travel" have tended to occupy a slightly more dominant position in Western

Europe (region 13). For North America, Japan and Oceania (region 14), "other

government services," which constituted the major category in 1967, dropped

to last position in 1975 because of a slowdown in US overseas military expenditures in the post-Vietnam era.

In a recent article on Yugoslav building activities abroad, it was noted that they have had a substantial impact on the country's balance of payments. However, the article also emphasized that in almost all cases, project design documents were prepared by foreign (non-Yugoslav) design firms, with the result that engineering services represented only 2 percent of total building earnings from abroad. See S. Vukcevic, "Yugoslav Building Organizations Abroad, 1966-1977," Yugoslav Survey, August 1978.

In the case of the developing countries, "shipping" was the major import category for 8 out of 12 regions in 1975. The other major item has quite often been "other private services," mostly in the form of copyright and patent royalties, insurance services and various contractors' fees and fees for technical advisory services - this last prevailing in oil-producing countries.

Tables 4 and 5, Annex I, give the growth rates of NFS export and import components respectively for the period 1967-1975 and the sub-periods 1967-1971 and 1971-1975. In shipping exports, the fastest growing countries between 1971 and 1975 were Iran and Iraq (region 5) and Singapore (region 9). On the other hand, shipping imports for the whole period of analysis have grown at a particularly rapid pace in the oil-exporting countries in North Africa and the Middle East (regions 4, 5 and 6). At the same time, these countries have benefitted from a rapid expansion of their exports of "other transportation" services, mostly in the form of port services. The oil-producing countries in the Middle East have also rapidly increased their imports of "other transportation" services, mainly airline services. With respect to "travel," exports of the OPEC surplus countries, Singapore and, interestingly, low income Asia (regions 6, 9 and 7) have grown at an annual rate of roughly 30 percent between 1967 and 1975. The fastest growing importing countries have been Iran and Iraq, and Singapore (regions 5 and 9, respectively), which also have the largest growth rates for both exports and imports of "other private services." Finally, "other government services" exports and imports have been growing relatively slowly in most regions, with the exception of the Middle Eastern oil-exporting regions (5 and 6) and middle income

Africa south of the Sahara (region 2). The two former regions and Singapore (region 9), have led, as far as NFS import and export growth rates are concerned, during the period 1967-1975 (see Annex I, Table 2).

The above analysis is based exclusively on balance of payments data, which are available only at current prices. An attempt was made to provide estimates of trade in NFS at constant prices by constructing a series of deflators. Since these deflators are not found in the literature, $\underline{1}$ / they are described here briefly. $\underline{2}$ /

As deflators for "shipping," price indices for tankers, bulk carriers and liners (Table 28, Annex I) were used. These three indices were combined into a single index of shipping exports (imports) for each region, using as weights the 1975 value shares of the three corresponding merchandise categories exported (imported) by each region. The three categories are: fuels, assumed to be carried by tankers; metals, minerals, grains and 20 percent of non-food agricultural products, assumed to be transported by bulk carriers; and all food categories (excluding grains), 80 percent of non-food agricultural products, and manufactured products, assumed to be carried by liners. The resulting export/import deflators are shown in Tables 26 and 27, Annex I, respectively. No regional distinction was attempted for "other transportation." In that category, a single deflator was used for both exports and imports, based

^{1/} The methodology is inspired, in part, by Marian Bond's paper, "The World Trade Model: Invisibles," International Monetary Fund Staff Papers, Vol. 26, No. 2, June 1979, pp. 257-333.

Since it was necessary to make some rough assumptions, the deflators presented should be used with some caution.