

# WORLD TRADE ORGANIZATION

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**Working Group on the Relationship  
between Trade and Investment**

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The following communication, dated 6 October 1997, was received from the Permanent Mission of Japan with the request that it be circulated to Members.

### I. INTRODUCTION

In the last few decades, trade liberalization has steadily progressed under the WTO/GATT system. On the other hand, although the growth rate of foreign direct investment (FDI) has greatly outpaced that of trade<sup>1</sup>, a comprehensive multilateral legal framework for investment has yet to be established.

As noted below, most of the research carried out so far concludes that there is an extremely strong and systematic relationship between trade and investment.<sup>2</sup> Moreover, amidst the ongoing globalization of economic activity, the importance of FDI in vitalizing the world economy is likely to further increase in the future. Under such circumstances, in order to realize the efficient resource allocation across borders (as noted in the preamble of the Marrakesh Agreement), it is essential for the WTO to pay close attention, not only to trade, but also to investment. Thus, this Working Group should play a significant role by using the past results of trade liberalization to thoroughly analyse the relationship between trade and investment and to examine the possibility of establishing a multilateral framework for trade and investment.

In order to contribute to the efforts of the Working Group to build a basis for fruitful discussions in the future, this paper, mainly from the empirical standpoint, examines issues raised in the agenda, i.e., (1) the relationship between trade and investment, and (2) the relationship between investment and development. Thus, to avoid any duplication of existing work carried out by the UNCTAD, the OECD or other international organizations, including the WTO Secretariat, this paper mainly concentrates on Japanese data.

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<sup>1</sup>During 1973-1995, the amount of trade grew 8.5 times and the amount of FDI grew 12 times.

<sup>2</sup>UNCTAD estimates that one third of world trade takes place within multinational corporations (MNCs). Moreover, trade between MNCs and non-affiliates occupies another third of world trade, cf. the Secretariat note for details.

## II. THE RELATIONSHIP BETWEEN TRADE AND INVESTMENT

The Secretariat note, which concisely overviews past theoretical and empirical research, is extremely helpful in building the basis for our future discussion. As described in the note, the majority of empirical research supports the idea that there is a strong and systematic relationship between trade and investment. As for the relationship between FDI and the trade balance of home and host countries, although little consensus has been reached in determining whether FDI increases or decreases the trade surplus in home and/or host countries, few members deny the existence of a systematic relationship between FDI and trade balance.

Through providing Japan's statistics concerning the relationship between trade and investment, we shall attempt to supplement past empirical research conducted mainly by economists, and ultimately, attempt to help the Member countries of the WTO to obtain a better understanding of this relationship.

### A. Impact of FDI on Trade

#### 1. Effect of investment on home country trade

As is portrayed in the survey of the Secretariat note, the past empirical research has not produced consistent results as to whether FDI has positive or negative effects on a home country's trade balance.

In the case of Japan, according to the annual survey conducted by the Government, we have been able to obtain rather more accurate figures of the effects of Japanese firms' FDI on Japan's trade flows. According to this survey, although the net effect of FDI on trade flows has been consistently positive from FY1991 to FY1995, the margin is diminishing. More detailed figures show, in FY1995, that the export inducement effect of FDI was US\$103.1 billion, approximately one fourth of Japan's total exports. Additionally, the export substitution effect was US\$54.2 billion, imports from overseas affiliates were US\$46.8 billion (15 per cent of Japan's total imports) and the net import conversion effect was US\$1.1 billion. Consequently, calculations based on the above figures show that, in FY1995, the net trade flow effect of FDI amounts to US\$1.1 billion [which is equivalent to "export inducement effect" less "export substitution effect" less "import from overseas affiliates" less "net import conversion effect"] (see Appendix).

#### 2. Effect of investment on host country trade

As described in the Secretariat note, a theoretical consensus on whether the net effect of FDI on a host country's trade flow is positive or negative has not yet been reached.<sup>3</sup> The overall trend of empirical research, however, suggests that FDI has a positive effect on the trade flow of host countries.<sup>4</sup>

By using input-output tables, research has been carried out to examine the effects of Japan's FDI on host countries'/regions' trade. According to the research, Japan's FDI has consistently exerted a positive influence on trade flows in the sample regions (ASEAN and NIEs) and in one country (i.e. China). For example, during FY1994, the import substitution effect of Japanese FDI on ASEAN

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<sup>3</sup>It is worthwhile noting that the sum of the net trade balance of a home country and a host country is not necessarily zero. For example, in the case where exports from the foreign subsidiary drastically increase, since the export inducement effect will also drastically increase in both the home and the host countries, the net effect of the FDI on both countries is likely to be positive.

<sup>4</sup>See, for example, Hummels D. I., and R. M. Stern 1994 - "Evolving Patterns of North American Merchandise Trade and Foreign Direct Investment" - *World Economy* 17(1): 5-29 January

was US\$30.3 billion, the export inducement effect was US\$19.9 billion, and the import inducement effect was US\$26.4 billion. Thus, the net effect of Japanese FDI on the trade flow of ASEAN in FY1994 was estimated to be US\$23.8 billion [which is equivalent to "import substitution effect" plus "export inducement effect" less "import inducement effect"] (see Appendix). In this regard, it has been suggested that, in the initial stage, FDI increases imports. Research carried out by the Japanese Government supports this hypothesis.

B. Impact of Trade Measures on Investment

As mentioned in the Secretariat note, past research has explicitly demonstrated both theoretically and empirically that trade measures can severely effect FDI. For example, high tariff rates and rampant AD measures (non-tariff barriers) can induce so-called "tariff-jumping FDI". On the other hand, it has been pointed out that trade measures, such as anti-circumvention measures, are likely to hinder efficient investment activities by private firms. Since trade measures clearly affect such investment activities by private firms, an abrupt and/or significant change of trade policy by a host country can cause severe damage on FDI (or, more specifically, foreign subsidiaries within the country). Thus, in order to promote FDI, it is both necessary to restrict trade measures that might restrain the efficient investment activities by private firms and to enhance the predictability of the trade policy of the host country.

C. Summary (Implication for the Future Work of the Working Group)

As outlined above, empirical research and data more or less demonstrate the existence of a symbiotic relationship between trade and investment. Furthermore, in recent years, private firms are making parallel choice between trade and investment in order to attain the ultimate goal: to sell goods in the targeted market.<sup>5</sup>

Thus, considering the above evidence, there is enough rationale for the WTO to treat trade and investment in an integrated manner.

III. DETERMINANTS OF THE RELATIONSHIP BETWEEN TRADE AND INVESTMENT  
(ANALYSIS OF CORPORATE BEHAVIOUR)<sup>6</sup>

Due to the recent globalization of the world economy, when planning corporate strategies to sell goods in a targeted market, private firms choose simultaneously where to invest and/or from where to export, at the same time.<sup>7</sup> In such a business environment, therefore, the determinants for investment by private firms are closely related to the determinants of trade. Based on this understanding, we will focus on the determinants for investment by private firms. As above, in order to avoid unnecessary duplication of those contained in the Secretariat note, data are taken mainly from the research survey on Japanese corporate behaviour.

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<sup>5</sup>UNCTAD 1996 - "World Investment Report 1996: Trade and International Policy Arrangements"

<sup>6</sup>Since the general relationship between trade and investment has been analysed in the above survey, this paper will examine corporate behaviour for making a strategic choice between trade and investment.

<sup>7</sup>See UNCTAD 1996

#### A. Determinants for Investment

According to the research survey conducted by the Japan External Trade Organization (JETRO), of 1,170 Japanese firms having invested in Asian countries, 51 per cent quoted "political and social stability" as the most important factor when making their investment decisions. The second factor was "low labour cost" (44 per cent), and the third "the future potential of the domestic market" (42 per cent). In addition, based on data gathered through a survey on Japanese companies, the Japanese Government has made a comprehensive statistical analysis. According to this analysis, the determinants of investment that seemed to be significant were a "nominal GDP of the region/country (positive)" (a proxy for the market size), a "real wage (negative)", a "cumulative number of existing projects (positive)" (a proxy for infrastructure), and "safety (consistency of governmental policy, national economy, etc.) (positive)" (see Appendix).

#### B. Barriers and Problems Affecting Corporate Activities in Developing Countries

According to the research survey conducted by the Japanese Government, among the Japanese firms that have invested in developing countries, the main barriers or problems faced in operating in these countries are the "rising labour cost" (54 per cent), a "lack of transparency in application of law and regulations" (34 per cent), the "quality of labour force" (29 per cent) and others (see Appendix).

#### C. Summary (Implication for the Future Work of the WTO)

From the research survey described above, the principal determinants for private firms' investment activities can be sorted into four categories: "labour-related factors (labour cost etc.)", "scale and future potential of the domestic market", "infrastructure conditions" and "predictability". These findings are consistent with the results of past empirical studies conducted by managerial economists. Among these four determinants, "predictability" can be significantly improved through the creation of a multilateral legal framework. In fact, it seems that one of the major objectives of establishing a bilateral framework for investment is to enhance the "predictability" of private firms.

The ongoing work within the OECD for establishing the Multilateral Agreement on Investment (MAI) has the potential to drastically improve the "predictability" of investment. Considering the corporate behaviour apparent in the research survey above, if the MAI is properly formulated, those countries having ratified the MAI are likely to gain an advantage over other countries in terms of "predictability", which, in turn, will increase the inflow of FDI. In such cases, considering the fierce competition among nations for inviting FDI, countries that do not ratify the MAI are likely to be forced to make efforts to increase "predictability".

### IV. IMPACT OF INVESTMENT ON DEVELOPMENT AND GROWTH

#### A. Relationship between Investment and Development and Growth

According to economists' research, there is little doubt that investment and economic growth are highly correlated.<sup>8</sup> Since sources for investment are either domestic savings or capital inflows from abroad, especially for low-income countries that permanently lack sufficient domestic savings, FDI can provide an excellent financial source for economic development. In fact, economists point out that a strong correlation exists between the amount of FDI invited and the economic growth in a given country.

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<sup>8</sup>Yujiro H. 1996 - Development Economics - Sobunsysa

Moreover, developing countries can receive the transfer of various "positive externalities", including technology and managerial expertise. For example, an empirical research shows that technology transfer through the subsidiaries of multinational corporations surpasses that through other routes.<sup>9</sup>

On the other hand, previous experience tells us that there might also be a downside of investment flows across borders (including FDI). For example, large amounts of FDI might induce an excessive intervention of foreign subsidiaries in a host country's political economy. Also, as already mentioned, at the initial stage of FDI, imports from a host country are likely to increase and FDI might have negative effects on the trade balance of a host country. Even in the mid- and long term, there could be some indication that repatriation of profits from foreign subsidiaries to a home country will have serious effects on the balance of payments (BOP) of a host country.

Many scholars have also attempted to examine the relationship between FDI and employment. There is a widely accepted view that FDI leads to the loss of work for low-skilled labour in a home country. However, empirical research conducted by economists does not always support such a view. As for employment in the host country, the results of empirical research have not yet reached a widely shared consensus. Also, some adherents of the dependency theory have claimed that FDI allows developed countries to exploit the relatively cheap labour force from developing countries, and that workers in developing countries are deprived of the opportunity to acquire advanced skills. However, the economists' empirical research shows that FDI rather tends to transfer sophisticated technologies and skills from developed countries to developing countries.

#### B. Summary (Implication for the Future Work of the Working Group)

While FDI and other forms of investment flows generally have positive effects on growth and technological innovation, they may produce negative effects as well. Thus, in order to utilize FDI as a force to accelerate the growth of developing countries, it is important for this Working Group to examine what can be done by the WTO and other international organizations to avoid such potentially negative effects from FDI (and possibly, from other forms of investment) on growth. For example, since the scope of the MAI of the OECD includes portfolio investment, the current consolidated text of the MAI contains a BOP provision, allowing the host country to temporarily suspend the rapid flow of capital across borders. In addition, since there are political economic concerns for activities of multinational firms within the host country, this Working Group should examine what can be done to reduce such concerns, by also taking into account the benefit of the home country.

### V. STOCKTAKING AND ANALYSIS OF EXISTING INTERNATIONAL INSTRUMENTS AND ACTIVITIES REGARDING TRADE AND INVESTMENT

#### A. Increase of the Bilateral Investment Treaties (BITs)

The expansion of FDI has accelerated the importance of investment on the world economy and has increased its economic and social impacts on the host countries. Against this background, a common framework needs to be established to promote the predictability of enterprises and to further increase FDI, thereby contributing to the realization of a stable and sustainable growth of the world economy in the medium and long term.

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<sup>9</sup>Bloomstra M., A. Kokko, and M. Zejan 1992 - "Host Country Competition and Technology Transfer by Multinationals" - *NBER Working Paper* No. 4131

At present there exist approximately 1,160 BITs, two thirds of which were concluded in the 1990s. This demonstrates the increased interest in the impact of FDI on a host country's economy, such as the promotion of competition and technology transfer, and in the creation of a stable environment for investment.

Despite their merit of being flexible in nature, BITs have some limitations. For example, they tend to be focused on investment protection, rather than on investment promotion. In addition, BITs are applied only to countries' concerns, from which arises the problem of differences, not only in their geographical scope, but also in their substantive coverage, specific content, approach and legal nature, when making investment extensively. Furthermore, BITs improve predictability and increase investment between the countries involved, thereby influencing the optimum allocation of resources between them and the countries which lack such agreements. Unlike trade, investment tends towards the countries involved and thus accommodates only specific bi-polarization for home and host countries (i.e. imbalances in trade flows), which may unduly affect dispute settlement procedures through the political and economic relations of the two parties.

#### B. The Importance of Multilateral Investment Framework

Since trade and investment proved to be correlated strongly with each other, it is important to conduct a thorough examination on investment under the framework of the WTO. As rightly pointed out in the Secretariat note, however, most pertinent multilateral agreements, such as those in the WTO, relate only to sectorial or to specific issues and do not address investment in a comprehensive and complete manner. In fact, as the globalization of the economy and the internationalization of corporate activities progress, we have witnessed the emergence of various issues:

- One example is the restriction on FDI itself, including the control over the ratio of local financing and the volume of foreign capital. Some countries and regions impose on investors exchange restriction measures, such as the control of a funds transfer and a ceiling of royalty ratio against sales. Other restrictive factors include local employment requirements or local employment incentives, and the lack of systems to protect investment, such as the protection of patent rights and trademarks from which local firms should benefit. All of these factors make investors cautious to extend their activities overseas. According to the questionnaire, the Japanese machine industry regards the following factors as problems for making investment in the Asia-Pacific region: namely, the tax system (e.g. tax application, fairness), restriction against the entry of foreign capital (e.g. restriction of local financing ratio), employment (e.g. local employment requirement), inefficient administrative measures, and the protection of intellectual property (e.g. lack of systems to protect patent rights and trademarks) (see Appendix).

Other international fora, such as the APEC and the OECD have already launched discussions for possible instruments or frameworks in the field of investment. To establish an international rule on investment would provide a solid foundation to stably expand FDI through improved predictability. As discussed above, expansion of investment, together with its close correlation with trade, contributes to economic growth and development of both home and host countries. Furthermore, optimum resource allocation among different regions and different points of time is expected to promote the growth of the economy of the world as a whole, including that of developing countries. In this respect, it is important to examine both aspects of investment facilitation through liberalization and investment protection, taking into account the interests of both home and host countries. Bearing these factors in mind, the discussions in this Working Group will lead us to a "win-win" solution.

APPENDIX

TABLE 1

Japan's Recent Trend of Total Export/Import, Export Inducement, Export Substitution, Imports from Foreign Affiliates, Import Conversion, and Impacts on Trade Balance

[Unit: US\$ billion]

	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
Total Export (a)	309.6	331.6	347.1	386.5	434.8
Total Import (b)	204.9	205.3	209.5	248.5	312.6
Export Inducement (c) (c/a)	57.9 (18.7%)	63.2 (19.0%)	89.0 (25.6%)	89.0 (23.0%)	103.1 (23.7%)
Export Substitution (d)	25.2	27.6	40.5	45.0	54.2
Imports from Foreign Affiliates (e) (e/b)	14.1 (6.9%)	11.8 (5.8%)	27.9 (13.3%)	33.3 (13.4%)	46.8 (15.0%)
Import Conversion (f)	2.2	2.4	1.8	2.0	1.1
Net Impacts on Trade Balance (c-(d+ e+ f))	+ 16.3	+ 21.3	+ 18.9	+ 8.8	+ 1.1

Source: Export and Import: Bank of Japan, *Balance of Payments*  
Others: MITI, *The 6th Basic Survey of Overseas Business Activities (Preliminary Report)*

TABLE 2

Impacts of Japanese Manufacturers' Investment on Host Countries' Trade

[Unit: US\$ billion]

	1991	1992	1993	1994
ASEAN*	+ 10.2	+ 13.5	+ 18.5	+ 23.8
Import Substitution	+ 13.7	+ 17.4	+ 19.2	+ 30.3
Export Inducement	+ 9.3	+ 8.7	+ 17.0	+ 19.9
Import Inducement	-12.7	-12.6	-17.8	-26.4
NIEs**	+ 17.4	+ 19.9	+ 19.3	+ 25.4
Import Substitution	+ 17.6	+ 17.2	+ 20.1	+ 28.2
Export Inducement	+ 12.8	+ 13.5	+ 18.3	+ 22.3
Import Inducement	-13.0	-10.8	-19.0	-25.1

Source: Takugin Research Institute, *Gaishi-kei Kigyo Enkatsu-ka Chosa [Research on Foreign Affiliates]*

Note: \*ASEAN = Indonesia, Malaysia, Philippines and Thailand  
 \*\*NIEs = Republic of Korea, Singapore and Chinese Taipei



TABLE 3

Reasons for Selecting Investment Site by Japanese Manufacturing Affiliates in Asia

1.	Stable political/social climate	51.4%
2.	Low-cost local labour	44.8%
3.	Future potential of local market	41.2%

Source: JETRO, *Survey of Japanese-Affiliated Manufacturers in Asia*

TABLE 4

Estimate of Determinants of Japanese Firms' Foreign Investment (Conditional Logit Model)

	Results of Estimate (Coefficients for Each Variable)		
	General Machinery	Electrical Machinery	Automobile
Real GDP Growth Rate	0.0597	<u>0.1104</u>	<u>0.0903</u>
Nominal GDP	<u>0.3228</u>	<u>0.2230</u>	<u>0.3913</u>
Real Wages	-0.4661	-0.7159	-0.4341
Cumulative Number of Existing Projects	<u>0.4921</u>	<u>0.5609</u>	<u>0.6313</u>
Safety	<u>2.7978</u>	<u>3.3632</u>	<u>2.4724</u>
Distance from Japan	-0.0261	-0.2869	-0.0292

Source: MITI, *White Paper on International Trade 1996*

Note: Underlined coefficients are significant at 1% level.

TABLE 5

Problems and Barriers to Business Activities in the Developing Countries

Rising personnel expenses	53.9%
Untransparent laws/regulations	34.4%
Quality of workforce	29.1%
Availability of workforce	29.1%
Complex tax system	26.2%
Complex local regulatory procedures	23.4%
Frequent changes in government policy	23.0%
Restrictions on Japanese entering the country	19.5%

Source: MITI, *White Paper on International Trade 1997*

TABLE 6

Problems Concerning Investment in Asia and Oceania

Taxation	55 points
Restrictions for foreign participation	42 points
Employment	40 points
Systems, practices, inefficient procedure	31 points
Infringement of intellectual property	28 points

Source: Japan Machinery Exporters' Association etc.,  
*Asia no keizai Hatten to Boueki Tousi no Mondai-ten*  
[*Economic Development in Asia and Problems Concerning Trade and Investment*]